

SPATIAL SCIENCE QUEENSLAND

THE MAGAZINE OF SSSI QLD



INSIDE:
3DQLD
QUEENSLAND GLOBE
NEW REO REPORT
INDUSTRY NEWS



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After two previous annual events each drawing in excess of 100 delegates, the LiDAR Technology Workshop series in Cairns is emerging as Australia's premier annual LiDAR event.

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Keynote Speaker:

Lewis Graham
Director
LiDAR Division
ASPRS

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**PHOTO BY
INDUSTROPOP**
MAP OF QUEENSLAND
VIEWED THROUGH A T2
THEODOLITE

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CHAIR'S REPORT

CHRIS McALISTER

Welcome to the autumn edition of Spatial Science Magazine.

We've had a bumpy start to the year, but things seem to be settling down now. I'd like to welcome our new REO Barb Angus on board, and wish her the best of luck for her upcoming challenges!

I'd like to extend a big welcome back to Department of Transport and Main Roads as a Gold Regional Sustaining partner. The support that TMR has shown SSSIQ over the years has been incredible, and we will continue to work with TMR on some exciting new certification programs in the future.

I'd also like to welcome aboard our latest Sustaining Partner Industropop photography, who have been taking a huge number of shots for us. You'll be able to see the full range of Industropop & SSSIQ works at our exhibition at the end of May entitles 'Suits & Boots'. It has been a refreshing experience to be involved with the Industropop photo shoots, as I am finally able to show other people the beauty in what we do through Kristi's amazing art. I hope you'll join us at the exhibition to celebrate this new take on our amazing world of surveying and spatial science.

After a kick in the pants to get back involved with social media, I have been regularly venturing into the world of Twitter. While it has taken me a while to get used to squashing my thoughts into 140 characters, I have had some fascinating discussions about a variety of topics. The passion from the people in our industry is astounding, and that they can eloquently express ideas, thought, opinions, share new technology & connect in such a truncated form of communication continues to amaze me! If you're interested in hearing the most up to date information about our industry, I'd highly recommend getting involved in Twitter, and make sure you follow us @SSSIQ. If you're not sure about where to start, sign up for one of the social media workshops that are being run across the state this year.

I am also excited that the preparations for the

Queensland Spatial Excellence awards are well underway, with amazing Cloudland venue in Fortitude Valley booked for Friday 18th October. Further details will be loaded on to the calendar as they become available.

I recently said a mildly controversial thing in Position magazine, and one of the joys of being chair is that I can now explain myself more fully! I was asked the open ended question of "In the future I...". I responded by wishing that more people could experience the amazing feeling of volunteering, as well as suggesting that I would love to see surveyors dressing like professionals and not construction workers. Now, I'll lay my cards down here, I have nothing at all against construction workers as a whole, and my comment came off the back of having attended a series of school careers days, educating the world about the amazing professional industry of surveying & spatial science.

Now back to my reasoning; I was out with my kids on a trip to Southbank in Brisbane recently, and on my walk there I passed several significant areas of construction & civil works. I passed several groups of surveyors, several of whom had a few things in common – not one of them looked like the professionals they were. Yes they were wearing high visibility gear (as required by law) but that wasn't the issue. They were presenting an awful image to the public, and I was almost in tears thinking about how these people were sabotaging all the hard work of the people who were out there educating the community about our industry & profession.

So I ask this of you all, when you're out in public and identifiable as a surveyor or spatial scientist, have a look at what image you are presenting to the public – are you dressed & behaving in a manner that your parents would approve of? Or that you would want your kids to be exposed to? Remember that each one of you is an ambassador for our industry, a custodian for our brand, and we entrust it to you and hope you treat it with the professionalism it deserves!

EDITOR'S REPORT

SHANE SIMMONS



Welcome to the Autumn edition of *Spatial Science*, the Queensland content edition for the year 2013.

