

National Magazine of the Mapping Sciences Institute, Australia

# Mapping Sciences National

# **Centenary of National Mapping**

Over the years many members of MSIA / AIC have contributed to national mapping. The Institute plans to publicly recognize these achievements by hosting a conference and exhibition to commemorate one hundred years of national mapping.

In 1910 the then recently formed Australian Army recruited four topographers from the (British) Royal Engineers to form a survey section within the Intelligence Corps to produce maps over training and other areas of military importance. A program of one inch to one mile (1:63,360) topographic mapping was commenced over strategic areas starting with Geelong and Westernport in Victoria, and Newcastle in New South Wales.

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These map sheets were compiled in the field by plane table methods and complemented with detail taken from existing cadastral plans. The Newcastle and abutting Morna Point sheets were the first to be printed in colour by the NSW Government Printer in 1913. This was effectively the start of the national topographic mapping of Australia.

In 1912 the Intelligence Corps survey section was transferred to the Royal Australian Engineers and three years later formed the nucleus of a new Australian Survey Corps. A triangulation section was established in 1914 to provide geodetic control for the plane table compilations. Up to the Second World War the Survey Corps continued the one inch to one mile series mapping over pockets of priority areas in all States.

Plane table methods were used until the early 1930s when vertical aerial photography flown by the RAAF was trialed and subsequently adopted to speed up map compilation. However progress was slow due to government financial constraints and the low priority accorded to the military in general throughout the 1920s and early 1930s. Only a minute portion of Australia had been adequately mapped when Prime Minister Menzies declared war on Germany in 1939. The available map coverage was then confined to areas around the cities and ports in the south-east and south-west of the country.

1910 - 20

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Pi Island

On the outbreak of war the defence chiefs were confronted with the serious problem of a lack of maps to plan and execute military operations across the country. There were no maps at all across northern Australia suitable either for strategic defence planning or to support troops in the field. The government's response to its predicament was to increase the size of the Survey Corps and to initiate an emergency mapping program in conjunction with the State Surveyors-General.

Due to the vastness of the country and the need for expediency, the program called for one inch to one mile (1:63,360)

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### May 2008

## cartography in the news

Robin A Orr The Guardian, Saturday February 16 2008 www.guardian.co.uk/theguardian/2008/feb/16/1

### **Obituary John Bartholomew**

John Bartholomew, who has died aged 85, was probably the most patient perfectionist one could meet. His family's Edinburgh-based company has been synonymous with high-quality cartography for more than 170 years, producing maps and atlases of world renown, and remaining independent until 1980, when the Reader's Digest Association took it over. Like his grandfather John George Bartholomew, the "Prince of Cartographers", John was passionate about maps.

The Times Survey Atlas of the World was first published in 1922, and by the 1960s various editions of the Times atlases, with Bartholomew mapping, were established as standard works. The company also provided the maps for the Reader's Digest Great World Atlas (1962), eventually published throughout western Europe, the US, Canada, Mexico and Brazil.

However, as technology advanced, investment was needed to convert the huge archive into digital form and maintain Bartholomew's reputation hence the takeover. This would ensure the future of the Times atlases and enable the company to produce different designs for other publishers. While plans for the development of a digital database were still on the drawing board, Reader's Digest sold the company in 1985 to News International - which approved the plans. In 1989 Bartholomews became part of HarperCollins. One of the early projects produced from this archive was complete sets of maps for Le Petit Larousse encyclopaedic dictionaries, considered standard reference works in France.

Once the archive was completed, in the 1990s, both the comprehensive and concise editions of the Times atlases were republished entirely from the digital archive. John was



John Bartholomew with Les Isdale at the 3rd Australian Cartographic Conference -Brisbane 1984

the end, perfectionist that he was, he admitted the results were comparable. Any lingering doubts were dispelled when he requested a world map on a specific projection that was delivered to him the same day. John followed in the footsteps of his father

and grandfather, becoming president of the Royal Scottish Geographical Society. He was also president of the British Cartographic Society and a vice-president of the International Cartographic Association (ICA).

John Christopher Bartholomew, geographer and cartographer, born January 15 1923; died January 16 2008

Taipei Times - Source: AFP. BEIIING Wed, May 07, 2008 www.taipeitimes.com/News/world/archives/2008/05/ Beijing probing Google over 'problematic' maps

China has launched an investigation into online mapping services by Internet giants, including Google and Sohu, in an effort to protect state secrets and territorial integrity, state press said.

Min Yiren, vice head of the State Bureau of Surveying and Mapping, said that authorities hoped to get rid of online maps that wrongly depict China's borders or that reveal military secrets, the People's Daily said on Monday.

The government began the investigation into the problematic maps last month and would continue it until the end of the year, the report said.

