



National
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Australia

Mapping Sciences National

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What's this got to do with Mapping Science ?



.. an early start to 24 hour shifts Fire Mapping during the Victorian Fires of 2006-07

On the night of 1st December 2006 lightning started 50 fires across the mountain eucalypt forests of eastern Victoria. These initial lightning strikes in the drought affected forests of Victoria were spread over an area of 120 km² from near Benalla, to Jamieson, across to Dargo and back towards Mt Buffalo.

Immediately the Melbourne based Emergency Control Centre (ECC) of the Department of Sustainability and Environment (DSE) scaled up from a skeleton

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WORDS, WORDS, WORDS

Keith Smith

"My message to the cartographers of Australia concerns the emergence of the surveying and mapping industry."

"The move towards the identification of such an industry began in Queensland a few years ago; it has been taken up in some of the other States and with the imminent formation of the Australian Surveying and Mapping Industries Council has clearly made its mark at Federal level.

"The concept groups together many of the disciplines engaged in the collection, management and presentation of spatially referenced geographical information. This means that surveyors of various

specialisations, cartographers, photogrammetrists, geographers, remote sensors, et al., whether they operate in the private sector, the public sector or the academic sector, are considered to constitute a single economic unit."

Now, now, be alert, but not alarmed. This is not my latest call to rally round the flag; it was in fact the first few paragraphs of my (national) "President's Message" published in "Cartography" in 1987. That's exactly twenty years ago. And what a year that was! Overnight we went from being engaged in the mapping business to being frontrunners in the new business

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cartography in the news

CBC News - Thursday, October 12, 2006
www.cbc.ca/news

Canada shreds plan to scrap paper maps

The Canada Map Office has found its way out of the scrap heap. The previous Liberal government decided to close the map office, which provides regional dealers with large-scale topographical maps that show details about terrain and elevation. The plan had been to move to digital maps only.

But Natural Resources Minister Gary Lunn announced Wednesday that the Conservative government has yanked that plan off its course, and the map office will remain open. Kathleen Olson, a spokeswoman for Lunn, said Natural Resources Canada received a flood of letters protesting the planned closure.

"We did start seeing a lot of commotion around the idea of this office closing," Olson said. "The minister wanted to find out more about it and once he did, he quickly realized that this is not something he wanted to see happen."

Paper maps vital

Map librarian Heather McAdam was among the many who cried out against the plan to provide the maps only over the internet for Canadians to download and print themselves. McAdam, who works at Carleton University, said that won't help the third of Canadian households that don't have internet access.

And she said many Canadians prefer paper maps to digital ones because they can be spread out to show a much wider area at once. "When you want to plan something or you want to look at something, you have to see the beginning and the end," she said. "How do you look at that on a screen?"

She said paper maps are vital to many people, including researchers, emergency services personnel and outdoor enthusiasts. "What about if you're a hiker and you're out in the bush?" she asked. "A compass and a GPS are not what you need. You need a map."

Nick Miller - July 10, 2007
http://www.theage.com.au

Plotting the digital map

Lines are being drawn in the sand as the makers of electronic maps go head to head. The venerable art of cartography is set to become a digital battleground in Australia with the launch of a global brand determined to unseat the local champion.

Last night, Navteq, the global market leader in digital maps, officially began its assault on the local market currently dominated by Sensis, after spending two years mapping Australia's road network. The Sydney launch follows a "soft launch" in August last year - the company wanted its official arrival to involve local customers, which now include

Nokia phones, some luxury car manufacturers and a portable device branded by Ausway.

Chicago-based Navteq says it plans to use its global muscle to win major navigation customers such as Garmin, TomTom and Navman away from Sensis. However, Sensis is ready for the fight, saying its local data is more extensive and comprehensive, and it has several digital mapping innovations in the wings such as 3-D models of tourist landmarks.

Both companies agree that maps are the key not just to navigation but to the lucrative area of local search. Navteq estimates 4 per cent of Australian vehicles have either a portable or embedded navigation system, but by 2010 that figure will be

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EVENTS

SYDNEY

August 16, 2007

MSIA Spatial Information & Cartographic Visualisation

gantonijevic@hornsby.nsw.gov.au

CHESTER - UK

September 6-8, 2007

Mapping 2007: Putting the pieces together
www.cartography.org.uk

MELBOURNE

September 19-23, 2007

COSIT'07 Conference on Spatial Information Theory
www.cosit.info

CHRISTCHURCH - New Zealand

Oct 29-Nov 2, 2007

9th SE Asian Survey Congress
www.conference.co.nz/index.cfm/surveyors2007

GOLD COAST

November 2-3, 2007

IMTA (Asia Pacific) Conf & Trade Show
www.maptrade.org

SANTANDER - Spain

November 2007

CoastGIS 07
www.coastgis.org

SYDNEY

February 7-8, 2008

Australian Map Circle "Map Day in Sydney"
email: robert.clancy@newcastle.edu.au

WELLINGTON

February 10-13, 2008

AMC - Te Taki o Autahi - Under the Southern Cross International Cartographic Conference
<http://australianmapcircle.org.au/>

"A compass and a GPS are not what you need. You need a map."

"The venerable art of cartography is set to become a digital battleground .."



Secretary's Spin



.. from front page

of geographic information. Not only that, we were now part of an industry. Wow! I am reminded of Les Isdale's article (MSN No 18) in which he pointed out that Queensland's Survey

Draftsmen of yesteryear "went to their graves probably unaware that in modern terms they were cartographers." Wonder what they would have made of being accused of being practitioners in the geographic information industry? Knowing them as I did, I have a fair idea.

I played my part in this revelation (revolution?) and became a leader in ASMIC which was spawned in a great burst of enthusiasm. In Queensland we even changed the name of the premier mapping agency from Department of Mapping and Surveying to Department of Geographic Information.

Closer to home I was also instrumental in trying to re-shape the Australian Institute of Cartographers. The AIC had been formed in 1952 and had been travelling fairly well, but by 1988, it was considered (by some of us anyway) that the new technology of geographic information systems development was having an adverse effect on our membership numbers and was threatening the relevance of cartography itself. Ron Furness and I simultaneously proposed that new life could be breathed into the Institute by broadening its membership base and we believed that this could be achieved by changing its name to reflect the then emerging technology. We boldly put forward the name Australian Institute of Geographic Information Technologists which, having the unfortunate acronym AIGIT, was laughed off the planet. Not quite so silly in view of some of the current "industry" names.

A reliable barometer of the health of our Institute had always been the success or otherwise of our national conferences. Because of the distraction caused by the advent of the "industry" it was with some disquiet that we approached our 1990 event - to be held in Darwin for the first time. As it turned out there was no cause for concern: the Eighth Cartographic Conference was a huge success, set a new standard in style and demonstrated a refreshing down-to-earth approach. The organisers cleverly exploited the novelty of a cartographic conference being held in the tropics and took the opportunity to showcase some of the region's unique fauna. The icing on the cake was a "scientific" safari through the Kakadu National Park. Brilliant.

Before the next conference could be held (in Adelaide) a new player appeared on the scene. During a visit to the USA in 1989, I had stumbled across a group of map-makers banded together as the International Map Dealers Association. I accepted an invitation to attend their conference in Reno, became a member and realised that this was what was missing in Australia - a home for

the people who earned a living making maps for the marketplace. Back in Brisbane, I initiated the inaugural Australian Map Fair and prevailed upon a number of the participants to form the Australian Map Industry Association. Note the dreaded "i" word.

By the time the Adelaide conference came around in 1992, AMIA was up and running and agreed to participate in the program. The conference attracted a very healthy 400 delegates and there was much excitement about an on-going partnership between AMIA and AIC. It never happened.

At about the same time cracks were appearing in the peak industry body, ASMIC. Perhaps individual member-bodies were questioning the benefits of expending energies in the pursuit of a dream of solidarity at the expense of the development of their disparate organizations. Whatever the reason, the members, - who had totaled twenty in the industry's heyday - withdrew one-by-one and left not a trace.

The AIC, after a few years' deliberation, changed its name to Mapping Sciences and virtually nothing more was heard of "the industry." (AMIA too dropped the industry tag, to become the International Map Trade Association.) However, the adoption of the term mapping sciences seemed to coincide with an explosion of neologisms. Plain old geographic information was soon replaced by location-specific information, spatial information, spatially referenced geographic information and geospatial information. Not to mention feng shui! Then, perhaps prompted by the "science" component of MSIA, science popped up elsewhere - as in spatial science and geospatial science. In a separate development surveying became geomatics in some quarters.

Despite this widespread preoccupation with semantics, the MSIA continued to function reasonably well and held viable conferences for the next decade, overcoming the circumstance that governments all over the land were disbanding their mapping departments and retrenching their cartographic staff in depressingly large numbers.

Then in 2003, the spatial sciences tsunami struck and the rest, as they say with sickening frequency, is history.

And yet, as events unfolded, there was to be at least one more triumph. In August 2006, the Northern Territory Division of MSIA conducted a conference which won critical acclaim as "one of the year's great conferences" (Editorial in "Position" No. 25). The event had been marketed as "400 Years of Mapping Australia". (emphasis added)

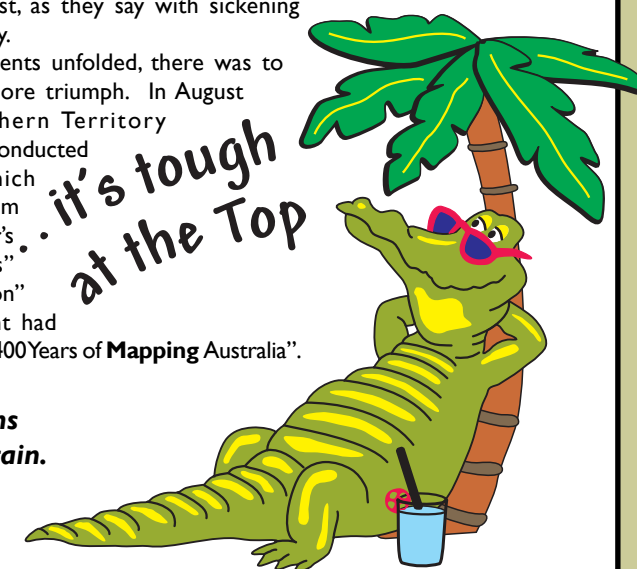
The Darwinians had done it again.