Recently, I went to see the Steven Spielberg movie, *Lincoln*, outside of being struck by the average age of the audience and the lack of a demographic of younger persons wishing to immerse themselves into the extraordinary oratory skills of Abraham Lincoln, there was one scene which captured my full attention and encouraged me to dig a bit deeper. There is a conversation in the movie between Lincoln and Thaddeus Stevens, a powerful member of the House of Representatives and a passionate and staunch abolitionist of slavery. They are discussing the course of events and the progress of legislation where Stevens chides Lincoln that he needs to follow his 'true north'. Lincoln's screenplay response was "A compass I learnt when I was surveying, it'll... it'll point you true north from where your standing, but it's got no advice about the swamps, deserts and chasms that you'll encounter along the way. If in pursuit of your destination, you plunge ahead heedless of obstacles, and achieve nothing more than to sink in a swamp, what's the use of knowing true north?"

The use of the humble compass by the screenwriters as a powerful metaphorical exposition of leadership principles in the areas of strategic planning within the bounds of pragmatic application of the directions taken to achieve the desired destination, presents the virtues of focus, patience and self-control. The compass needle may well point to where you need to go but it doesn't tell you how to get there and if your moral compass or GPS Navigation blindly guides you into the swamp, then your True North merely has historical significance.

It is extraordinary that three of the four United States presidents sculpted in the Mount Rushmore

National Memorial of the granite face of Mount Rushmore near Keystone, South Dakota were surveyors in a past life, Abraham Lincoln, George Washington and Thomas Jefferson.

Lincoln's interest in surveying and the law may have been shaped by the fact that his father lost all of the family's land holdings in court, due to faulty property titles. Lincoln's short career as a surveyor began in 1833 when John Calhoun, the Sangamon County Surveyor of Illinois, offered him a job as his assistant. Upon accepting the appointment, Lincoln's first task was to learn about surveying from two borrowed text books, A System of Geometry and Trigonometry with a Treatise on Surveying by Abel Flint (1804) and The Theory and Practice of Surveying by Robert Gibson (1814) and when he concluded his studies, he purchased some second hand equipment to commence his practice. But, financially there were difficulties when he was not paid for setting out a township and his equipment was sold at auction to satisfy a debt. Lincoln's career as a surveyor lasted only a few years before he moved into law.

His professionalism and ethics was on record and despite his financial problems as a surveyor, he wrote "The matter of fees is important, far beyond the mere question of bread and butter involved. Properly attended to, fuller justice is done to both lawyer and client. An exorbitant fee should never be claimed. As a general rule never take your whole fee in advance, nor ally more than a small retainer. When fully paid beforehand, you are more than a common mortal if you can feel the same interest in the case, as if something were still in prospect for you, as well as for your client. And when you lack interest in the case the job will very likely lack skill and diligence in the performance. Settle the amount of fee and take a note in advance. Then you will feel that you are

working for something, and you are sure to do your work faithfully and well.”

George Washington began work as a surveyor's assistant after studying surveying and geometry as a sixteen-year-old when he was appointed as one of the surveyors for Lord Fairfax's Northern Neck Proprietary of five million acres between the Potomac and Rappahannock Rivers in Virginia. Washington was appointed the official surveyor for [Culpeper County](#) and became the first Registered County Surveyor and at the age of seventeen, he was appointed Surveyor-General for Virginia. These were well-paid positions which enabled him to purchase land in the [Shenandoah Valley](#), the first of many land acquisitions and speculations in Virginia and his awareness of land as a great store of wealth and value. Washington after three years in surveying moved into regional administration and the militia and his knowledge of the topography was invaluable to his later military successes.

Like Washington, Thomas Jefferson was also appointed as a County Surveyor, in Albemarle County, Virginia and also later became Surveyor-General of Virginia. His father was also a land surveyor and he acted as a land surveyor for five years before practicing law. Jefferson as one of the founding fathers and during his

tenure as Secretary of State (under Washington) and President, his instructions and appointment of surveyors to official postings, gave the fledgling nation, the foresight and direction necessary to promote the orderly settlement of land as it spread northwards and westwards. At this time, Thomas Jefferson surveyed land using the Metes and Bounds system of monumentation and was subsequently involved in the creation of the U.S. Rectangular System, a system that uses a central point determined by a principal direction North-South meridian and an East-West baseline.

