



MSI - CONNECTED!

Newsletter of the Mapping Sciences Institute, Australia

mappingsciences.org.au

November 2014

Presidents Report

Preparation for Australia's participation in the International Cartographic Association's 2015 Barbara Petchenik Map Competition are underway. The aim of the competition is to promote children's awareness of cartography, asking them to depict their place in the world today as they see it in graphic form, the theme for 2015 being "My place in the world today". The Australian Geography curriculum for Years 5 and 6 has an emphasis on the diversity of places and the ways they are shaped by human and environmental processes with a focus on using maps and globes to effect the geographical understanding of these. This will provide a neat hook to promote the competition to primary school teachers.

The competition commenced in 1993 as a memorial to Barbara Petchenik, a past vice president of ICA and a cartographer whose special interest laid in maps for children and runs every two years in conjunction with the international conference. Each member organisation is asked to contribute towards to the main competition that will be judged as the ICA conference in Brazil next year. Doug Herrick, our newest council member is the Australian coordinator. Please watch out for further information regarding the competition in the next edition.



Trisha Moriarty, President MSIA

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Map of the Month



Title: Environmental Juicer

Source: <http://children.library.carleton.ca/>

The entries from 2013 were exceptional, I was impressed by not only the artist capability but by the strong political statements they contained. I have included a few photographs of the ones that stand out in my memory below.

The winners from 2013 and previous years can be viewed here

<http://children.library.carleton.ca>

Previous entries from 2005 and 2009 have been compiled into a book published under the title of 'Children Map the World: Selections from the Barbara Petchenik Children's World Map Competition' and 'Children Map the World Volume 2' respectively.

Article continued next page...

Presidents Report Continued...

Following on from thinking about the book of children maps, I recalled a recent publication from Quarry Books that plays within the space where cartography and art converge, 'Map Art Lab: 52 Exciting Art Explorations of Mapmaking, Imagination and Travel' by Jill K. Berry and Linden McNeilly. Though it appears a perfect resource for teachers, with practical activities to guide their students through the art of creative mapmaking, it's designed to inspire individuals and groups of all ages. Well worth a look if you have children, grandchildren or nieces and nephews to entertain over the school holidays.

As we are nearing the end of the year, I thought it would be great idea for the December edition to review what new and exciting publications have made it to the press in 2014. If you have come across a great book on or around the subject of cartography that you would like to share, please send through the details and we can list it in next month's newsletter.

Trisha Moriarty
President MSIA

Atlas of Design Volume 2 – Now Available

The North American Cartographic Information Society (NACIS) <http://nacis.org> is dedicated to showcasing some of the best examples of cartographic design with its bi-annual publication Atlas of Design. Excitingly Australian Cartographer Dan Bowles is one of the 32 cartographers whose work is being recognized. A link to his work can be found with the other successful cartographer on the Atlas of Design website. <http://atlasofdesign.org>

With over 300 submissions, the judging panel had a tough job, so they have decided to also publish a selection great maps that did not make it into this edition, check out the honourable mentions. <http://atlasofdesign.org/blog/>

If members are interested in purchasing a copy, a bulk order place by MSIA would provide cost benefit of a bulk order saving. An order of 4 books would bring the cost down to under \$US 50.00

Please contact MSIA if interested by November 15th.

MSI - Connected! content submissions

If you have an article, report, comment, image or any other content that you would like to share with fellow MSIA members, please send an email to msi-connected@mappingsciences.org.au

Content submission deadline for the December 2014 edition is Tuesday 25th November 2014



Title: Be careful...

Artist: Alla Sukhanova

Age: 15

Source: <http://children.library.carleton.ca/>



Title: Big miracle by little hands

Artist: Karina Balitskaya

Age: 13

Source: <http://children.library.carleton.ca/>

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(Education Manager)

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(International Program Manager)

From the Editor



Shane Oates, Editor

Welcome to MSI-Connected! for November 2014

We have put together, what I hope you will agree is another fascinating read of MSI-Connected for the month of November.