Min cited five areas of concern, with the redrawing of China's borders and placing disputed territory outside the nation the top priority, it said.

Such areas of dispute include Taiwan, the Spratly and Paracel island chains in the South China Sea and the Diaoyudai in the East China Sea, it said.

Previous reports, citing Min, said that there were nearly 10,000 illegal map Web sites in China.

The People's Daily named US Internet giant Google, as well as China's Sohu and Baidu, as being under investigation. The report was seen as the first time the government media had named specific companies as possible offenders.

Eight ministries including the mapping bureau, the Ministry of Industry and Information, the Ministry of Foreign Affairs and Ministry of Public Safety are involved in the investigation, it said.

Last year, China restricted mapping and survey activity by foreign entities for national security reasons.

These websites would be punished and required to make corrections, he said.



New Troop Carrier Surveying Rig being trialled in Canberra - not likely! - surveyors in HoChiMinh City, Vietnam.



Mr Greg Heron Mapping Sciences National Journal Fditor GPO Box 3693 Darwin NT 0801

Dear Greg,

Congratulations on an excellent publication and it is pleasing to see a revival in the Institute, small though

I was interested in the article by Keith Smith and it is. would like to make some comments.

While Keith was always very enthusiastic in trying

to improve the Institute and he did many good things but the diversion into changing the name of the Institute wasted a lot of time and resources and never achieved what the proponents claimed it would, that of increasing membership with all these other groups who claimed that the Institute of Cartographers as a name was not relevant to their particular industries.

I was always opposed to any name change and argued that many of the groups referred to were already part of cartography such as the Map Circle, MapDealers, AURISSA and many others and it was a lack of initiative on the part of AIC in getting them to join up. In the early 1980's the Royal Australian Institute of Architects was going through similar trials of membership as was AIC. They appointed consultants to examine their existence and charter and one of their strong recommendations was – do not change the name of the Institute. At about the same time, The British Cartographic Society went through the same exercise and their consultants reported that their greatest asset was their name – The British Cartographic Society.

I tried on several occasions to get the AIC to

follow the same path but was not successful. I believe that if it had been done, consultants would have recommended not to change the name of Australian Institute of Cartographers, that it was a privilege to be part of it. When I became the Secretary General of the International Cartographic Association, I was often asked why Australia wanted to change the name of AIC. As the Secretary General, I was caught between two worlds: the Australian scene where cartography was controlled (and restricted) by surveying and the international scene where I moved and interacted with the great cartographers / geographers of our time, Prof. Eduard Imhof, Prof. Ernst Spies, Arthur Robinson, Prof. Ormeling, John Bartholomew to name but a few.

The position of Secretary General was highly regarded on the world scene but barely acknowledged

The AIC missed an opportunity to make capital out in Australia. of my position over a period of 8 years and a further 4 years when I was a Vice President.

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John Christopher

Bartholomew,

geographer and

cartographer,

born January

15 1923; died

January 16 2008

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If my personal position

and business had not made it difficult to continue, I would have become the world President. My position as Secretary General was so highly regarded that the Chinese made a submission to change the ICA statutes that restricted office bearers to 2 terms of 4 years so that I could continue. They claimed that I was the best Secretary General because as an Australian, I was non political and was very fair in

my dealings with them. The second missed opportunity for AIC was the holding of the ICA Conference in Perth in 1984. The Conference was regarded as the best ever for ICA and gained an enormous amount of prestige for AIC

Instead of building on this to advance the AIC on the world scene. status in Australia, nothing was ever, it was as though

For me it was a wonderful experience as ICA it never happened. Secretary General to observe and feel what cartography was really all about and should have been in Australia so , that name changes would never have been necessary. Even the introduction of new technologies such

as GIS, were not reasons for change as they were only new tools to do the same job of presenting geographic or geospatial information in graphical form.

However, time has passed and while I still love cartography and have a successful cartographic business and will always call myself a cartographer, I no longer have the fire or passion to want to change the world but some sadness remains for what might have been.

I am very grateful for having chosen cartography as a career that gave me such wonderful experiences with the Australian Institute of Cartographers and over 18 years on the international stage and for being awarded 2 gold medals for my services to cartography.

Kind regards

PROMACO GEODRAFT CARTOGRAPHERS

September 11 2007

"Since the war

the politics of

national mapping

has been full

of intrigue ..."

"Needless to

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".. despite the

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achievements in national mapping have been impressive".

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mapping over populated areas, one inch to four mile (1:253,440) mapping over less populated strategic areas and one inch to eight mile (1:506,880) mapping over remote areas. Good progress was made throughout the war years by Survey Corps units operating around the country in between periods of deployments to operational areas in the Middle East, Papua New Guinea, the Netherlands East Indies, Bougainville and Borneo. In 1942 the Land Headquarters Cartographic Company was established at Fortuna in Bendigo, Victoria, equipped with photo-lithographic printing capability to enable a high rate of quality map production to be achieved.