In researching, ‘all the president surveyors’, the interlocking themes of land development, land law and surveying were evident in the monumental events that shaped and settled a nation. In history and the past we trust to what we can learn in the future.

I trust members will have an entertaining and informative read of the Autumn edition of *Spatial Science*, a talking point for title, tide, traverse and topology. On behalf of the editorial committee we hope our readership and advertisers enjoyed going back to the hard copy edition and we look forward to the next edition.

Shane Simmons



QUEENSLAND SPATIAL EXCELLENCE AWARDS 2013

18TH OCTOBER 2013

CLOUDLAND, FORTITUDE VALLEY

OFFICE REPORT

BARB ANGUS



April has been a hectic month with my introduction to SSSI being somewhat of a baptism of fire!

Coming into a not-for-profit organisation from the public sector has been a refreshing change on the personal front whilst professionally it has been challenging and entertaining. My background in the public sector has involved working variously as a librarian, project manager and researcher in the vocational education and training sector.

I am very much looking forward to meeting more of our members and partners in the near future. Everyone I have met so far has been friendly and extremely helpful. Thank you.

My first challenge was getting to know Kaye and Kellie and what they do as well as getting to know the job. So far, all is going well.

Some of our achievements so far include:

✦ Getting a start on collating the Strategic Plan for SSSIQ

✦ Getting this magazine off the ground (so if you are reading this, we have succeeded!)

We are currently working on our budget, so we can bring you more of the CPD events you want and/or need and provide services to our members and partners.

This year, we hope to increase our membership, number of partners and sponsorship. As we work towards making SSSI a stronger professional body, please feel free to contact us with any ideas you may have to help us achieve this. Our organisation is only as strong as our membership.

Our CPD calendar for 2013 is coming together with May being the month for Queensland Open Source Spatial Workshops, Risk Management and, of course, the Rockhampton Conference. For more information on CPD, be sure to read Kellie's report in this issue.

Barb Angus
reo.qld@sssi.org.au

Why Join SSSI?

- ✓ Professional Home: An institute providing you a home as a Surveying and Spatial Sciences professional.
- ✓ Events: 200+ events, including seminars, workshops and online training.
- ✓ CPD : Access to the diverse certification programs which are internationally recognised, national APSEA awards and the SSSI CPD program.
- ✓ Financial Benefits: Savings on a range of benefits through our member rewards program and sustaining partners.
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OUR HERITAGE

JOHN COOK

Surveyors' Institute.

A MEETING of licensed surveyors was held in the Town Hall yesterday afternoon, in connection with the formation of a surveyors' institute in this colony. There were present about twenty gentlemen, and Mr. W. M. Davidson was voted to the chair. That gentleman having read the advertisement convening the meeting, called upon the hon. secretary to give an account of the steps already taken in this matter. The secretary, Mr. James Warner, then read the minutes of two meetings held by several members of the profession. The first of these was held on December 7, 1875, and resulted in the draft of a memorial to the Minister for Lands, which was subsequently adopted, calling his attention to certain grievances which are suffered by the profession, and to the fact that the scale of charges in New South Wales is at present from 30 to 50 per cent. higher than that ruling in Queensland, while in the former colony the surveyor is not called upon to carry out the details of his work in the same careful manner as in the latter. The memorial prays that the Minister for Lands will be pleased to raise the scale of fees for the survey of Crown lands by 25 per cent, and to make other alterations. The memorial was signed by forty-four surveyors, and sent to the Minister for Lands on the 15th of March last. Circulars had also been issued to the surveyors throughout the colony, seeking their co-operation in the works of forming a surveyors' institute. At the conclusion of the secretary's statement, it was moved by Mr. Townson, and seconded by Mr. Weale, "That this institute be called the Queensland Institute of Surveyors." The latter gentleman said that it had been thought by some that their institute was to partake of the character of a trade union; but such was very far from their intention. The institute had simply been started for the purpose of raising the profession from its present low state. The examination upon which persons were at present admitted to the profession was such as could be passed by any Grammar School boy. Men who had been in the service fourteen or fifteen years were thus brought into competition with boys, which was anything but right. In a

Recently the SSSI in conjunction with ISQ has begun a project to capture our history. Dr John Cook is spearheading this project. Each edition we will explore a part of our history, 'From the Vault'.