Work is progressing on the new MSIA website with a draft framework and website being developed in consultation with the MSIA President and Council. At this stage, my time has been limited to progress the new website past the initial "mock-up" stage, however with only three weeks of my study course to go, it'll be all systems go come the end of November to focus on the new website! Hopefully I will be able to provide a sneak peak in the next newsletter!

To save writing up a whole article about it, here is a link to the National Library of Australia (NLA) website regarding Cartographic Links.

<http://www.nla.gov.au/maps/cartographic-links>

The MSIA is in the third group down the page under the heading "Australian Map Societies and Groups", just after the Commonwealth and State / Territory agencies. The page is a great resource for finding some great information, industry contacts, and cartography resources relevant to Australia.

I have this page bookmarked along with Trove and Pandora which are also provided by the NLA in my web browsers. Who doesn't like trawling through old newspapers and websites?

On a final note, the December 2014 edition of MSI Connected will be the last edition until February 2015. I plan to have a small hiatus over the Christmas / New Year break. Happy reading!

Regards
Shane Oates

We still have copies available!

Mapmakers of Australia: The history of the Australian Institute of Cartographers

The MSIA has a limited number of copies of the publication "Mapmakers of Australia: The history of the Australian Institute of Cartographers" available to members for **FREE** on a first come, first served basis.

If you are interested in obtaining a copy of this publication, please see Page 7 for more details.

Ninety Five Years of Nautical Charting

By Trevor Menzies - MSIA Program Manager Heritage



The year 2015 is a significant one in Australia's military history. Not only is 2015 the centenary of ANZAC but is also the centenary of the formation of the Royal Australian Survey Corps. The MSIA / ANZMapS Conference to be held in Canberra from 28 April to 1 May 2015 will include a session devoted to military mapping to commemorate these milestones.

The role of the Army Survey Corps was briefly outlined in the October issue of MSI-Connected. This article outlines the nautical charting activities of the Hydrographic Service of the Royal Australian Navy (RAN) undertaken over the past 95 years for defence and civilian maritime purposes.

The first RAN ship to be dedicated to hydrographic surveying was HMAS Geranium commissioned in 1920. Its first task was charting the hazardous waters of Great Barrier Reef where over time many vessels had come to grief. The Navy's second survey ship HMAS Moresby (1) was commissioned in 1925 and spent most of its 20 year life charting the sea lanes around northern Australia and New Guinea in the pre-war defence build-up and during the war.

Early survey methods utilised the lead and line for depth measurement, the sextant and chronometer for positioning, and the compass for navigation – the same technology used by the Royal Navy hydrographers Flinders, King, Stokes and co. one hundred years previous. It was not until the echo sounder became available in the 1930s that significant improvements in data acquisition could be achieved.

During the Second World War the Hydrographic Service made an essential contribution to the war effort by providing charts and data needed for the safe navigation of naval and merchant vessels. Amphibious troop landings were paramount in the south west Pacific theatre and it was here that the work of the hydrographers was critical for success. This involved identifying safe passage to areas of operation, surveying landing beaches and their approaches, and collecting information on tides, currents and the nature of the seabed. Often these operations had to be carried out with the constant threat from enemy aircraft and coastal artillery. At its wartime peak the navy had 16 survey ships in service and over the course of the war printed 1.5 million charts.

After the war the hydrographic work continued and the service received a boost when the purpose built HMAS Moresby (2) was commissioned in 1964. Throughout the 1960s and 1970s the growth of the mining industry saw the need for improved chart accuracy and availability to enable deep draught ships to access Australian ports. Satellite positioning systems and the pioneering AUTOCHART computer mapping system introduced in the 1970s were a godsend for meeting this need.

HMAS Moresby and HMAS Flinders, commissioned in 1973, operated for 33 and 25 years respectively until being replaced by the ships Leeuwin and Melville that carry on the work today. These modern vessels are equipped with the state of the art Hydrographic Survey System (HSS), a computer system that integrates position information with data from multi beam echo sounders, towed side-scan sonar, single beam echo sounders and forward looking sonar – a far cry from the lead and line, sextant, and the hand recording of data from the early days.