Keith Smith

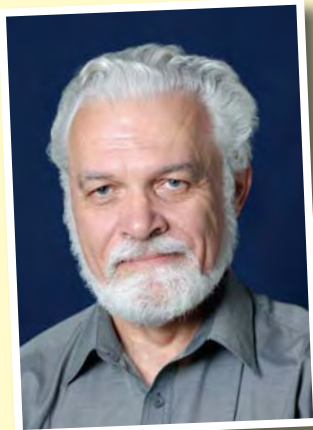
"Overnight we went from being engaged in the mapping business to being frontrunners in the new business of geographic information. Not only that, we were now part of an industry. Wow!"

"Then in 2003, the spatial sciences tsunami struck and the rest, as they say with sickening frequency, is history."

And yet, as events unfolded, there was to be at least one more triumph"



John McCormack FMSIA appointed to position of Chair of Executive



I joined the Institute in 1975 as a student member and have over the years supported activities run and organised by the Institute. Since 1992 when I joined the Queensland Division committee I have undertaken many roles within the Institute at both the National and Divisional level. I have always been there to assist fellow members in their endeavours to run an efficient Division and meet the professional needs of the membership.

During my fifteen years as a member and office bearer in both the Divisional and National jurisdictions I have had the privilege to undertake the following roles within the Institute's management.

Role:

Divisional Committee	1992 - present
Div. Membership Secretary	1995 - 2005
Divisional Treasurer	1997 - present
Divisional President	1998, 2004
Div. Newsletter Compiler	1998 - present
National Program Manager, Management	1995 - present
President Elect	2002, 2003
National President	2003, 2005

I am honoured to have been appointed to the position of Chair of Executive by my peers.

John

BOOKS

SURVEYING QUEENSLAND 1839-1945

A Pictorial History

by Bill Kitson and Judith McKay

A Queensland Museum and Queensland Department of Natural Resources and Water joint project.

ISBN 0-9751116-4-7

Bill Kitson is senior curator at the Museum of Lands, Mapping and Surveying in Brisbane and Dr Judith McKay is a senior curator (culture and histories) at the Queensland Museum

Book requests should be made to Queensland Museum, PO Box 3300, South Brisbane BC, Qld 4101 or telephone 07 3840 7645.

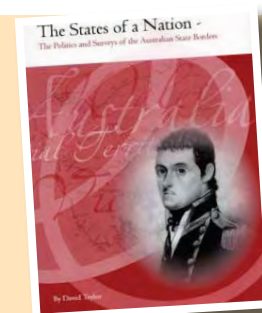
THE STATES OF A NATION

The politics and Surveys of the Australian State Borders

by David Taylor

Comprising over 350 pages, well illustrated with maps, photographs etc, the book is a joint publication of the NSW Department of Lands and ICSM. Researched by the author over 20 years, it is an attempt to consolidate the history of the borders into one publication.

Enquiries to David Taylor, NSW Department of Lands,
PO Box 143, Bathurst NSW 2795
or to David.Taylor@lands.nsw.gov.au.



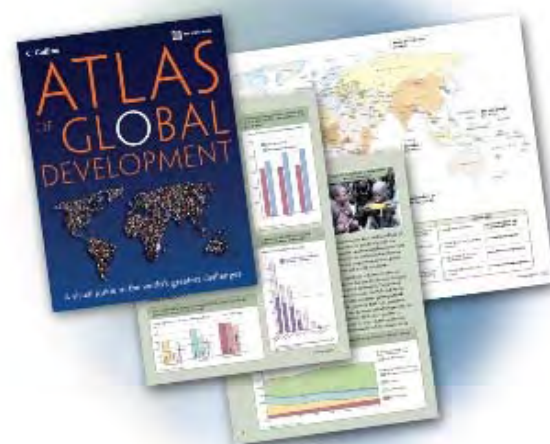
Atlas of Global Development

A visual guide to the world's greatest challenges

The Atlas of Global Development vividly illustrates the key development challenges facing our world today. Presented in easy-to-read, colorful world maps, tables, graphs, text, and photographs, the atlas highlights social, economic, and environmental issues that affect us all.

The atlas provides a wealth of information on today's key global issues including eradicating poverty, combating HIV/AIDS and corruption, and promoting environmental sustainability. This title builds on the World Bank Atlas which has been published by the World Bank for the last 36 editions.

February 2007. 144 pages. Stock no. 16856 (ISBN: 0-8213-6856-7, ISBN-13: 978-0-8213-6856-5). US\$19.95



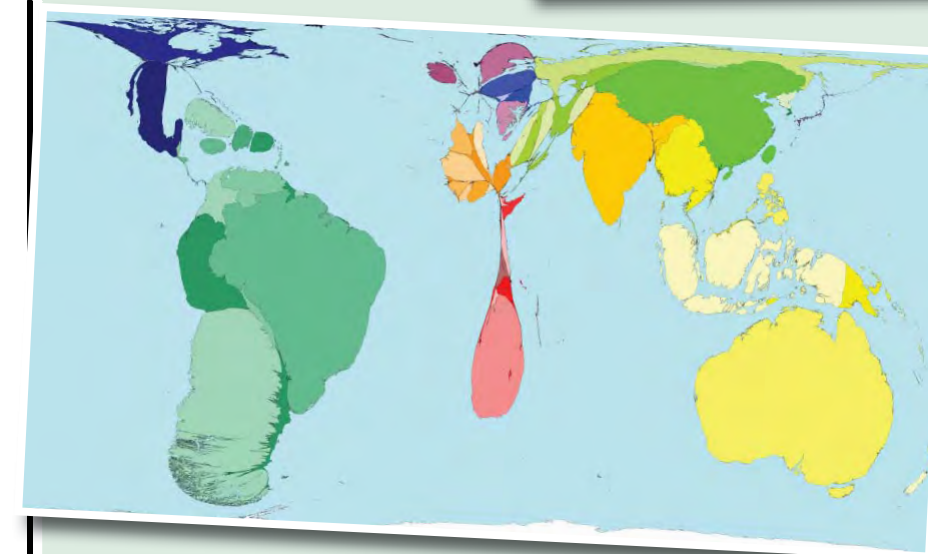
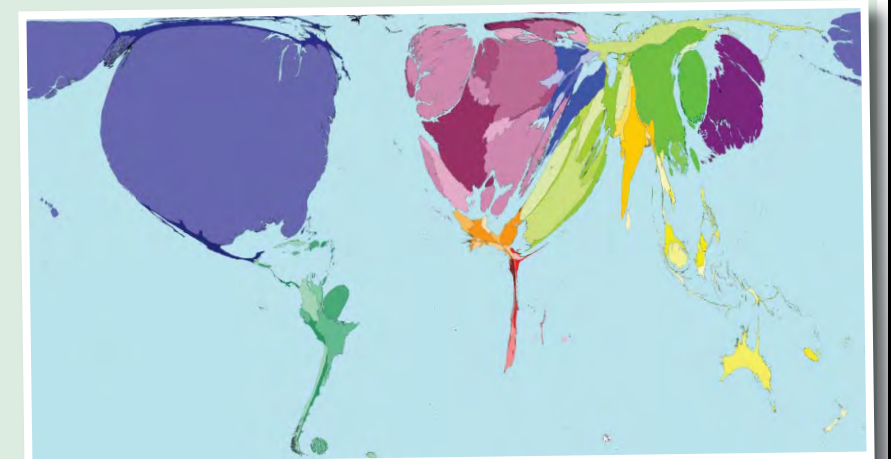
WORLDMAPPER *The world as you've never seen it before*

<http://www.worldmapper.org/>

Military Spending 2002

Mapped here is state military spending. This covers the costs of military personnel, including recruitment and training, supplies, weapons and equipment, and construction. Also included is spending on military assistance to other territories. In 2002 state military spending was estimated at US\$789 billion worldwide.

In 2002 the United States was the largest military spender, spending almost 9 times more than the second biggest spender, Japan. In that year the United States spent US\$353 billion; 45% of all state military spending worldwide



Mineral Depletion

This map shows the fall in the financial value of a territory's mineral resources due to current extraction rates. Included here are gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate.

Territories with the highest mineral depletion are Australia, Brazil, Chile and China. Australia is the largest producer of bauxite, Brazil of industrial diamonds, China of tungsten, and South Africa of platinum and gold.

Mineral extraction often causes environmental damage, itself a form of depletion. Territories that are small on this map may lack minerals or have used those worth extracting.

Hi-Tech Exports 2002

Between 1990 and 2002 the spending on exports of hi-tech goods quadrupled to US\$ 1950 billion. This huge increase in the hi-tech market was accompanied by adjustments in the proportion of exports that were hi-tech goods. Malaysia and Singapore reported a 20% increase in hi-tech exports; Malta, Finland and Indonesia reported increases of roughly 15%. Despite these changes, the main territories exporting hi-tech goods remain the same over time.

On average hi-tech exports make up 41% of the value of all manufactured exports from territories in Asia Pacific. This ranges from the Philippines with 65% to Samoa and Tonga with 0%.