At the end of the war the Federal Government realized the importance of having topographic map stocks on hand for defence purposes as well as to facilitate national development which was then high on the political agenda. Prime Minister Chifley invited the States to cooperate with the Commonwealth on national mapping activities and as a result the National Mapping Council (NMC) was established. The Council was made up of representatives of the Army, Navy, the Commonwealth and the States, and was given the task to develop programs and coordinate activities. In 1946 a National Mapping Office, later to become the Division of National Mapping (NATMAP), was established as the lead Commonwealth civilian topographic mapping agency.

Since the war the politics of national mapping has been full of intrigue as the various members of the National Mapping Council competed over aspects of the mapping programs and activities. The areas of responsibility between the Army, NATMAP and the States were often blurred and caused some friction within the Council. Over time the Commonwealth undertook several functional and organizational reviews of its civilian and military mapping operations. Needless to say the resulting outcomes created acrimony between organisations and personalities. In 1987 NATMAP was absorbed into Australian Surveying and Land Information Group (AUSLIG) but was later re-created within Geoscience Australia when AUSLIG itself was

the National Mapping Council were deemed to have been achieved by 1988 and the Council was dissolved and replaced by the Intergovernment Committee for Surveying and

Mapping (ICSM) reporting to the Australian and New Zealand Land Information Council (ANZLIC). ANZLIC had been formed in 1985 as the peak government council for land information matters of which mapping now became just one component. The Royal Australian Survey Corps was disbanded in 1996 as a result of the implementation of the Defence Department's Commercial Support Program to outsource some activities from Australian Defence Force operations.

However, despite the politics and the organizational arrangements, the postwar achievements in national mapping have been impressive.

Some of the milestones have been:

**1965** Completion of the National Geodetic Survey.

**1966** Adoption of the Australian Geodetic Datum.

1968 Completion of the first edition of the 1:250,000 series (mostly without contours) giving complete planimetric cover of Australia in 540 map sheets.

**1971** Completion of the National Leveling Survey and adoption of the Australian Height Datum.

**1988** Completion of the 1:100,000 contoured mapping program comprising 3,059 map sheets made up of line maps in settled areas and orthophoto maps in remote areas.

1991 Completion of the second edition of the 1:250,000 map series giving complete planimetric and contour coverage of Australia in 540 map sheets

1994 Completion of the Australian Fiducial Network of the National Geodetic Survey and adoption of the Geocentric Datum of Australia

1994 Release of Series | of Geodata Topo 250K – the 1:250,000 National Topographic Data Base for GIS.

1996 Release of Version 1 of the 9-second Digital Elevation Model of Australia.

1997 Release of Version L of Geodata Raster 250K - the 1:250.000 digital map sheet series on compact disks for low cost mass distribution.

Since the war the States have undertaken significant programs of standard topographic mapping, initially at the imperial scales of two inches to one mile (1:31,680) and one inch to one mile (1:63,360), and since the 1960s at the metric scales of 1:25,000 and 1:50,000. The States have also undertaken significant map production at scales larger than 1:25,000 for local requirements that do not conform to any national mapping criteria.

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The Army has published a substantial number of standard 1:50,000 maps across northern Australia and along lines of communication in remote areas

The achievements in national mapping over the past 100 years can be attributed to massive technological developments along the way in surveying, photogrammetry, cartography, and computing:

Surveying has progressed through the plane table; tapes; geodetic and astronomic theodolites; geodimeter; tellurometer; aerodist; level and staves; the Johnson (vehicle) Ground Elevation Meter; airborne profile recorder; laser (terrain) profiler; satellite doppler; GPS.

Photogrammetry has utilized vertical and trimetrogon aerial photography; radial line plotting and triangulation; stereoscopes and parallax bar; comparators; superwide angle photography; optical, mechanical and analytical stereoplotters; orthophoto projectors; digital aerial photography; satellite imagery; digital stereo workstations.

Cartography has utilized pens; paper; linen; manual drawing instruments; drafting film; scribe coat, photo-lithography, digitizers, scanners, and plotters.

Computing has seen mathematical tables. logarithms, mechanical and electric calculators; electronic calculators and computers.

Over the years many members of MSIA / AIC have contributed to national mapping through their employment with the military, the Commonwealth and the State Governments, and the private sector. Several members have been awarded Imperial and Australian Honours for their efforts. The Institute plans to publicly recognize these achievements by hosting a conference and exhibition to commemorate one hundred years of national mapping. Venues and dates have not been finalized but Canberra is the likely location in early 2011.