Four survey motor launches - Paluma, Mermaid, Shepparton and Benalla are currently used for coastal and shallow water surveys. Shallow water data acquisition has been greatly accelerated with the Australian developed Laser Airborne Depth Sounder (LADS) which is currently fitted in a De Havilland Dash 8 aircraft. Water depths down to 50 metres can be measured from a flying height of 500 metres by comparing infra-red laser pulses reflected from the sea surface with green laser pulses reflected from the sea bed.

The survey data from the ships and aircraft is sent to the Australian Hydrographic Office (AHO) in Wollongong, NSW, for processing and input into the Digital Hydrographic Data Base (DHDB). The output can be a range of products such as electronic and paper charts for sale to the maritime community as well as maritime military geographic information for the Australian Defence Force. The AHO also publishes information on tides and other nautical and maritime safety information to provide for the safe passage of vessels in Australian waters.

Like the topographic mapping work of Royal Australian Survey Corps over its 81 year history, the nautical charting work of Australian Hydrographic Service over its 95 year history to date has aided the defence and development of the Nation. In undertaking this work the staff of both organisations, many of whom are/were members of AIC / MSIA, have contributed much to our cartographic heritage.

Upcoming Events

2014

December 2

Beck to the Future: The London Underground map as a design icon | RMIT Melbourne VIC, Australia

December 2 - 3

Geospatial Science Research 3 Symposium (GSR_3) | RMIT Melbourne VIC, Australia

2015

April 29 - May 1

The Power of Maps - (ANZMapS and MSIA) | National Library of Australia, Canberra ACT, Australia

August 23 - 28

27th International Cartographic Conference, 16th General Assembly of ICA | Rio de Janeiro, Brazil

2016 / 2017

July 2 - 7, 2017

28th International Cartographic Conference | Washington DC, USA

Do you know of a mapping or a spatial related event, in which other MSIA members may be interested in attending?

Let us know and will may include the details in our next newsletter!

Invitation to the Barbara Petchenik Competition 2015

On behalf of the International Cartographic Association and the **Commission on Cartography and Children**, it is our pleasure to invite you to participate in the next Barbara Petchenik Map Competition 2015, an event created with the aim of promoting the creative representation of the world in graphic form by children.

In 2015, this biannual international award has a special connotation, because it is organized on the frame of activities programmed within the **International Map Year**. The theme for the 2015 competition remains the same: "My place in today's world" and the entries can be nominated in four age groups: under 6 years, 6–8 years, 9–12 years and 13–15 years.

We are currently sorting out competition details in Australia at the national level and will have more details in the near future. The deadline for participation in the contest will be sometime in April 2015. International details can be found in the **rules document**.

Winner drawings selected at national level will be displayed in the International Exhibition to be held during the **27th International Cartographic Conference in Rio de Janeiro, Brazil from 23–28 August 2015**. An international jury will select the best entries by each age group. Also there will be a public vote open to all participants for a dedicated public prize. If you are interested in using children maps in your context, e.g. with publications, we would like to encourage you to contact us.

For more international information about the competition, please visit the **Petchenik section** on the ICA website, the website of the **Commission on Cartography and Children** or their **Facebook page**.

Yours sincerely,
Doug Herrick (Coordinator of Australian entries)



Title: My Creation, My World
Source: <http://children.library.carleton.ca/>

Wearable Maps

By Doug Herrick

A recent article on carpets featuring satellite imagery <http://www.geolounge.com/landcarpet-turning-satellite-imagery-carpets> feed my fascination in the unconventional uses of maps, one of which is wearable maps.

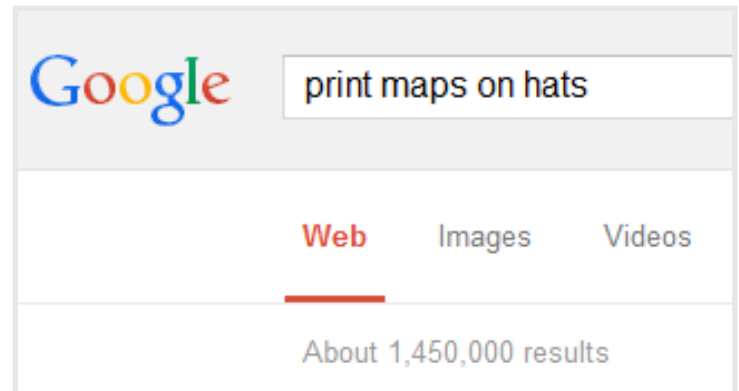
Since GIS day last year, when a colleague bought a pair of shoes with maps printed on them, I've been thinking about and discussing wearable maps. So far I've found people who own maps printed on umbrellas, shoes and clothing.