Territory size shows the proportion of the

value of all hi-tech exports in 2002 that came from there. This is measured in US\$ by Purchasing Power Parity, meaning that the values reflect the local cost of living.



Innovation & Technology – Solutions for a Changing World

by Adam Ladhams

Then and Now

The use of technology has the most influence on people's lives. We have emerged from the Industrial era into the New Economy with much vigour and promise. Some say knowledge is power, however, the forming on intelligible information is important to handle the facts. The current technological advances are in nanotechnology, digital data and virtual communities. In this article a number of captions provide an insight into the emerging requirements to remain successful in the business-world.

Nanotechnology to the Fore

Recently published in an airline magazine were the developments that are occurring in Research and Development labs across the world. One product that deserved attention was the 3M polymer-type flexible screen that has the ability to upload images and documents. This will effectively enable say, field staff to upload thousands of plans and view them in detail on a piece of film that can be rolled for compactness and reuse. Whilst energy sources have made some advances, the constant need to recharge batteries is almost unbearable. Battery power still has a significant way to develop in terms of miniaturisation and capacity. The latest advances looks at solar cells being worn on the surface of a person's clothing or hat to recharge low voltage dependent devices such as mobile phones and laptop computers.

Innovation for Survival

Creative thought and ideas is needed in a growth market to ensure that businesses survive in an impending recession that may occur over the impending decade. Macro indicators are the best form of determining where the global economy is headed. Countries comprising of different governments, cultures and religions have truly become a part of a global economy, albeit sometimes fragmented. China is the hidden dragon that has taken the resource markets by surprise. It is with more interest that China may surpass the economy of America in the medium term future. The economy of China grew 11% for the first half of 2006 and this is set to continue. As the Chinese economy and systems mature and democracy become apparent, the possible unleashing of consumerism for its people will be derived at a heightened level. This has adverse, both negative and positive effects on the provision of services and products for local businesses.

The Future is Mobile

The mobile phone will become the necessary consumer product to the extent the mobile phone number will become a person's unique identifier. However, a mobile phone purchased 6 months ago is now outdated or has been superseded by a slicker and compact one. Mobile phone technology has surpassed the expectations of consumers. Inevitably, the mobile phone will become the media centre for most people and users will become comfortable with video conferencing, internet, music collection library, digital imaging, location maps, for making reservations and lastly, for making telephone calls.

Cost and Benefit Analysis

Upgrading and replacement may not necessarily provide the best return on investment, however it provides an intangible benefit for some in terms of aesthetics, fashion and techno-equipped. Technology has a far greater impact to attract the masses than other forms of marketing. Consider the effect of ATMs and internet banking on physical bricks and mortar physical banking services.

There is a silent cost that technology has on society. The diminishing need to have personal interaction due to the available forms of contact through email, mobile phone and texting creates a form of people inept of basic communication skills. The uptake of the technology for the savvy Y and Me Generations provides a gap in the different cohorts, one that may not be able to be closed. Younger generations are able to assimilate into the digital age with ease, however this may hamper other aspects of their generic skills including numeracy, spelling and reading comprehension. The use of calculators to do simple arithmetic, the use of abbreviated words with SMS and playing computer games for extended periods of time is cause for concern.

Where to from Here?

Markets are no longer isolated and it is the threat of aspects such as the avian bird flu, SARS, terrorism or a potential slowing resource needs, pushing some sectors into slowdown. Reinvent, reinvigorate and survival are the key attributes to sustaining business in tough times. Penny pinching downsizing should not only be undertaken in times of despair but when the economy is rosy. Waste at all levels should be eliminated and efficiencies introduced to alleviate the financial burden that may occur later. Constant "reengineering" of structures, models, systems and processes is important to fix problems before they occur. Often when something goes wrong, it is an aspect of a flow path that has lead to that failure.

The emerging overseas markets provide many organisations to expand, as long as that growth managed organically rather than an artificial burst. Some companies are bent on mergers and acquisitions for the required scale of growth rather than concentrating on the fundamentals of providing 'value' services and products that are client focused. Continual improvement, a relic of the 1990's Quality Assurance era still rings true, with the focus extended to client expectations. Some companies concentrate on the basis of financial competition without developing competition on other fronts. There is renewed hope for companies that believe they are able to differentiate their products and services, even if the end product is appears seemingly the same to other providers. Competition can be established through fresh ideas, innovation, intellectual property and patents, by exceeding client expectations with little cost burden and with driven employees. Whilst others move to play catch-up to the innovative measures, then further innovation is needed to stay that one step ahead. Some professions will prosper while others that can be undertaken by intelligent computers will vanish. To remain successful and relevant in the job market, it is important to remain with the times and advances in technology.



"There is a silent cost that technology has on society".

"Younger generations are able to assimilate into the digital age with ease, however this may hamper other aspects of their generic skills including numeracy, spelling and reading comprehension"

"Reinvent, reinvigorate and survival are the key attributes to sustaining business in tough times"

An early start to 24 hour shifts Fire Mapping during the Victorian Fires of 2006-07

. . from front page

crew to an incident control structure which covers control, planning, situation, logistics and resources. Regional centres established 'Incident management teams' (IMT) to coordinate local resources and fire fighting activities.

Both the ECC and IMT require mapping staff for a range of activities including for fire fighters on ground, strategic planners, asset management, media releases and fire spread prediction.

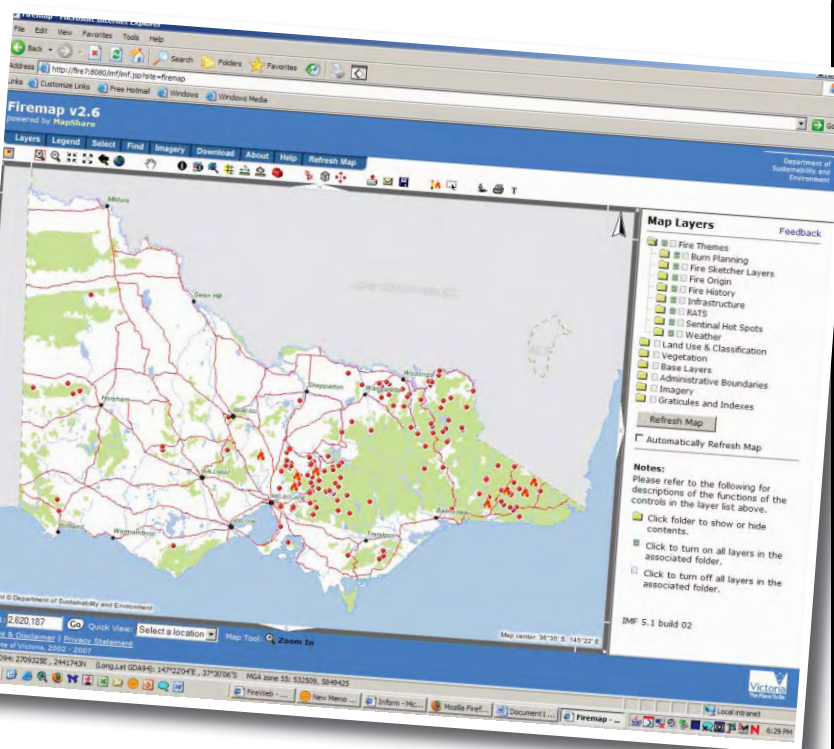
Resources for a 24 hour roster are initially targeted from Victorian Government agencies including DSE, Primary Industries, Vic Forests and Parks Victoria. The Country Fire Authority (CFA) is a key partner organisation as it is responsible for fire fighting in country communities, it also has mapping staff.

All staff work 12 hour shifts from 0700-1900, 1900-0700 but handover is required so frequently staff are at work more than 13 hours per day, normal work activities have largely ceased by this stage. Mapping staff in the ECC have shifts of 3-4 people per shift working 3-4 shifts, with the IMT's having 1-2 mapping staff per shift, people work 5-7 shifts in a row.

In the first week to 8 December following a week of high temperatures, strong winds and low humidity the 18 known bushfires to burnt 170,000 hectares.

A key to fire fighting is to know where the active fire boundary is so late in the afternoon and into the evening aircraft equipped with thermal scanners fly the fire area, particularly focussing on the active edges. These 'linescan' images are transmitted from the aircraft directly to computer facility.

These images are already rectified and imported into ESRI ArcMap 9.1, ESRI ArcView 3.3 and a customised web mapping application called FireMAP. Additional sources are fire hotspot data which is



supplied by the CSIRO from processed MODIS satellite images.

ECC based mapping staff interpret the fire boundary from these images creating shapefiles, also standard map products for planning and media releases. These ECC mapping staff also works with Fire behaviour specialists who predict potential fire spread and create map products to support this activity.

Regionally based mapping staff also create maps of fire sectors for operational activities including control lines, fall back lines and back burning for local staff. Some head office staff are deployed to regions this may be their first visit to a regional office. Meals are provided to all staff undertaking

FireMAP web mapping application, it operates in an internet browser and all DSE staff can access this program

Ron Furness Retires

Ron Furness has recently "retired" from active service as MSIA's Chair of Executive. Over the years Ron has served MSIA in many capacities but the time has come for him to try to take a less forward profile.

Having said that he remains active as the Chair of the ICA Commission on Marine Cartography, a role he will relinquish after many years, in August this year.

Even then he will remain involved with organising CoastGIS Conferences and as one of the two ICA representatives on the FIG/IHO/ICA Advisory Board for Standards of Competence for Hydrographers and Nautical Cartographers.