The exhibition will comprise maps, photographs, instruments and equipment drawn from various collections around the country. The display will be arranged as a chronology of the history of national mapping commencing with 1910 plane table compilations and the first sheet of a national map series to be published – the 1913 Newcastle one inch to one mile sheet.

Although the commemoration is still a while away interested persons are encouraged to give some thought to contributing ideas and/ or presenting a paper on any aspect of national mapping over the past one hundred years. Topics could cover the achievements, the technology, the organizations and the politics of national mapping undertaken by the military, the Commonwealth and State Governments, and the private sector.

Please contact Trevor Menzies at trevor.menzies@hotmail.com with any suggestions or for more information on the conference and exhibition.

Trevor Menzies MSIA Heritage Program Manager



disbanded. The objectives of

Adelaide River NT - 1942

### Mapping Sciences National

"The exhibition will comprise maps, photographs, instruments and equipment drawn from various collections around the country"

".. interested persons are encouraged to give some thought to contributing ideas and/or presenting a paper on any aspect of national *mapping*"

1938 NT Sesquicentennial map

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" Surely this decrepit assemblage could have nothing to do with serious time-keeping in the second half of the twentieth century, could it? "

"... that is: until a builder told me he planned to "pour" a huge slab of concrete and asked if we were likely to have any rain ..."



The Real Observatory

### **A MOMENT IN TIME** by Keith Smith

One of the great misfortunes of my academic life as a cadet draftsman was to perform exceedingly well in the subject of astronomy. As remember it, study of this discipline at that time required little more than adherence to the heresy that the earth was not the centre of the universe, so my "Honours" award passed unremarked by my fellow spatial scientists. But there were to be dire personal consequences later. Much later.

Indeed, it was about twenty years later, that I was summoned to the presence of the Chief Cartographer who informed me that I had been selected to undertake a very prestigious role. And what was this role? CC breathlessly advised me that I was to understudy the Astronomical Enquiries Officer. The who? Turned out that CC had checked the results of the astronomy exams for the last century or so and I was the brightest star in the firmament. Sometimes I had idly wondered what the movements of the sun, the moon and the stars had to do with map-making as we practised it; perhaps now I would find out.

The AEO was a rather earnest fellow with an affinity for all things astronomical; that is, he was a member of the Royal Astronomical Society and had fashioned his own telescope to facilitate study of heavenly bodies. I, on the other hand, was a member of the local golf club and the only celestial phenomenon I had observed there [sans telescope] was the occasional setting of the sun. Not a good look for the "A" Team.

The most intriguing facet of the astronomical caper came under the heading of *"doing the* observatory". Here in Brisbane, the term "The Observatory" usually referred to the heritage landmark built in the form of a windmill perched on the top of Spring Hill where it was a much-admired tourist attraction. It had nothing to do with our role. Our observatory was perched on the roof of the tallest available government building and was not in any way a tourist attraction. Nor had it any great architectural merit. The structure was an inelegant shed, measuring about three metres square and not much more than two metres high. Its salient feature was an opening in the roof, providing a view of a segment of the sky, justifying the observatory appellation. However, it is said that form follows function and, while its form had its detractors, it had to be admitted that it certainly had an important function. For this crude erection housed the apparatus that established and maintained standard time for the sovereign State of Queensland.

And just what did this apparatus comprise? Upon entering the sanctum, I was assailed by an ominous cacophony emanating from an array of timepieces, all tick-tocking away, completely out of sync. Dominating the scene was a towering old great-grandfather clock with his jaundiced dial, his laboured hand-movements and his ancient pendulum, oscillating with a weary resignation - tick... ...tock. The sights and sounds filled me with a sense of despair. Surely this decrepit assemblage could have nothing to do with

### twentieth century, could it?

I mean I had grown accustomed to the Dickensian approach to furnishings and equipment in the cartographic world in which I toiled, but obviously the geriatric G-G clock should have been put down before I was born. The AEO disagreed and assured me that it was a masterpiece of the ancient art and science of horology, and it was my privilege to be chosen to attend to its welfare - along with the several other clocks, oops, chronometers that kept it company.

However, the really tricky bit of machinery was the "transit instrument". This was essentially a telescope: mounted on a pedestal and pointed permanently skyward, and significantly, it was fitted with a crosshair which corresponded with the meridian on which we were located. So the story was that if we knew the precise Greenwich Mean Time at which a particular star was scheduled to cross "our" meridian (and mystifyingly we did) we could observe its transit (via the aforementioned hole in the roof) note the time as portrayed by the G-G and thus determine the extent of the error caused by his recent sloppy time-keeping. Got it? Looked like a piece of cake or something; although I wasn't sure I could manage to get the roof open.