The next step was to see how popular maps are when wearable. A google search of "print maps on ..." yielded the following results:

- Hats 1,450,000
- Shirts 1,750,000
- Pants 65,300,000
- Shoes 208,000,000
- Umbrellas 15,300,000

I then looked at maps around the house:

- Tablecloths 238,000
- Placemats 135,000
- Curtains 723,000
- Carpets 114,000,000



Even taking into account the google hits that talk about maps and hats rather than maps printed on hats, these results show good interest in printing maps on things. It's a great time to have a love of maps!

Personally my next project is to take some unfolded topographic maps and see if I can make a shirt. Unfortunately topographic maps have a habit of tearing easily so it will probably end up being a one time use shirt.

Mapmakers of Australia: The history of the Australian Institute of Cartographers

By J. E McCarthy (Author)

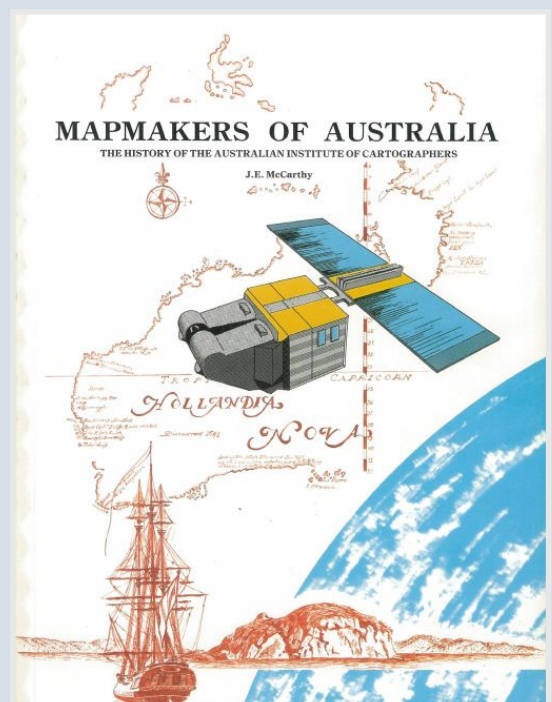
ISBN: 0731654757

The MSIA has a limited number of copies of the publication "Mapmakers of Australia: The history of the Australian Institute of Cartographers" available to members for **FREE** on a first come, first served basis.

If members are interested in a copy of this excellent publication, please send an email with your name and postal address to;

msi-connected@mappingsciences.org.au

"Mapmakers of Australia: The history of the Australian Institute of Cartographers" covers the period between 1952 to 1988 and provides a valuable insight and detailed knowledge into the creation of the Institute and the challenges and victories faced along the way.



MSIA - The Future

By Don Pearce

In the last edition of MSI – Connected, Trisha Moriarty in her President's address, made reference to the fact that ICA has been accepted as a full Member of ICSU, the International Council of Scientific Unions. To most members, this may not be seen as anything spectacular or needing to raise one's eyebrow. However, this could not be further from the truth.

ICSU is one of the most powerful bodies in the world and has influence over governments of any ideology. Membership is highly prized, difficult to obtain and jealously guarded. When I was Secretary General of ICA, it was my ambition that one day ICA would be a full member but attempts then were not successful. There are only 32 full members and for ICA, it is the ultimate recognition of Cartography as a science and its relevance to other sciences .

Following on the huge success of the Map Exhibition at the National Library this year, there should now be no doubt in any one's mind that Cartography is the true name of our profession and the people who practice it are Cartographers. If I was 20 years younger, I would make it my task to restore all the correct uses and names of Cartography and educate industry, the community, academic institutions and young people about its relevance and excitement as a career.