Indeed, Ron, with the assistance of the Australian Hydrographic Service, will host

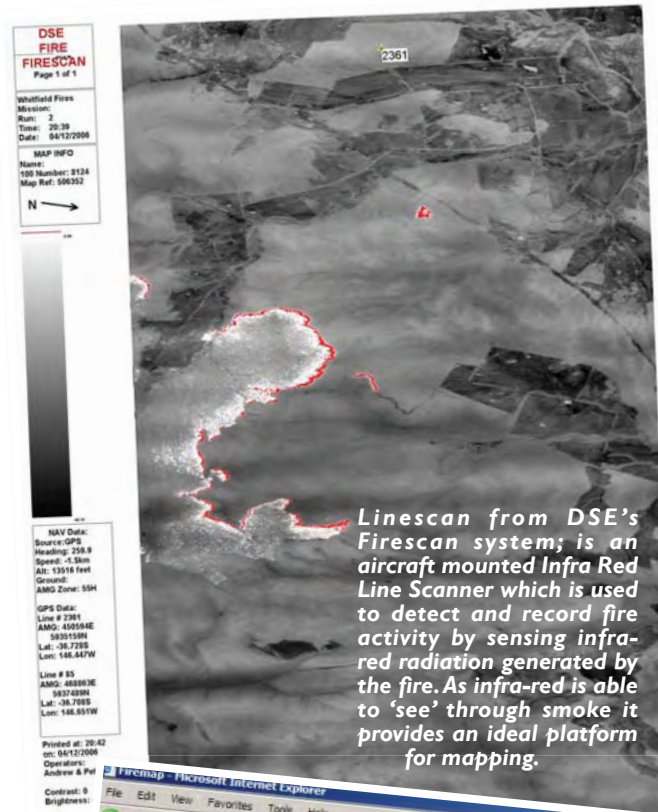
the Board's 2008 Meeting in Wollongong in April that year.

Jennifer and Ron (pictured here in semi-retirement mode) plan to keep travelling as they both try to cut down on their commitments but their main pride and joy is their grandchildren. A couple of them need some special care and so their grandparents intend to spend more time as their grandchildren develop over the next few years.

Ron says that he will miss catching up regularly with all the friends he has made in MSIA and appreciates their support and

kindnesses over the years. Knowing Ron, we feel we can confidently say "he will only be an email away!"





ECC and IMT tasks. Also accommodation is provided for staff deployed to regional locations, this could be a tent or a motel suite spa and it's the luck of the draw which one you get.

Data is sourced from VICMAP digital topographic and cadastral data, Corporate Geospatial Data Libraries (CGDL), Aboriginal Affairs Victoria, Forest, Flora and Fauna GIS data stores. The FireMAP web mapping application is where the fire area and control line shapefiles are uploaded to an Oracle/SDE database, for storage, display and downloading.

Additional to this a shared network drive can be mounted to share shapefiles, linescans, map products and map related documents, to all staff involved in the fire activity. As the fire spread to over 1.1 million hectares of mainly public land resources came from interstate and overseas, mapping staff came from places including Geoscience Australia in Canberra and fire mapping staff from USA.

From a personal level I undertook about 10 night mapping shifts in December-January when the fire extent was growing the most quickly. As well as 12-13 hour shifts many of us travel via public transport to return home, so it's easy to add on 1 hour each way, sleep was of course a priority for the remaining time during the day.

Additionally I undertook a 7 day deployment to Gippsland supporting the Bureau of Meteorology with portable fire weather stations.

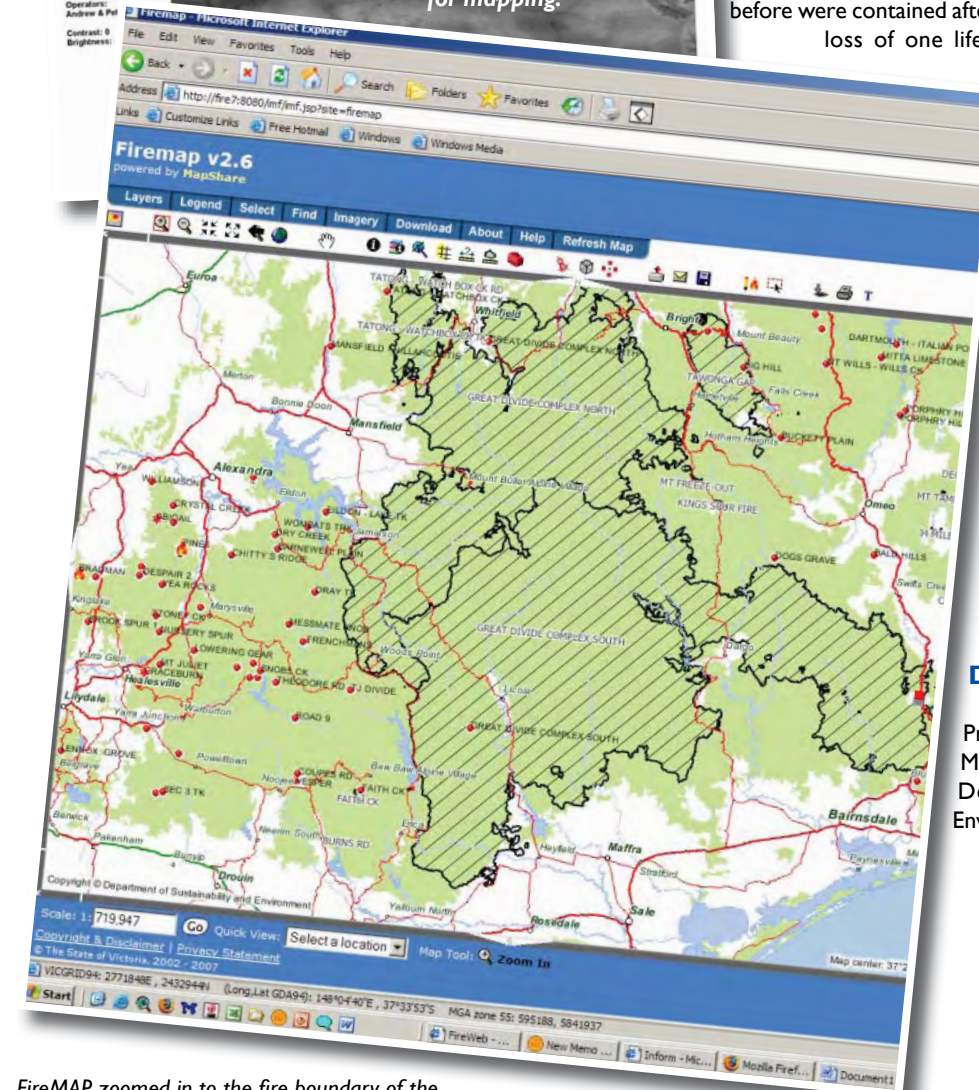
On 2 February 2007 the fires that started 2 months before were contained after having cover 1.1 Million hectares, loss of one life, some houses, sheds and stock losses. Smaller fires in East Gippsland, Tom Groggin on the NSW border, Little Desert and Dergholm in western Victoria have also occurred since late November 2006.

The fire season could restart again at any moment as each night for the last week lightning is striking across the Victorian landscape, with 220 new fires starting but high humidity and quick response has stopped any more spreading. Now tasks including fire severity mapping, asset condition assessment, timber salvage, flora and fauna impacts begin.

But that's another story.....

David Adams, MSIA, SSI

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East Melbourne Victoria 3002
david.adams@dse.vic.gov.au