As luck would have it, some spoilsport former AEO had discovered that the United States Geological Survey was broadcasting continuous GMT time signals throughout the Pacific region and if he could listen in, there would be no need to open the roof etc. The signals were transmitted on the short-wave band, but this minor obstacle was overcome when our resident wireless enthusiast volunteered to listen for them every morning and compare them with our version of local time.

By the time I arrived on the scene, the signals were obtained by phone from a friendly representative of the Postmaster General and all that was required was enough aural acuity to judge where in the space of the G-G's tick the GMT tock occurred. An acuity I never developed to any useful extent.

Despite my limitations, it was all very manageable - as long as the G-G didn't break down. And did the old G-G ever break down? My very word he did. Constantly. So the television and radio stations, the railway traffic controller and various other naive users of our time-source were forever contacting me to go like "Here, where's the pip then?"

Our phone number was listed under "observatory" and back then many people associated this with the weather forecasts, so in between fending off irate users of the time service, I got a few inquiries about impending weather conditions. After a while, I tired of referring them to the Met. Bureau and decided to chance my arm. At this distance I can claim that my record was slightly better than the MB's, that is; until a builder told me he planned to *"pour"* a huge slab of concrete on the following day and asked if we were likely to have any rain. I went "Not a chance" and of course we had a tropical downpour to rival the 1974 flood. I left the phone off the hook after that, while I scanned the results of the astronomy exams searching for a starry-eyed spatial scientist eager to inherit my happy time-keeping moments.

### Presidents Report to MSIA Annual General Meeting 30th May 2008

Since my installation as President in May 2007 the Council met face to face on one occasion and had many communications via Email to implement follow up actions.

May 2008

The Council Meeting was held in Sydney in August 2007 and was preceded by an excellent one-day seminar organized by the NSW Division on the theme of Spatial Information / Cartographic Visualization. The seminar attracted delegates from SSI, ISA and others from the broader spatial community. They were treated to a stimulating program of papers presented by speakers from the NSW Government and the private sector. I presented the opening address in which I outlined the challenges facing the MSIA as well as some of the positives that will be highlighted in the course of this report. I called upon members to support the Institute. Why? - Because it is doing worthwhile things to foster their professional development such as organizing conferences and seminars and producing high quality publications.

The August Council Meeting occupied a full day and the usual enthusiastic debate resulted in a number of resolutions and on-going actions.

The winding-up of the WA Division has necessitated an urgent review of the constitution in terms of the size and structure of the Federal Council, and the size of quorums required at general and council meetings. The Executive of Council carried out the review and their recommended amendments have been now put to members at an Extraordinary General Meeting.

A subcommittee under Adam Ladhams was formed to undertake a review of the website. A priority of the revamped website is to foster membership growth and development.

The Editor-in-Chief of the Journal of Spatial Science, Graeme Wright, presented a case for making the Journal available to members and subscribers as on on-line publication. The Council supported a model to establish on-line publication and to continue print publication for an initial period of 5 years. A contract was subsequently signed with the publishing firm Ingenta to publish and archive the bi-annual issues of the Journal for a 4-year period from 2008. A membership survey was undertaken to ascertain the preferences of members regarding the Journal.

The June and December editions for 2007 were printed and distributed on time. I thank the Editorial Board and Graeme in particular for the continued high standard of professional content and the timely distribution.

Council supported a recommendation from the Heritage Program that a conference and exhibition be held to commemorate the centenary of national mapping 1910-2010. A proposal has been submitted to the National Museum of Australia in Canberra and it is hoped that the conference and exhibition will be held there in March 2011 or thereabouts.

Queensland Division offered to conduct the next MSIA National Conference in Brisbane in

SSI conference to be held on the Gold Coast in July 2008. MSIA is the professional association representing Australia on the International Cartographic Association (ICA). The 14th General Assembly of ICA was held in Moscow in August 2007 in conjunction with the 23rd International Cartographic Conference. MSIA members continue to offer their services to international cartography by holding high office on the ICA Executive and the Commissions. Bill Cartwright was elected President for the period 2007-2011 and David Fraser was elected Chair of the Commission on Education & Training. Several MSIA members completed tours of duty with the ICA. Graciela Metternicht stepped down as Editor of the ICA Newsletter and as Chair of the Commission on Mapping from Satellite Imagery. Ron Furness completed several 4-year terms as Chair of the Commission on Marine Cartography and Dorothy Prescott stood down as the MSIA representative on the Commission on the History of Cartography. Thanks to Graciela, Ron and Dorothy for representing MSIA on the ICA and their contributions to international cartography over many years.