QIS Inaugural Meeting - 1876

Report of the QIS Inaugural Meeting held on 4 July 1876 at the City Hall, Brisbane, and reported in the Brisbane Courier on Wednesday, 6 July 1876 at page 3. Edited by John S Cook

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The motion was carried.

K. J. DAVIES

2.10.1937 -
29.12.2013

Kevin John Davies passed away aged 75, on 29 December 2012 after a short battle with cancer. Known to many as KJ, KD, Kev or Big Kev he was a giant of the Queensland surveying and mapping industry and introduced many far reaching reforms commencing in the mid 1970s. His influence was felt on the whole Australian surveying and mapping scene.

Kevin was born in 1937. His parents were pragmatic country folk with strong family values and work ethic which they instilled in their four children. Kevin boarded at The Southport School from 12 to 17 where he was an excellent rower, good rugby player, in the army cadets and dux in mathematics. Holidays were spent on family farms at Kilkiven and Esk where he learnt bush skills, including fishing, which was to become a lifelong passion. With bush skills and an excellence in mathematics, it is no wonder that he became a surveyor.

At 19 he met Jill, his future wife of 52 years and was besotted. Jill sensibly refused to marry him until he became qualified. With that incentive he became the youngest surveyor to ever qualify in Queensland – Such incentive must have developed his great tenacity of purpose. John Andrews, a lifelong friend and partner with him in their surveying firm was also under a similar mandate to qualify as a surveyor from his future wife Valda. They helped each other study through the article system and became licensed surveyors on the same day in 1959. Kevin and John remained lifelong friends, fellow members of the Liberal party, and worked together during Kev's various appointments in government.

Kev exhibited the attributes of entrepreneur, optimist, technologist, reformer, politician, and legislator as well as being the consummate professional. Above all he was a visionary. He also exhibited loyal friendship, gruffness, humour, compassion and love of family. He never saw problems only solutions. He was held in high



K.J. DAVIES
SURVEYOR GENERAL 18-10-1982 – 2-8-1990

respect both within and outside his chosen profession.

Like all young surveyors of his time, his first years were spent on extensive field trips and getting mud on his boots. In his early career he levelled countless miles in the outback. A photo shows his team leaving Birdsville in an old army 6x6 towing a caravan and water trailer where the back of the truck had been made into two storeys; on the top storey was for a herd of goats to provide meat for his team.

Kevin was instrumental in setting up the Queensland Association of Consulting Surveyors which later spread to all Australian states. This body had a significant impact on improving the interests and capabilities of the private sector, and also in influencing policies associated with surveying and mapping. This was the start of his many innovations and reforms.

In about 1978 Kevin realised he could best foster innovation from inside government and he was appointed Deputy Surveyor General. Few could lay claim to the following:- President, Institution of Surveyors Queensland; President Institution of Surveyors Australia; Inaugural Chairman Association of Consulting Surveyors Queensland;

Inaugural Chairman Association of Consulting Surveyors Australia; President Surveyors Board of Queensland; Deputy Surveyor General; Surveyor General; Director General Department of Geographic Information; Director General Public Works and Housing; Deputy Chancellor Queensland University of Technology; President the Queensland Council of Professions. There were many other positions, some with an Australia wide focus.

Kev was not a mere collector of positions he was a doer with a formidable intellect. He passionately believed that the status quo could be improved and achieved in major leaps. Strategically he would look 20 years ahead. He was the right man at the right time and achieved much both for his profession and for the Queensland public service. These days it would probably be impossible for a single person to achieve the same amount.