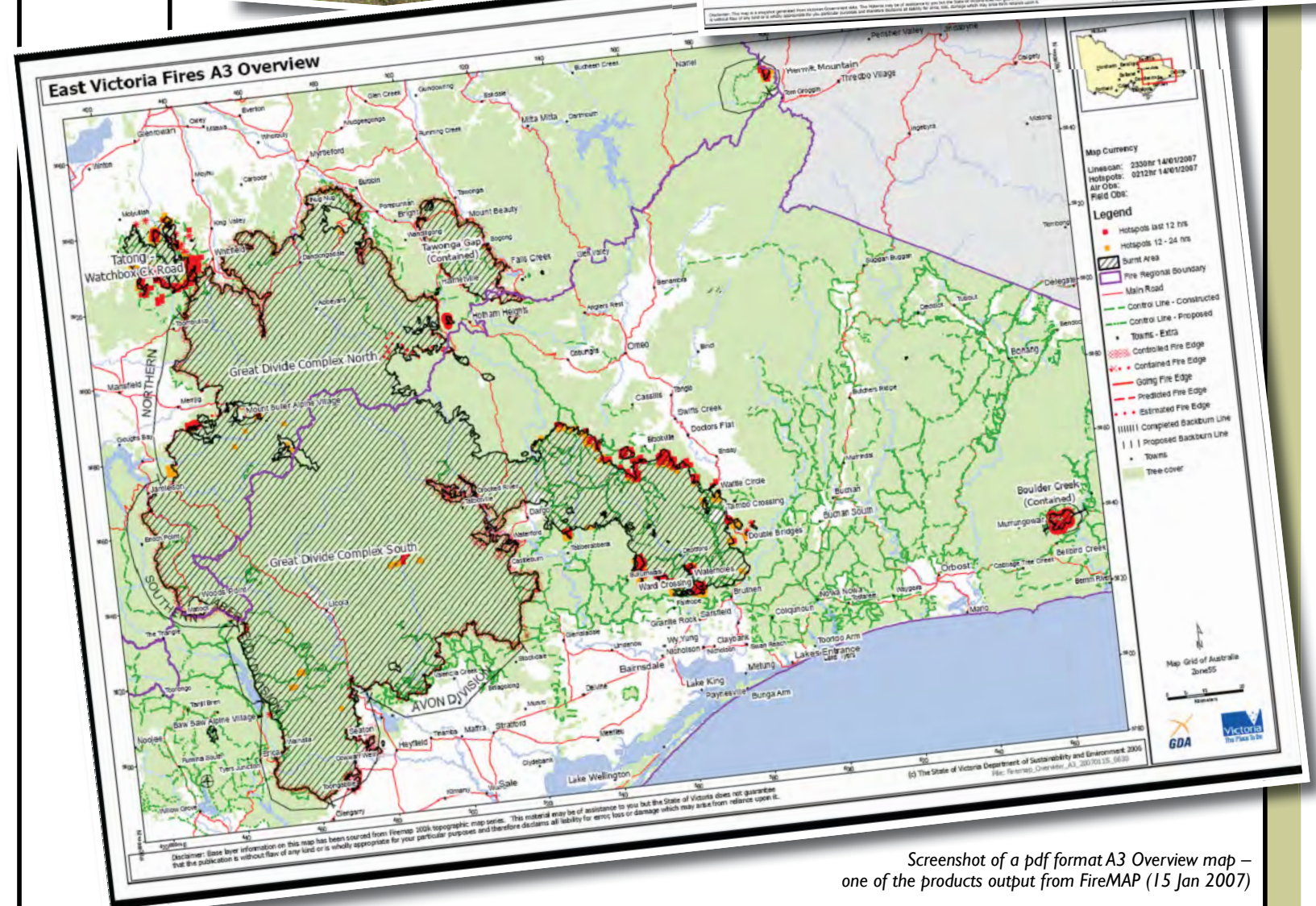
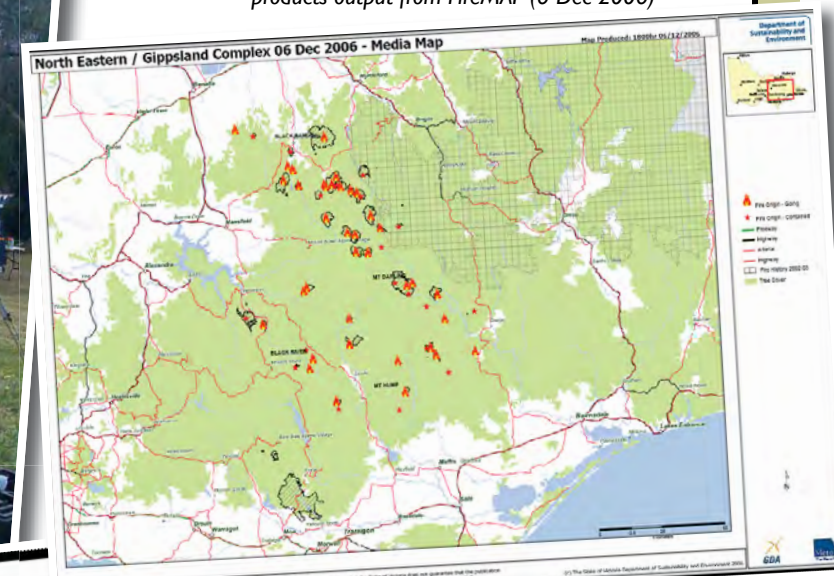


FireMAP zoomed in to the fire boundary of the North East – Gippsland Complex fire in Victoria, 2006-07 fire season



PAWS Training,
Bushy Park
November 2006

Screenshot of a pdf format A3 Media Map – one of the products output from FireMAP (6 Dec 2006)



Screenshot of a pdf format A3 Overview map – one of the products output from FireMAP (15 Jan 2007)

Outgoing National President's Report



"As National President I had the privilege of welcoming delegates to the conference and I was able to participate in the conference and listen to the many interesting presentations..."

"...I must say that I am extremely disappointed at the current situation."

A major event for Mapping Sciences Institute, Australia, during 2006, was the 400 Years of Mapping Australia Conference which was organised by the Northern Territory Division of MSIA in August 2006 to coincide with the Australia on the Map Commemoration Project 1606-2006. Whilst not attracting the numbers that would normally attend a full national industry conference, for a specialised event focussing specifically on the history of cartography, it was successful and attracted more than originally anticipated by the organisers. Many came from interstate and included members of other organisations such as the Institution of Surveyors, Australia (ISA), Australian Map Circle and Spatial Sciences Institute (SSI), all sharing a common interest in the history of mapping and exploration in Australia. Trevor Menzies and his team are to be commended for their efforts.

As National President I had the privilege of welcoming delegates to the conference and I was able to participate in the conference and listen to the many interesting presentations, a list of which Trevor provided in his summary of the conference that appeared in the October 2006 edition of the Mapping Sciences National Newsletter. In mixing with conference delegates I could not help but observe that they did in fact represent a cross-section of the spatial sciences industry and that without the input from local representatives of SSI and ISA, the NT Division of MSIA would have struggled to have organised the event alone.

Although MSIA has organised a number of local activities and has continued to provide some services to members in divisions where divisional committees remain active, compared to the institute's past profile this is now on a reduced scale with respect to level of activities, overall membership numbers and the number of effectively operating divisions.

As at the end of December 2006 the National membership register contained a total of 481 with only 144 of these being financial. This included 31 members who were either Life Members or Honorary Fellows who do not pay annual subscriptions. Also included in the total membership number of 481 are 34 Student members. Prior to 2005 all Student members were admitted free, however during 2005 a student member subscription of \$25 per annum was introduced. The majority of students have not yet paid any subscriptions and there would be many who now no longer qualify for student membership status.

The only divisions of the institute that continue to operate at a local level are Queensland, New South Wales, Victoria (on a very much reduced skeletal basis) and Northern Territory. Both ACT and South Australian Divisions wound up their operations some time ago and merged their activities with the local regional groups of Spatial Sciences Institute. Western Australian Division has been effectively in "caretaker" mode since 2004

with all local activities integrated with those of the Western Australian Region of SSI since then. The winding up of the WA Division was first mooted at the last divisional AGM held in November 2003. With the centralisation of all membership services within MSIA being handled from the national level since January 2005, the provision of local services via SSI as outlined above, and the significant drop in numbers of financial members remaining in WA, then the winding up of the WA Division of MSIA as foreshadowed at the end of 2003 will now be finalised. With only a very small number of MSIA members attending local events, even if these were organised solely by MSIA, then it would still be difficult to justify the continued existence of the Division and it would also be difficult to fill committee positions.

Although MSIA did have some initial dialogue at the national level with SSI in 2004 and a draft MOU was put forward to National Executive and Council for consideration, the members of executive and Council were reluctant to take any further steps for MSIA to integrate with SSI. In May 2005 I became elected as National President of MSIA and in taking office I put forward a firm agenda to try and move the MSIA towards integration with SSI. Various articles that I have included in the National MSIA Newsletter over 2005-2006 have reflected this. Unfortunately I have been unsuccessful in convincing the majority of national Executive and Council of the benefits of such a move and the stalemate at the national level continues.

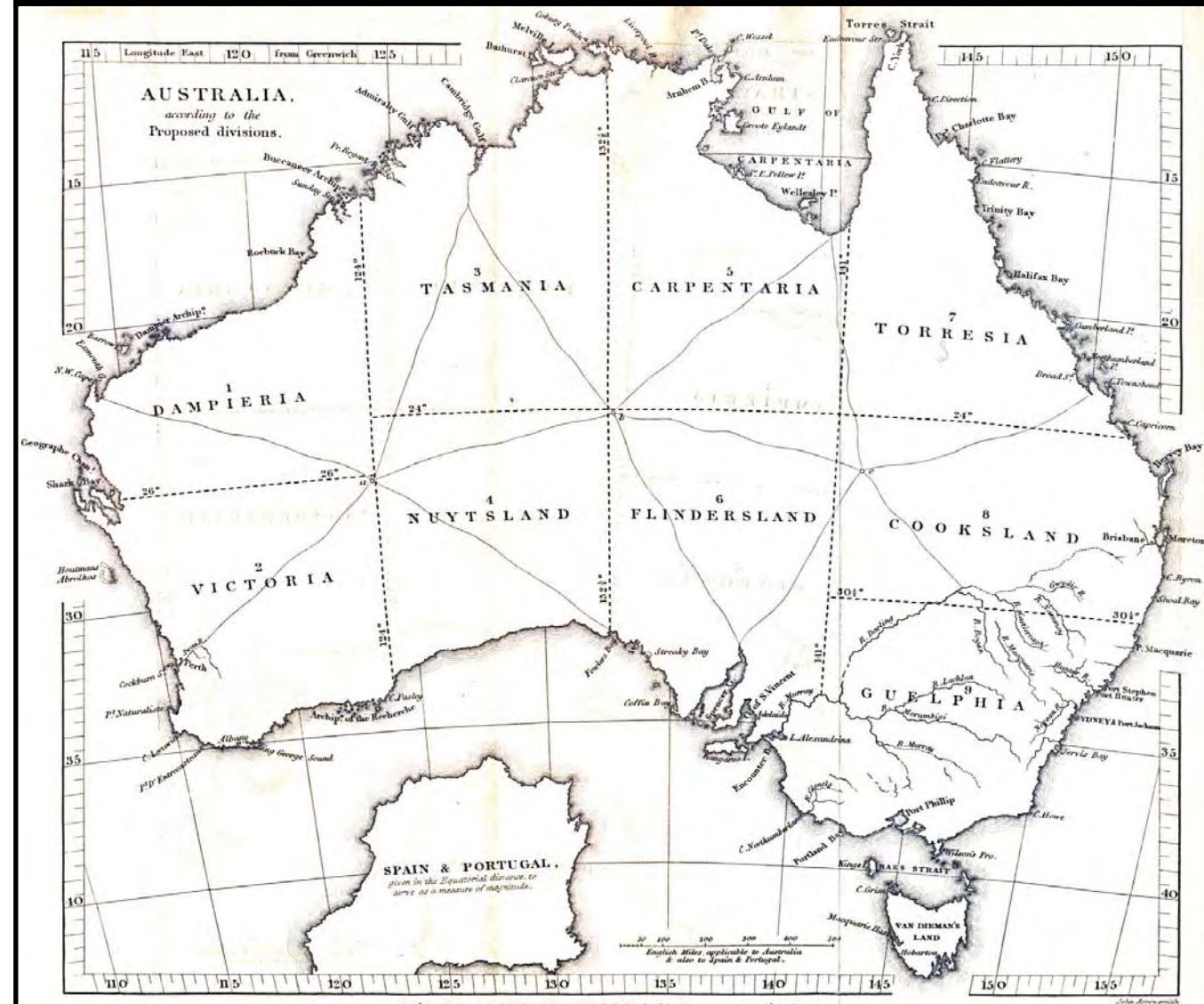
In January 2007 the Chairman of the MSIA National Executive, Mr Ron Furness, who had held the position for a number of years, resigned from the position. His services to National Executive and Council while in the position of Chairman were very much appreciated. As many members would know Ron has also served previously as National President.