Two issues of the magazine Mapping Sciences National were printed in 2007. The 20-page July issue featured articles on varied cartographic topics, MSIA activities and MSIA personalities. The 12-page November issue featured the excellent MSIA Report presented by Bill Cartwright to the ICA General Assembly in Moscow in August 2007. The report summarized the state of cartography in Australia within the government, education and private sectors as well as reporting on the activities of MSIA over the past 4 years. International readers would have been rightly impressed with the state of cartography in Australia and Bill's presentation. To conclude on a very positive note, I wish to

announce that Greg Heron, Northern Territory Councillor and Editor of Mapping Sciences National, has been elected as an Honorary Fellow of the Institute. The citation that accompanied the nomination outlined the long and distinguished service that Greg has given MSIA, both nationally and within the NT Division, over the past 25 years or so.

I thank all Councillors for their efforts and support over the past year. In particular I thank the indefatigable Keith Smith for his continued work as Honorary Secretary which he carries out always with the best interests of the Institute at heart.

Trevor Menzies President

### Mapping Sciences National

August 2008. This was subsequently re-scheduled to 2009 to avoid clashing with the

> "MSIA members continue to offer their services to international cartography by holding high office on the ICA Executive and the Commissions"

"In particular I thank the indefatigable Keith Smith for his continued work as Honorarv Secretary which he carries out always with the best interests of the Institute at heart"



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### **Mapping Sciences National**

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Papua New Guinea	823 languages	Australia	235
Indonesia	726	DR Congo	218
Nigeria	505	China	201
India	387	Brazil	192
Mexico	288	United States	176
Cameroon	279	Philippines	169

### **HEMA CELEBRATES 25 YEARS**

A Personal Perspective from Keith Smith

I was chuffed recently to receive an invitation to participate in celebrations to mark the 25th anniversary of the entry of Hema Maps Pty Ltd into the world of map distribution and publishing.

It took me back to 1983, when, as the newly-appointed Director of Mapping, I was approached by a Mr. Henry Boegheim who at that time was operating a laminating business. He asked if I would review the Department's policy on discounts for bulk purchases of maps. Henry was talking in terms of a hundred or so maps and while I had no first-hand knowledge of discount rates, I did know that although the maps we were producing at the time were very marketable, we had no proper sales network to distribute them. Perhaps opportunity had just walked in the door. I advised Henry that I could agree to modify the discount for his hundred maps, but in return would he consider purchasing, say, three thousand maps, if the price was right? He was back a week or so later with some interesting figures which I successfully negotiated through our bureaucratic obstacle course, and it is my modest belief that, as a consequence of that deal, the seeds were sown for the creation of Hema Maps.

What guickly developed was a Private-Public Partnership with Hema entering into agreements to purchase fairly large quantities of tourist maps before they were actually published. They were given the opportunity to influence, to a limited extent, which maps we would produce and provide input into their coverage and design. Thus they were assured of an expanding product range and the Department had a ready-made sales network for our Sunmap brand products. Worked well for quite a few years, but then policy changes within the department placed less emphasis on map production and Hema responded by developing its own cartographic capability. They now have a range of several hundred maps that they distribute throughout Australia and overseas.

Congratulations to Henry and Margaret Boegheim and their team for an outstanding contribution to Australian commercial mapping.

### EVENTS

**BEIJING - China** July 3-11, 2008 XXI Congress ISPRS http://www.isprs2008-beijing.org/

**GOLD COAST** July 17-19, 2008 **Queensland Spatial Conference** www.gsc2008.com.au/

**SYDNEY** August 25-27, 2008 GITA Annual Conference http://gita.org.au/08sydney.php

**AUCKLAND - NZ** September 1-3, 2008 GeoCart'2008 http://www.cartography.org.nz/ geocart2008

### **SHEPHERDSTOWN - USA**

September 8-11, 2008 AutoCarto 2008 http://www.cartogis.org/autocarto

> DARWIN Sept 29-Oct 3, 2008 14ARSPC www.14arspc.com

HOBART November 2-3, 2008 IMTA (Asia Pacific) Annual Conf & Trade Show www.maptrade.org

> ADELAIDE Sept 28-Oct 2, 2009 SSC2009 www.spatialsciences.org.au

**SANTIAGO - Chili** November 15-21, 2009 icc2009 - 24th International Cartography Conference www.icc2009.cl/



### May 2008

CHANGE . .

. . an analysis of the loci of the individual within a continuously varying technical environment to establish significant points of horizontal inflection significant of holistic patterns applicable to whatever it was I started out to say.

That's what I like about conference papers. By the time you've got your brain around the title you can relax and draw moustaches on the illustrations of glamourous lady surveyors. Their inevitable inclusion in publications surely is naked sexism. Why aren't they revolting? (I can assure you they're not!)