Big Russ Hinze once remarked that since the formation of the new Department of Surveys and Valuation, with Kevin involved, more had been done in local government mapping in 4 years than in the previous 50 years. Kevin was instrumental in getting the following underway:- the Sunmap Building (now the Land Centre), together with the K J Davies rose garden, and the Sunmap branding of maps; the fifth floor innovation Centre in the Sunmap building; major surveying and mapping exhibitions at Expo 88; export initiatives to south-east Asia, particularly the Philippines and Indonesia; saving the surveying degree at UQ in the early 80s and establishing a range of applied GIS research projects between the University and the State government and being instrumental in the formation of The Australian Centre in Land Information Studies; postgraduate diploma in survey practice at QUT to improve the quality of training for the licensing of cadastral surveyors.

Being around Kevin was not always easy. Many will recall that when he was driving through obstacles could be an interesting experience – some would call it slightly terrifying – however it was always vibrant, fascinating and a magnificent ride even if one had to hang on tightly at various times.

As well as contributing to the Queensland Surveying and mapping industry he also

contributed to Queensland as a whole. He was a key member of the central core of Director Generals during his various stints in government. He was widely recognised for his forward thinking in relation to IT and e-government and the need for a modern efficient state government. He was a major agent for change in the Chief Executives' Forum.

Those who worked closely with Kev, and got to know him well, observed the human qualities of the man behind that gruff, sometimes grumpy, professional exterior, exacerbated by the bushy eyebrows. He gave loyalty and friendship to his friends, and love to his family. To many he was really a big Caramello, a hard external appearance with a soft inside. His formidable intellect was always ticking away. He was the instigator of robust debate wherever he could find a willing partner. He thrived on good opposing arguments and gave and expected no quarter.

Kev's life was not all work and no play. His great love was fishing, with golf coming probably second. At one time he owned a racehorse. There is a story of how, with his good friend Ian Keilar, he put his mathematical skills to good use playing poker. The exploits of Kevin Davies the fisherman, are legendary. He established the annual Swains Trip about 50 years ago and only missed one. He was known to fish throughout the night on occasions, with evenings spent with a rum and coke with his fellow fisher folk. The Swains crew took some of the 2012 catch and had a great lunch with Kev, his family and some friends on the BBQ at the Wesley Hospital, just before he died. Kevin also founded the Moreton Island Fishing and Leisure Club about 40 years ago, to which he often brought visiting VIPs for "the experience". Kevin was also a long-standing member of the Fraser Island Gang and participated for over 30 years in the annual taylor trip, where he was known to sit around the campfire with a rum and provide comments about political realities and what made the world go round. Kevin was also one of the colourful members of that colourful club, The Johnsonian, where many surveying functions formal and informal were held in the 1970s and 1980s.

Kevin was a strong family man. He and Jill had five children and they also largely brought up one

THE PROFESSION

grandchild. He was a strong patriarch to his family and kept in close touch with them, even though they were spread around the globe. He was intensely interested in their doings and proud of their achievements. His single-minded focus, in the last decade of his life, in caring for his beloved wife Jill, stricken with dementia, was an inspiration to everyone. He undertook this with the same passion and vigour as everything else he undertook in his life. During this time his daily routine include a 5 am cycling stint on the riverside bike path from St Lucia to the city where he would have breakfast, meet every now and then with friends, and then cycle back to prepare for his day in looking after Jill in the nearby nursing home. In typical style he also assisted the nursing home and others in it.

His wife Jill, his partner of 52 years, died a mere four months before Kevin. He is survived by his children, Helen, Elizabeth, Katherine, Kevin, Ian and Andrew, and his many grandchildren.

Vale from the industry he did so much for; his legacy will last a long time; he showed what could be achieved and how one determined individual can make a major difference.

At the church service the final piece of music was appropriately, I did it my way.

Ken Lyons with assistance from John Andrews, Ian Keilar, and the Davies' family.

SPATIAL SCIENCES – 2013 IS THE YEAR FOR CAREERS

ARE YOU ABLE TO HELP PROMOTE THE SPATIAL SCIENCES AT YOUR LOCAL HIGH SCHOOL?

If you are, the SSSI Qld office is able to provide you with lots of help.

The Destination Spatial campaign has been developed to inform students about all the options for a career in the spatial sciences!