Prior to 1984, ICA was a sub group of IGU, the International Geographic Union and a member of ICSU. ICA Conferences were held at the same time and place as IGU and they also approved of the ICA program. I first lodged the Australian bid to hold the ICA Conference in Perth in 1984 at the Conference in Maryland, USA, in 1978. Although I was told that it was an impressive bid, I would have to convince IGU to hold their Conference in Perth too, otherwise it wouldn't happen. IGU did not like Perth, saying it was too small and there was not enough technical expertise and they did not want to break the long held ICA/IGU nexus.

Over the next 2 years, I lobbied the Executives of IGU and ICA and made presentations at many major events and lodged a second bid for 1984 at the ICA Conference in Tokyo in 1980. After several high level meetings, the IGU agreed to break the nexus and said ICA could be held in Perth but IGU would be held in Amsterdam. There was some concern because many members went to both so the dates were made one week apart.

ICA has grown since then from 62 member countries to 77. They accepted a proposal that I put forward to have Associate Members as we did with the Australian Institute and there are now 38 Associate Members that include organisations such as USGS, ESRI, Ordnance Survey and small countries that can't qualify as full Members.

We failed to build on the great success of the 1984 Conference and the fact that I was appointed as the Secretary General and Treasurer of ICA, the first time out of Europe. All Mapping Agencies in Australia were controlled by Surveyors who didn't recognise Cartographers as managers, partly because we didn't have tertiary qualifications back then.

We failed again to take advantage of the great success and popularity of the Map Exhibition at the National Library earlier this year and interviews were held with members of other professions and not MSIA. We cannot afford to ignore this great opportunity that we now have if we want to be serious about having an Institute or professional body and concern for our profession and members.

Over the years we have been misled into believing that the changes in technology that have occurred has meant a change in our profession which has been completely wrong. We have simply been given different tools with which to do our job better, that is converting data into graphical form for others to use. The person who does the job is still a Cartographer as he was in the years 1500, 1800, 2000, 2100 and his profession is Cartography. I began my career using pen and ink and drawing on paper, moved onto scribing on plastics, using photogrammetry, remote sensing, satellite imagery, computers, all tools required to produce a map over the last 70 years. I am a better Cartographer than when I first started (a bit old though) and no doubt there will be changes in the future within the profession of Cartography as there will be with others.

Mapping Sciences is not a profession, it's a conglomerate or collective of subjects, similar to Building Contractors, Gardening Gurus, Computer Consultants and others. I have made the point before that no other country, large or small and some with more cartographic expertise than Australia, has seen the need to change its Society or Institute's name to not include Cartography or Cartographers. Australia was the only one and I was often asked "why" and I couldn't give a satisfactory answer and still can't.

We are constantly complaining that the Institute has lost relevance. Others have too, of course, but I will be very upset and disappointed if we don't take advantage of this wonderful boost that we've been given. I've frequently gone on about the value of marketing to no avail. I had my own business for 25 years and although we won State and National Awards and were regarded as the best in the business, to stay there, I had to frequently look at how we marketed because of changes in technology and people's perceptions.

I notice that we have a very healthy bank balance with no apparent plans on spending it, If we are serious about having an Institute ,we are going to have to spend money. If we do nothing and the Institute just dies, as it will, that money will have to be dispersed somewhere. Isn't it worth trying a revival?

I watched a program on TV last night about a restaurant in a prime location on a busy road in England that was losing money. A guy came in and advised a complete change of name, furniture, colour, menus and better marketing. After a special reopening, it took off and they needed more staff.

I would like to propose a 5 year plan for MSIA with the following objectives:

1. Revoke the name of MSIA and revert to the Australian Institute of Cartographers
2. Set up a marketing plan to advertise the change and promote the AIC at every opportunity .
3. Advise State and Federal Governments that AIC is the body to approach in regard to mapping policy
4. Request that all Academic Agencies set about changing the name of courses that relate to cartography to be called cartography.
5. Update the mailing lists and provide regular newsletters such as MSI – Connected and Cartography that refer to the value and relevance of Cartography and it's benefit as a career. (David Fraser's Cartography)

This may seem like an ambitious program and it is, but most of these things are done in other countries. In the USA, they have an advisor to Congress on Cartography. I believe that under Trish Moriarty's leadership, with help from young cartographers, this could be achieved and see the former status that the Australian Institute of Cartographers previously enjoyed, returned and be a worthy Member of ICA and ICSU.