Anyway – change. I would like to say, in fact I'm saying it, drawing on the texts of extensive technical research, that they protest too much who say the struggle naught availeth, when by toiling upward in the night we might become the very model of a modern cartographer.

Confronted with change we catch a glimpse of the future, and apply ourselves unstintingly to leading -edge concepts and procedures which will Stand Us In Good Stead. Thus my early fascination with the Hewlett Packard programmable RPN calculator. It would do in a blink (rather a lot of blinks actually) tedious repetitive calculations that freed us forever from the tyranny of seven figure log tables. Or, when inverted, could loop through amazing text messages like hello and ho ho. You wouldn't be without it.

Programs in Basic were another milestone, offering access to limitless operational flexibility and storage sites where data could be mislaid forever. But we persisted, knowing that this was the Next Big Thing, and would Stand Us in Good Stead.

Then came DOS, and one could wish it hadn't. By the time we'd compressed our creativity to the arcane limits of the Gatesmeister, computers were inducing anthropomorphic prejudices of us-andthem. Thankfully the prophet Jobs, with a little help from Xerox, gave us GUIs that immediately freed us from wondering what was going on in the tiny little silicon brains and made us Computer Literate, which is a Good Thing.

and etchings. Now all the world can copy and paste till they are dragged and dropped. We have reached such a the water cooler.

Never let it be said that ground crews lack a sense of humor

Here are some actual maintenance complaints submitted by Qantas' pilots (marked with a P) - and the solutions recorded (marked with an S) by maintenance engineers.

: Left inside main tire almost needs replacement. : Almost replaced left inside main tire.	
: Test flight OK, except auto-land very rough.	P: S
: Auto-land not installed on this aircraft.	S: <i>S</i>
: Something loose in cockpit.	P: <b>N</b>
: Something tightened in cockpit.	S: <i>E</i>
: Dead bugs on windshield.	P: <b>/</b>
: Live bugs on backorder.	S: <i>A</i>
: Evidence of leak on right main landing gear.	P: <b>T</b>
: Evidence removed.	S: <i>R</i>
: DME volume unbelievably loud.	P: N
: DME volume set to more believable level.	P: N
: Friction locks cause throttle levers to stick.	like
: That's what friction locks are for.	S: 7

### Mapping Sciences National

that direction.

Big Thing.

Les Isdale technological pinnacle that we can focus on the real problem, which is how to enable the nation's

youth to engage interminably in international war games against fearsome invaders on Game Boys and Play Stations, where correct spelling and grammar are not in high demand, or thumb incomprehensible text messages in code for the usual grunts which is the New Conversation. After a lifetime of study to establish position by astronomical observation, surveyors now witness instantaneous location streams from their Tom Tom, which speak more politely than most navigators to tell us in fifty metres turn left, even if at that point you find a solid cliff in

For lifetime graphicists, the current state of the art is Clayton's cartography, the map you have when you don't have a map. What you have is zillions of bits, precisely positioned in three dimensions, ready to express themselves in visible form on demand in whatever form your fancy takes. Welcome to the world of GIS. I'm heartened by the evidence that whilst the data bases lend themselves to generating tables and graphs and learned analyses, people of the human variety retain a preference for an oldfashioned Map, which may turn out to be the Last

And it's back to the future. There is enormous interest in our cartographic roots, and the earliest maps have the greatest attraction. In the age of the lithograph we'd watch our cadastral offerings quietly ageing on the shelf of the map room. (Antique maps? We've got a room full of antique maps!) But this strange fascination of old maps seems to be saying we are better able to handle change if we can keep in touch with the past. Hence the glass cases in museums with their memorabilia

I'm in the third case on the left, just opposite

"For lifetime graphicists, the current state of the art is Clayton's cartography, the map you have when you don't have a map"

"... this strange fascination of old maps seems to be saying we are better able to handle change if we can keep in touch with the past"

A skeptical anthropologist was cataloging South American folk remedies with the assistance of a tribal brujo who indicated that the leaves of a particular fern were a sure cure for any case of constipation. When the anthropologist expressed his doubts, the brujo looked him in the eye and said, "Let me tell you, with fronds like these, who needs enemas?"

### Suspected crack in windshield. Suspect you're right. Number 3 engine missing.

ngine found on right wing after brief search. Aircraft handles funny. Aircraft warned to straighten up, fly right, and be serious. Farget radar hums. Reprogrammed target radar with lyrics.

Mouse in cockpit. S: Cat installed.