WE NEED OUR MEMBERS TO:

- ✓ Deliver promotional material to schools
- ✓ Make presentations to school students
- ✓ Mentor teachers in spatial technology
- ✓ Give practical lessons using technology

WHAT'S AVAILABLE?

- ✓ Printed material – posters, postcards, fact sheets, brochures,stickers
- ✓ Destination Spatial Website – follow the link and learn all about the spatial sciences
- ✓ Destination Spatial Powerpoint presentations – specially designed to delivery to students or teachers – adapt them to your needs
- ✓ Large flat screen (if you live in or near Brisbane) to project the above!

Interested in promoting your particular discipline within the spatial sciences? You can find plenty of great links to material on surveying, GIS, Remote Sensing, etc., on the Destination Spatial website.

WWW.DESTINATIONSPATIAL.ORG





CPD REPORT

KELLIE DAVIDSON

We have had a slow start to our CPD year but things are starting to heat up now!

We have had two Women in Spatial Breakfasts, in Brisbane and Townsville. These are great opportunities for our women (and men) to get together in an informal setting to hear from someone interesting.

Our Social Media workshop was held in Brisbane and will be travelling to Rockhampton for their conference. This is a chance to learn all about #Hashtags, tweets and statuses!

The Young Professionals (YP's) are holding some 'getting to know you' events this year at a local pub. Our first one was at the Comedy Night and this will be followed by the pub's Trivia Night in May. We are also having a Beer Appreciation Night at the Archive, renowned for their awesome beer. A great chance to meet other YP's and members. Remember, it's your club – make the most of it! And Comedy, Trivia and Beer aren't limited to the young! Everyone welcome.

Rockhampton is the next big conference. "The Fast 15" conference will cover all your CPD requirements in one weekend, including some NSW Cadastral points. A fantastic line-up includes a Cadastral Reinstatement workshop, GIS, GNSS and Cadastral survey, a UAV Field Trip (always fun), Height Datum from the Dept, Terrestrial Laser Scanning, Social Media, Coastal LiDAR and Spatial info in the Bundaberg floods. This is going to be a great conference!

Open Source Spatial workshops are coming in May too. We have three separate and different workshops for you to attend. Learn how to use Open Source to make smarter business decisions.

Risk Management – this is everyone's problem! We all need to know how to minimise risks in our workplace and business. From this interactive

workshop you will learn how to reduce and manage your risks.

LiDAR Technologies 2013 has just confirmed their first international presenter – Lewis Graham, CEO of GeuCue and Director, LiDAR Division, American Society for Photogrammetry and Remote Sensing. This conference promises even greater access to detailed information on airborne and bathymetry LiDAR with an increased emphasis on mobile mapping. There is also the opportunity to attend workshops presented by industry manufacturers aimed at providing an understanding of the basic principles and fundamental benefits associated with LiDAR technologies. And the conference is in Cairns! Fantastic venue, fantastic city.

Qld Spatial Excellence Awards (QSEA) is confirmed for Fri 18 October at Cloudland so book a sitter, book a cab and book it in!

Other CPD events on the horizon include ADAC workshops, boot camps for graduates, UAV demonstrations, business breakfasts, Fellows dinners and an event (in May) aimed at obtaining NSW Cadastral points.

If you have looked at this list though and felt there is nothing for you, please call me with your suggestions. We will do what we can to get them onto the calendar for you.

Kellie Davidson
pd.qld@sssi.org.au

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SSSI Queensland



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@QCON14 - SSSI Qld Conference



QCON14

REPOSITIONING FOR A SUSTAINABLE FUTURE

7-10.10.2014

-16.927,145.778

MEMBER NEWS

CENTRAL GROUP NEWS

SSSI central group consists of about 100 SSSI members, with town groups in Bundaberg, Emerald, Hervey Bay-Gympie, Mundubbera & Rockhampton.

Some of the town groups meet on a regular basis while other groups meet as required.

Mundubbera town group provided assistance to home owners during last year's floods.

A recent accomplishment for Hervey Bay was the establishment of a new EDM range at Boonooroo.