EDITORS COMMENT:

I'd like to thank Don Pearce for his article in this months edition. It is a great example of the passion one has for an organisation to want to keep it strong and the affect that cartography has had on their life.

More importantly though, it gives all members some issues to consider and I would hope the drive to help promote and revitalise the MSIA in the professional / government arena, while also engaging the general public and students (future cartographers).

We would like your input!

Submit your thoughts or opinions regarding cartography, mapping in general or even the MSIA to us at MSI-Connected!

Articles and opinion pieces can be emailed to the editor at msi-connected@mappingsciences.org.au

Map of the Month

US Wind Map

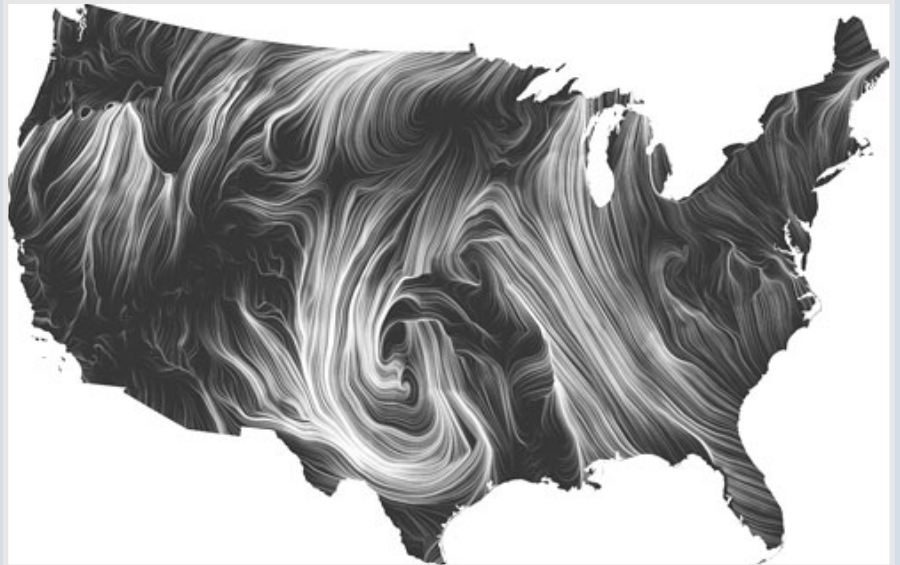
There are many great uses of spatial data out in the wilds of the internet that have been manipulated and transformed to create stunning and interactive maps. The US Wind Map featured below is one such example.

While the picture below is a static image, I encourage readers to visit the website linked below and see the map in action. It would be interesting to know if similar wind observation data was freely available for Australia and if the same concept could be applied to it.

Below is an extract from <http://hint.fm/wind>

The wind map is a personal art project, not associated with any company. We've done our best to make this as accurate as possible, but can't make any guarantees about the correctness of the data or our software. Please do not use the map or its data to fly a plane, sail a boat, or fight wildfires :-) ...

Surface wind data comes from the National Digital Forecast Database. These are near-term forecasts, revised once per hour. So what you're seeing is a living portrait. (See the NDFD site for precise details; our timestamp shows time of download.) And for those of you chasing top wind speed, note that maximum speed may occur over lakes or just offshore.



Caption: US Wind Map
Source: <http://hint.fm/wind/>
Copyright: HINT.FM

Contact Us

Visit our website www.mappingsciences.org.au or email us for more Information about our organisation.

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Not a MSIA member?

If you are not a MSIA member and wish to join our organisation, please visit;

www.mappingsciences.org.au/new-members/

The four levels of membership and associated costs vary depending on academic qualification, relevant and professional experience, and willingness to further the objects of the Institute.

Member: - \$170 (retired \$85 per year)

Associate: - \$170 (retired \$85 per year)

Affiliate: - \$170 (retired \$85 per year)

Student Member - \$26

Fees are per year.