In ending my current term of President I must say that I am extremely disappointed at the current situation. In my view MSIA is becoming ineffective in totally representing those involved in the mapping component of the spatial industry and SSI will be the body referred to at the National level to act as the voice of the whole spatial industry. It is encouraging to see that the Young Professionals interest groups are becoming quite active in many of the SSI regions and these will provide a future source for full membership of SSI.

MSIA held its last truly national conference in Melbourne in 2002. Since then SSI has effectively run biennial national spatial industry conferences in Canberra (2003), Melbourne (2005) and with the current one held in Hobart in May this year.

In stepping down from my position as National President I also signal my intention to formally resign from the Mapping Sciences Institute, Australia.

Peter Shaw, FMSIA, FSSI
National President
May 2007



Proposals for new Australian States

http://en.wikipedia.org/wiki/Proposals_for_new_Australian_States

"Australia, according to the Proposed divisions."

from The Journal of the Royal Geographical Society, Volume 8, 1838

to accompany "Considerations on the Political Geography and Geographical Nomenclature of Australia"

by Captain Vetch, Royal Engineers, F.R.

(Portugal and Spain were included for size comparison purposes).

<http://strangemaps.wordpress.com/>

Hannover On Her Mind - and On Her Back

"I wanted something unique, something nobody else had. But every idea I had – it had already been done," says Britta Oelschlaeger. The 33-year-old photographer, who hails from the city of Hannover, knew she wanted a large tattoo on her back. Eschewing more popular designs as elves, dragons, dolphins and roses, she looked for ten years until she found this 1896 map of her hometown. "I'm a fan of Hannover's football team and I'm completely crazy about maps," the artist explained her choice of tattoo.

It took the tattooist 7 hours to etch the outlines of that late 19th-century city plan

on her back, and it will take many more to etch in the various hues of brown and green to give it the exact look as the original map.

According to the AP press report, Oelschlaeger's daughter is absolutely thrilled with her mom's cool and original tattoo. Hannover is the capital city of Lower Saxony, one of Germany's constituent Länder.

1896 happens to be the founding year of Hannover 96, Oelschlaeger's favourite football club.



Plotting the digital map

...from page 2

12 per cent. "Navigation products are where digital cameras were three to four years ago," Navteq's Asia-Pacific senior vice-president Richard Shuman says. "A device to tell you where you are and how to get you to your next location will become a standard expectation for the majority of Australians in the next few years."

There are already 20 million GPS navigation devices in Europe, and prices are coming down quickly. "How many phones were GPS-enabled two years ago? Hardly any," Mr Shuman says. "There is a lot of 'where am I and what's around me', but now we're also seeing a lot of 'where can I find something in my vicinity?' "We are just scratching the

surface. In the next few years we are going to see the convergence of products and services based on maps."

Navteq's local business development director, Kirk Mitchell, says he hopes to win the local custom of TomTom, Navman and Garmin, who are all currently using Sensis data. The selling points would be the quality of the product as well as the ability to leverage global volumes. "Vendors want one source, and we are a global company," he says.

Overseas, the company is already experimenting with licensed content on its maps - Starbucks, for instance, pays for its logos, store locations and contact details to be included in Navteq's data.

Mr Mitchell says Navteq is about to sign a local reseller for the service, although he has no local

clients yet. The company is also building a "Discover Cities" product that appeals to a tourist market, due to launch next year.

However, Sensis is also innovating in this area - and has a 10-year history of selling digital mapping data in Australia.

"Yes, Navteq does have some of our customers (overseas)," says Fred Curtis, senior commercial manager for location at Sensis. "But we have long-term relationships with those customers here in Australia."

"It comes down to a good, strong product, good commercial terms and good account management. In the past 12 months we have driven more than 15,000 hours to capture information down to one metre (accuracy). We can give the user the exact reality of the road."

Marcus Perks, managing director of Sensis' location and publishing business, says the UBD is the benchmark for good mapping data in Australia and the company's other data pools, such as Yellow Pages, allows it to offer a rich package to mapping customers.

"It's more than just a map," he says. "It's about trying to match the real world to a (digital) system. Consumers can get easy directions from A to B and overlay information from a general search."

In the luxury market, the trend is from simple navigation to "automated driver assistance" requiring details such as lane structures and even the slope of a road, Mr Perks says.

There is also a move to richer visual content such as 3-D building models, even with photo-realistic textures. This would be a big selling point for the tourism market, and Sensis is working on digitally reproducing landmarks such as Melbourne's Parliament House.

Sensis also plans to integrate editorial content from its touring guides with information about fishing, 4WD off-roading and national parks.



"...There is also a move to richer visual content such as 3-D building models, even with photo-realistic textures"

Designer Options for that Little Room!

Clark Sorensen has created some of the most amazing urinals one is likely to ever see.

Each is meticulously hand built and formed from high fire porcelain. They are fully functioning vitreous porcelain fixtures that can actually be plumbed and used in a bathroom or simply displayed.

Clark hopes that his urinals will be put to use in uniquely designed bathrooms around the world.

Because of the size and complexity of the forms they must be dried slowly and evenly - taking five to eight months to complete each one. Achieving such rich vibrant colors at such high temperature has also been a challenge.

<http://www.clarkmade.com>



INTERNATIONAL AFFAIRS 2007

INTERNATIONAL CARTOGRAPHIC CONFERENCE

The International Cartographic Association has advised that the 23rd International Cartographic Conference will take place in Moscow, 4-10 August, 2007. To quote Alexander Borodko, President of the Working Organising Committee, "The important tasks of this conference are representation and discussion of:

- * Cartography development and global cartographic projects of world value, and
- * Problems, modern directions of cartographic development in ICA member-countries."

Further information at www.icc2007.com

NOMINATION - PRESIDENT OF ICA

The nomination of Dr William Cartwright,

Hon FMSIA, for the position of President of the International Cartographic Association has been accepted by the Secretary-General and Treasurer, Dr. F Ormeling, on behalf of the ICA Executive Committee.

The nomination was initiated by the Council of the Mapping Sciences Institute, Australia, in anticipation of the election which will be held at the ICA General Assembly in Moscow in August this year. Bill is the manager of the MSIA International Program and is currently a Vice-president of ICA.

In his professional life, Bill is Professor of Cartography and Geographical Visualisation, School of Mathematical and Geospatial Sciences, RMIT University, Melbourne.

Our best wishes go to Bill.

NOMINATION - CHAIR OF ICA COMMISSION ON EDUCATION AND TRAINING

The Council of MSIA has been pleased to nominate Dr David Fraser, FMSIA, for the position of Chair of the ICA Commission on Education and Training.

David is a Senior Lecturer and Director of Research Programs (Geospatial) in the School of Mathematical and Geospatial Sciences, RMIT University.

He is currently a member of the ICA Commission on Education and Training and is the manager of the MSIA Education Program.

The election for this position will also take place at the General Assembly in August and we wish David good luck.



NOMINATION - CHAIR OF THE COMMISSION ON MAPPING FROM SATELLITE IMAGERY

Council has also been pleased to nominate Professor Graciela Metternicht for the position of Chair of the ICA Commission on Mapping from Satellite Imagery.

Graciela is Professor of Geospatial Science at Curtin University and is currently the Acting Chair of the above ICA Commission.

We extend our best wishes to Graciela for the August election.



ABOUT THE ICA

The International Cartographic Association is "The world authoritative body for cartography, the discipline dealing with the conception, production, dissemination and study of maps". It was founded in Switzerland in 1959 and now comprises about 80 member-nations.

The ICA is managed by an Executive which consists of a President, seven Vice-presidents, a Secretary-General and the Editor of the newsletter - all of whom act in a voluntary capacity. Funding of ICA is by way of subscriptions from member-countries. The MSIA represents the Australian cartographic community and our annual subscription is approximately \$1000.

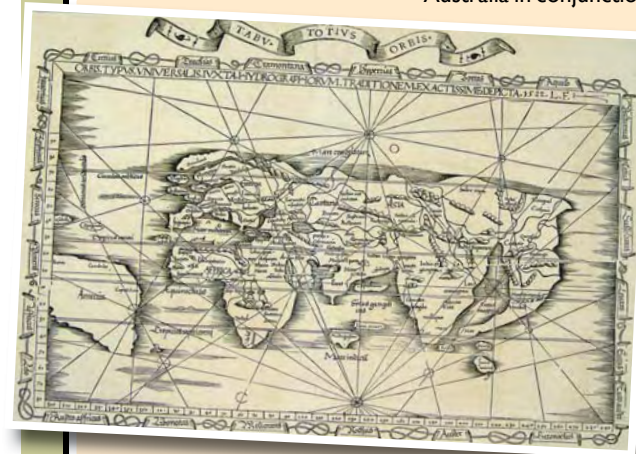
Every two years the ICA holds a conference; the first being staged in Frankfurt, Germany, in 1962 and the most recent in A Coruna, Spain, in 2005. At the latter, there were 1600 participants and 540 papers were presented - including 17 by Australian authors. As part of the conference proceedings awards are made for excellence in map design and production and the Barbara Petchenik Children's World Map Competition is also conducted.