Members from the all groups generally meet at the Central Group Conference to discuss new developments and to propose changes to legislation and policies if required.

With assistance from the SSSI PD officer and the Northern group, Rockhampton members have made a significant contribution to the organisation the combined Central and Northern group conference in Rockhampton.

It has been a busy year for members working in the areas associated with the resource sector and quieter in other areas.

Ray Tabulo
Central Group Chair

Central Group		
Chair	Ray Tabulo	ray@cullenc.com.au
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Rockhampton Convenor	Arron Setnik	setnik@gspc.com.au

Northern Group		
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Mackay Convenor	Andrew O'Dempsey	andrew.odempsey@braziermotti.com.au

NORTHERN GROUP NEWS

At the Northern Group AGM held in Townsville last October a new committee was elected. The new office bearers as elected are:-

Peter Murphy - Chair

Luke Steiger - Vice Chair

Graham Ward - Secretary/Treasurer

Jemma Picco - Town Group Convenor Cairns

Pat Madden - Town Group Convenor Townsville

Andrew O'Dempsey - Town Group Convenor Mackay

The focus of activity in the north ion past months has been our May conference.

This year the conference is to be a joint effort between Northern and Central Groups and will be held in Rockhampton. It has been some time since we have held a joint event, with the last one being in Mackay about ten years ago.

Kellie from the SSSI office in Brisbane and the organising committee have done a great job in securing a quality programme for the event.

Our annual Northern Group Conference will be held in Townsville again this year as usual. At this stage the Plaza Hotel has been booked for 25th to 27th October.

Our three town groups (Cairns, Townsville and Mackay) have been meeting monthly this year. Topics of interest have included new SBQ competency framework, potential CPD topics, May conference and amendments to the Registrars Directions.

Peter Murphy
Northern Group Chair

SEQ Region		
Moreton Convenor	Greg Williams	greg.williams@moretonbay.qld.gov.au
Gold Coast Convenor	David Edwards	dedwards@bennettandbennett.com.au

USC REPORT

SANJEEV SRIVASTAVA



The University of the Sunshine Coast has a record number of enrolment for the introductory GIS course. 163 students enrolled for the introduction to GIS course. The GIS course not only attracted a large number of students, but also attracted students from diverse discipline areas which include Environmental Sciences, Urban Planning, Engineering programs, Education programs, Arts, Information Technology, Coastal Studies, Biotechnology, and Australian and Cultural Studies. The diverse composition of the students undertaking GIS courses clearly indicates popularity of the technology across different discipline areas.

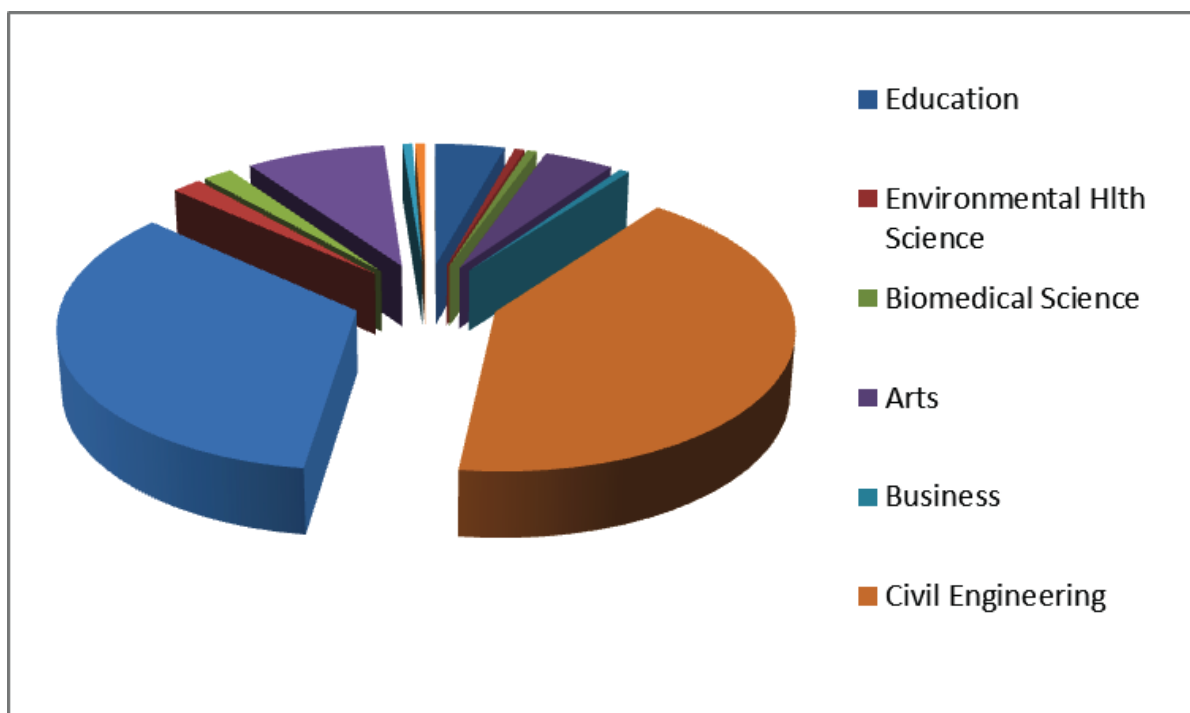
Discipline areas of students enrolling in introductory GIS course