Noise coming from under instrument panel. Sounds e a midget pounding on something with a hammer. Took hammer away from midget



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New South Wales 1856-2006 ELECTORAL ATLAS The Electoral Atlas is a comprehensive compendium of 150 years of turbulent politics in New South Wales. The Atlas illuminates New South Wales FNEW SOUTH WALES political history through recreating, from original sources, all electoral mapping, 1856-2006 voting systems and results since the introduction of responsible government in 1856. This foundation Atlas covers such topics as: The multi-member electorates of 1889 votes for Free Trade, Protectionists and the recently formed Labor Party The rise of Federation in late 1890s The growth and eventual success of the Labor Party from 1904 to 1910 The rise and fall of Lang in the 1930s The emergence of the Liberal Party in 1947 The Atlas details the colourful hustings of the early days, the effect of Federation on State politics, the divisive conscription election, the founding of the Liberal Party, Labor's long reign in the 1950s, the rise of Askin, the Wranslide, the Coalition's difficult 80s and the Bob Carr decade The Atlas maps historical curiosities such as the Sydney Hamlets, the non-contiguous boroughs and the extensive pastoral districts of the 1850s, the multi-Members electorates of the 1880s and the experimental proportional representation of the 1920s, the maladjustment caused by country weightings and the emergence of one-vote, one-value electorates that we have today. This hardback is available to purchase from NSW Department of Lands Map Sales. Cost per book is \$A85.00 (inc. GST) plus \$A4.00 postage and handling. http://www.lands.nsw.gov.au/about us/publications/lands forms/electoral atlas .

Walking through San Francisco's Chinatown, a tourist from the Midwest was fascinated with all the Chinese restaurants, shops, signs and banners. He turned a corner and saw a building with the sign "Moishe Plotnik's Laundry."

"Moishe Plotnik ?" he wondered. "How does that fit in Chinatown ?" So he walked into the shop and saw a fairly standard looking Chinese laundry. He could see that the proprietors were clearly aware of the uniqueness of the name as there were baseball hats, T-shirts and coffee mugs emblazoned with the logo "Moishe Plotnik's Chinese Laundry".

There were also selections of Chinese souvenirs indicating that the name alone had brought many other tourists into that shop. The tourist selected a coffee cup as a conversation piece to take back to his office. Behind the counter was a smiling old Chinese gentleman who thanked him for his purchase.

The tourist asked,"Can you explain how this place got a name like "Moishe Plotnik's Laundry?" The old man answered: "Ahh .. Evleebody ask me that. It name of *owner.*" Looking around, the tourist asked, "Is he here ?" "It me," replies the old man. "Really?You're Chinese. How did you ever get a name like Moishe Plotnik ?"

"Is simple", said the old man. "Many, many year ago I come to this country, I standing in line at "Documentation Center of Immigration". The man in front of me was Jewish gentleman from Poland . The lady at counter looked at him and say, "What your name ?"

He say, "Moishe Plotnik." Then she looked at me and say, "What your name ?" I say, "Sam Ting."



formulae.

sheep".

"That's right", admits the shepherd. "Well I guess you can take one of my sheep." He watches the young man select one of the animals and looks on amused as he stuffs it into the boot of his car. The shepherd then turns to the young man, "Hey, if I tell you exactly what your business is, will you give me back my sheep?" The young man thinks about it for a second and replies "Okay, why not?"

the yuppie, "but how did you guess?" "No guessing required," answers the shepherd, "You arrive here even though nobody called you, you want to get paid for an answer I already knew, to a question I never asked, and you know sod-all about my business. Now give me back my dog"

I was stunned, embarrased and humbled to receive this accolade from my colleagues but most of all very, very honoured. Greg Heron editor Thank you to all concerned !

# **The Electoral Atlas of**

### The Consultant

A shepherd was herding his flock in a remote pasture when a brand new BMW screeched to a halt. The driver, a young man in a Prada suit, Gucci shoes and Dior sunglasses, leans out of he window and asks: "If I tell you exactly how many sheep you have in your flock will you give me one?" The shepherd looks at the young man, obviously a yuppie and calmly answers: "Sure, why not".

The yuppie parks the car, whips out his Dell notebook computer, connects it to his AT&T cellphone, surfs to a NASA internet page, where he calls up a GPS satellite navigation system to get an exact location fix, this he feeds into another NASA satellite to scan the area and produce an ultra high resolution photo.

He then opens the digital photo in Adobe Photoshop and exports it to an image processing facility in Germany. Within seconds, the yuppie receives an e-mail on his Palm Pilot to say that his image has been processed and the data stored. He then accesses a MS-SQL database through the ODBC connected Excel spreadsheet containing complex

He uploads all of this data via an e-mail on his Blackberry and prints a full colour, 150-page report on his Hi-tech, compact HP LaserJet printer, turns to the shepherd and exclaims, "You have exactly 1,586

"You're a Consultant", says the shepherd, "Wow! That's correct," admits

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### 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".

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