Every four years a General Assembly of the Association is held in conjunction with the conference. At these, the members of the Executive are elected and the Commissions and Working Groups also have their office-bearers elected and terms of reference for the ensuing four years approved.

Australians have, for a long time, played an active role in the management and activities of ICA. The most notable office-bearer was **Don Pearce** Hon. FMSIA of Western Australia who served as Secretary-General and Treasurer for many years. Currently, **Bill Cartwright** is one of the Vice-presidents and **Graciela Metternicht** (WA) is the Editor ICA News. Also, **David Fraser**, **Dorothy Prescott**, **Abbas Rajabifard**, **Ron Furness**, **Graciela Metternicht** and **Bill Cartwright** are involved in various Commissions. (Details are on page 20). The highlight of Australia's contribution to international cartography was the staging of the International Cartographic Conference in Perth in 1984.

400 years mapping Terra Australis: Filling in the map

Between May and June last year, Antique MapArt Australia in conjunction with Illustration house and Gowrie Galleries held an exhibition at South Bank Brisbane to commemorate last year's 400th anniversary of the European mapping of the Australian coastline. The exhibition featured seventy original maps chronologically displayed from Fries' 1535 world map, which shows no trace of an Australian landmass

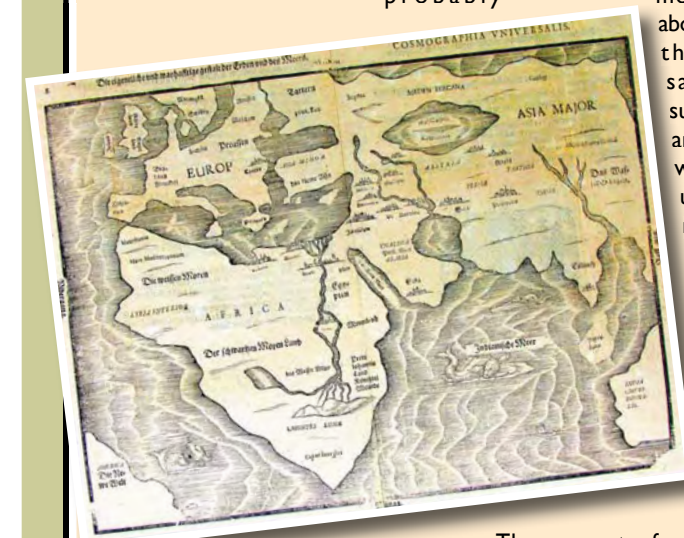


1535 Fries

to SDUK's map, displaying the recent borders of the state of Queensland in 1860. What was most astonishing about the exhibition though at the same time not surprising was the amount of visitors who could not understand why a map of the world in 1680 showed

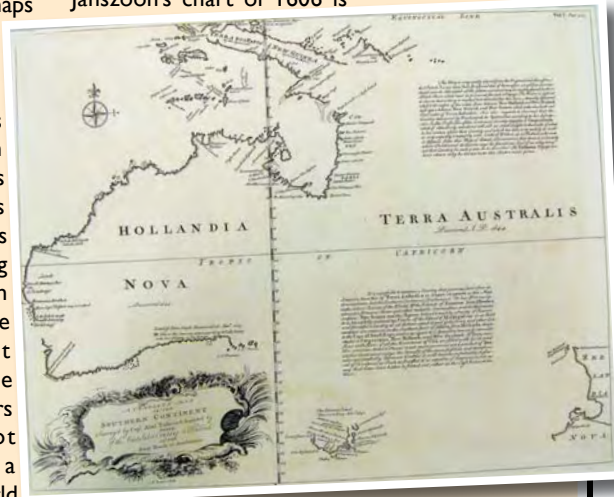
Australia. It seems to be a common Australian misconception that Captain Cook discovered the whole continent in an empty ocean.

The amount of amazed faces seen during the exhibition proved the need for a better understanding of



1581 Bunting

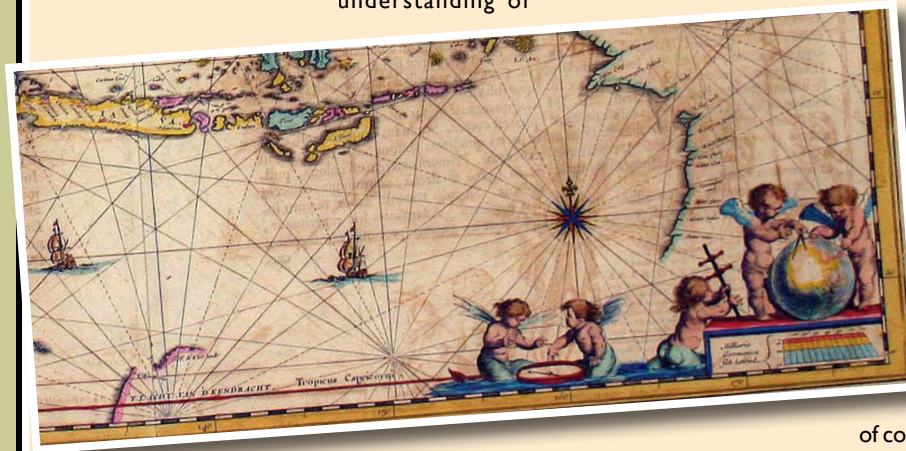
In recognizing the accomplishments of Janszoon's 'Duyfken' discoveries in 1606, Australia 'became' 400 Euro-centric years old this year, but the chance that even earlier maps may arise still exists. Both the Portuguese and Spanish explored the region around Australia before 1606, though no maps showing earlier discoveries of the continent have yet been found. The Portuguese and Spanish's mapping secrecy kept many of their discoveries away from the curious eyes of other European powers at the time. Bunting's 1581 map of the Indian Ocean shows what looks like a perfect West Australian coastline. This hints at the possibility of an earlier European knowledge of Australia long before its official first charting by the Dutch. However, Janszoon's chart of 1606 is



1744 Bowen

the most conclusive evidence that it was him, who not only sighted but acknowledged the Australian coastline for the first time. Ironically, while charting part of Cape York Peninsula, it is believed that Janszoon thought it was part of the New Guinean coastline rather than a new landmass.

Compared to the extent of 1988 celebrations to commemorate 200 years of European settlement, last year's anniversary of 400 years 'discovery' and mapping of 'Terra Australis' by Europeans has received considerably less attention by the general public. Obviously, it is difficult to celebrate something many people are not even aware of. The accomplishments of early explorers are not broadly recognised by the majority of Australians. It is difficult to appreciate how dangerous the occupation of mapping and exploration used to be, as going into blank areas on the map meant that reefs, submerged rocks, and hazardous currents to name but a few dangers were waiting to be unexpectedly encountered. The fact that the East coast of Australia remained uncharted for over a hundred years after most of the continent had appeared on maps must indicate there was a great deal of concern to embark on filling in Australia's Eastern half. Even after ten years of Australian settlement the belief that Tasmania was possibly attached to the mainland still commonly appeared on maps. The last substantial part of the Australian



1635 Blaeu

how Australia appeared on the map and why. The new multicultural Australia will hopefully endeavor to acknowledge these 'foreign' explorers who charted the Australian coastline.



1772 Dunn

coastline to be charted was finally completed by Flinders' and Baudin's voyages between 1801 and 1803.

Though it was Flinders who was first to chart most of the unknown southern coast it was in fact the Frenchman Baudin's discoveries that were first to appear on published maps. The Baudin voyages general map of the continent was published in 1811 showing the first 'complete' map of Australia, three years before



1798 Cassini

Flinders published his map in 1814, the year he died. This was due to number of reasons, most notably Flinders' imprisonment from 1804 to 1810, when the French kept him under house arrest on the island of Mauritius during a turbulent time of the Napoleonic wars. This meant that for a few years Flinders' charting of Spencer's Gulf appeared on maps as Bonaparte's Gulf, while the Gulf of St Vincent appeared as Josephine's Gulf, including most of the southern coast being referred to as 'Terra Napoleon', a fascinating part of Australia's Napoleonic connection.

With the emergence of Flinders map of the region in 1814 and proof of his first charting of a majority of the coastline, combined with the loss of the war by the French and political pressure, Flinders

right of discovery and naming was eventually accepted.

The fascinating history of Australia's mapping heritage is becoming known by more Australians now than ever before. Antique MapArt Australia specialises in the sale of antique maps of the Australian region but beyond that it also aims at creating this awareness, interest and enjoyment of Australia's mapping history.

In 2008, an exhibition of the official published charts and artworks of Captain Cook's three voyages is planned. The collection will number over 150 pieces and should be very remarkable in showing not only the depth of Cook's discoveries and charts but also the impressive beauty of the artworks that accompanied the journals of his three voyages.

Troy Hamilton-Irvine
Antique MapArt Australia
Phone: (07) 3103 0391
www.AntiqueMapArt.com



1811 Baudin

"Even after ten years of Australian settlement the belief that Tasmania was possibly attached to the mainland still commonly appeared on maps".

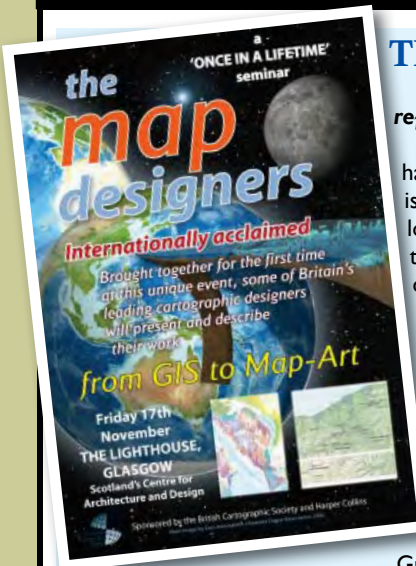
".. an exhibition of the official published charts and artworks of Captain Cook's three voyages is planned"



1811 Baudin

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"What a day we had; it was fantastic!"

THE MAP DESIGNERS

Lynda Bailey of the organising committee reports on the Nov 2006 Glasgow event.

What a day we had; it was fantastic! We had an audience of cartographers, visual artists, locative mappers, fine artists, central and local government, GIS experts, artists with their own studios, someone doing a music/art degree who wants to map internal spaces with sound, someone doing locative interactive mapping of Glasgow, people working in ecological mapping, town mapping and on and on. It sounds as though we had a huge audience. Not really, it was more an enthusiastic, engaged, electrically charged audience who just wanted to listen and learn and opinionate on EVERYTHING that was being put in front of them.

Guest presenters gave five minute talks and this turned out to be one of the many highlights of the day because it illustrated some of the more creative and unusual areas of map art, locative mapping etc where cartographic skill could be or was being applied.

So plans are already afoot for a second event. Evaluation forms received actively asked for more events and soon, a website, a blog, and a forum. I must stress that these are all just ideas at this point though. In effect we're already advertising for the second event. Plans are afoot for us to 'appear' at an urban arts festival in Manchester called Futuresonic 2007. www.futuresonic.com. If this happens it should be great fun..

The Bathtub Test

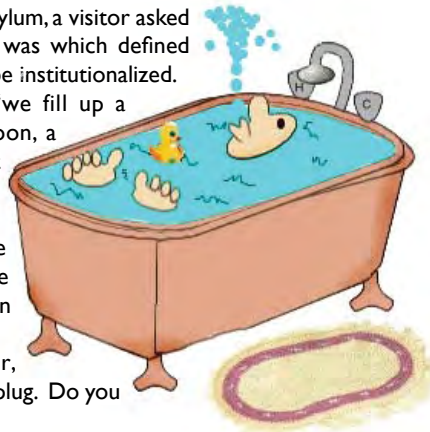
It doesn't hurt to take a hard look at yourself from time to time, and this should help get you started.

During a visit to the mental asylum, a visitor asked the Director what the criterion was which defined whether or not a patient should be institutionalized.

"Well," said the Director, "we fill up a bathtub, then we offer a teaspoon, a teacup and a bucket to the patient and ask him or her to empty the bathtub."

"Oh, I understand," said the visitor. "A normal person would use the bucket because it's bigger than the spoon or the teacup."

"No," said the Director, "A normal person would pull the plug. Do you want a bed near the window?"



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.. from page 4

Dementia Test Answers

Q1: If you answered that you are first, then you are Absolutely wrong! If you overtake the second person and you take his place, you are second! Try not to screw up next time.

Q2 Answer: If you answered that you are second to last, you are wrong again. Tell me, how can you overtake the LAST Person?

You're not very good at this, are you?

Q3: Did you get 5000? The correct answer is actually 4100. If you don't believe it, check it with a calculator! Today is definitely not your day, is it?

Q4: Did you Answer Nunu? NO! Of course it isn't. Her name is Mary. Read the question again!

Bonus: He just has to open his mouth and ask... It's really very simple.... Like you!

Humour - Brain transplant

In the hospital the relatives gathered in the waiting room, where their family member lay gravely ill.

Finally, the doctor came in looking tired and somber. I'm afraid I'm the bearer of bad news,' he said as he surveyed the worried faces. 'The only hope left for your loved one at this time is a brain transplant. It's an experimental procedure, semi-risky and you will have to pay for the brain yourselves.'

The family members sat silent as they absorbed the news. After a great length of time, someone asked, 'Well, how much does a brain cost?'

The Doctor quickly responded, '\$25,000 for a male brain, and \$3,000 for a female brain.'

The moment turned awkward. Men in the room tried not to smile, avoiding eye contact with the women, but some actually smirked. A man, unable to control his curiosity, blurted out the question everyone wanted to ask, 'Why is the male brain so much more?'

The doctor smiled at the childish innocence and said to the entire group, 'It's just standard pricing procedure. We have to mark down the price of the female brains, because they've actually been used.'

TECHNICAL SUPPORT

Dear Technical Support,

Last year I upgraded from Girlfriend 7.0 to Wife 1.0. I soon noticed that the new program began unexpected child processing that took up a lot of space and valuable resources. No mention of this was included with the product information. In addition, Wife 1.0 installed itself into all other programs and now launches during system initialisation, where it monitors all other system activity.

Applications such as Poker Night 10.3, Drunken Boys Night 2.5, Football 5.0, Hockey 3.0, Hunting & Fishing 7.5, and Racing 3.6 no longer run, crashing the system whenever selected. I can't seem to keep Wife 1.0 in the background while attempting to run my favourite applications. I'm thinking about going back to Girlfriend 7.0, but the Uninstall doesn't work on Wife 1.0.

Please help! Thanks. A Troubled User.

Reply from Technical Support

This is a very common problem that men complain about. It is due to a primary misconception among men. Many people upgrade from Girlfriend 7.0 to Wife 1.0 thinking that it's merely a Utilities and Entertainment program.

Wife 1.0 is an OPERATING SYSTEM and is designed by its creator to run everything! It is also impossible to delete Wife 1.0 and return to Girlfriend 7.0. Hidden operating system files cause Girlfriend 7.0 to emulate Wife 1.0 so nothing is gained. It is impossible to uninstall, delete, or purge the program files from the system once installed. You cannot go back to Girlfriend 7.0 because Wife 1.0 is designed to not allow this. Some have tried to install Girlfriend 8.0 or Wife 2.0 but end up with more problems than in the original system.

Look in your Wife 1.0 manual under "Warnings: Maintenance / Child Support". I recommend that you keep Wife 1.0 and work on improving the situation. I suggest installing the background application program "Yes_Dear" to alleviate software augmentation.

Having installed Wife 1.0 myself, I also suggest that you read the entire section regarding "General Partnership faults" (GPF's).

You must assume all responsibility for any faults and problems that occur, regardless of their cause. You will also find that GPF's tend to be somewhat cyclical, occurring approximately 28 days apart. The best course of action is to enter the command C:\APOLOGISE. Avoid excessive use of C:\YES_Dear, because ultimately you will have to use the APOLOGISE command before the system will return to normal anyway. Remember, the system will run smoothly as long as you take the blame for all GPF's.

Wife 1.0 is a great program, but tends to require high maintenance. Wife 1.0 comes with several support programs such as Clean_and_Sweep 3.9, Cook_it 1.5 (which replaces Burn_it 1.0) and Do_Bills 4.2. You must however, be very careful how you use these programs. Improper use will cause the system to launch the program Nag_Nag 9.5. Once this happens, the only way to improve the performance of Wife 1.0 is to purchase software. I recommend Flowers 2.1 and Diamonds 5.0 should this happen.

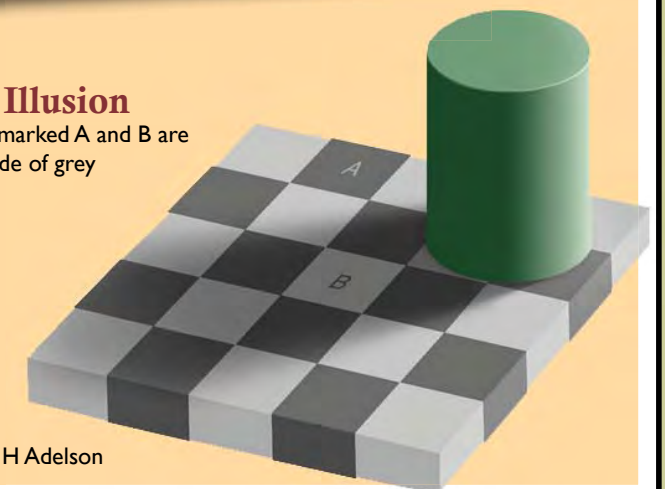
WARNING!! * DO NOT * under any circumstances, install Secretary_With_Short_skirt. This application is not supported by Wife 1.0 and will cause irreversible damage to the operating system. Regards, Technical Support.

Illusions It's all in the Angle!



Optical Illusion

The squares marked A and B are the same shade of grey



Prof Edward H Adelson

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

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 Colin Mitford & Michael Turner **New South Wales**
 Greg Heron **Northern Territory**
 Adam Ladhams and Alan Unkles **Queensland**
 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

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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 - johnmccormack@netspace.net.au

INTERNATIONAL AFFILIATION

MSIA is affiliated with the International Cartographic Association [www.icaci.org].

Dr. William Cartwright is a Vice President and Dr. Graciela Metternicht is the editor of "ICA News".

ICA Commission participants:

David Fraser **Education**; Dorothy Prescott **History**; Abbas Rajabifard **Standards**;
 Ron Furness **Marine Cartography**; Graciela Metternicht **Chair Mapping from Satellite Imagery**;
 William Cartwright **Geographic Visualisation & Virtual Landscapes** and **Maps & the Internet**

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Please supply the following facsimile maps:

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☐ No.4 Costa Australe, 1646 @ \$29.50 each _____
☐ No.6 Tasman's Voyage, 1726 @ \$29.50 each _____
 Add \$5 if you are NOT an MSIA member _____
 Additional \$5 for overseas postage _____

Total amount enclosed

(cheque/money order payable to MSIA) AUD\$ _____

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