Dr Scott Lieske joined the University under Commonwealth Government's Collaborative

Research Network (CRN) Research Fellow in Sustainability Centre. Dr Lieske was working as a research scientist at University of Wyoming USA.

The University is establishing partnership with University of Wyoming's GIS Centre in the field of fire management and research on GIS learning and teaching. In this regards, Dr Scott Lieske and Dr Sanjeev Kumar Srivastava are likely to visit University of Wyoming in July 2013.

The effectiveness of WorldView Satellite sensors to map burnt area was tested in a pilot study conducted in Currimundi Lake Conservation Park. Various band ratio were compared with field data collected on burn severity of recently burnt wallum heath vegetation. The mapping approach was further compared with the burnt areas mapped use Landsat 7 sensors.





USQ REPORT

SHANE SIMMONS

Staff and students

Dr Glenn Campbell and students have been collaborating with USQ anthropologists Professor Bryce Barker and Dr Lara Lamb to map ceremonial stone arrangements at Mine Island in North Queensland. The mapping is an essential part of the management plan for the site and of significance to the Juru People, who have been recognised as the native title holders at nearby Cape Upstart. The mapping was performed over two field trips by Glenn Campbell with both present and past surveying students, Devendra Madhow, Michael Zahl and Damian Heit. The positions of over 10,000 stones were measured using GPS equipment during the project.



In 2013, the USQ Faculty of Engineering and Surveying updated the academic programs in Surveying and Spatial Science for Surveying and Geographic Information Systems with the introduction of a new major, Urban and Regional Planning. Within the USQ Spatial Science suite of programs, an Urban and Regional Planning undergraduate major was introduced into the two year Associate degree program and also the four year Bachelor of Spatial Science program.

Meet our new Urban & Regional Planning lecturer Paula Grant



"After 20 years working as a town planner in the planning and development industry I am constantly astounded by the rate of change in that industry.

During my career in local government, first as a planning officer and later as a general manager, I have seen four major overhauls of the planning system, two major reforms amalgamating Queensland councils, the introduction of the pre-cautionary principle and sustainability into statute and all of this with the constant market evolution of what is the best and highest use of land in the public interest.

In this environment my own personal mantra goes like this:

"Grant me the serenity to accept the things I cannot change, the courage to change the things I can and the wisdom to know the difference"
(Anonymous)

You can tell a lot about a team's culture by how it responds to change and I have been really impressed and heartened by what I have observed. In my short time in the faculty I have seen an open and frank discussion in the team and I look forward to becoming a valuable member of a high performance team and working to achieve great things for ourselves, our students, the professions' and the university."

The lighter side of things:

Q. How does a town planner drive a surveyor insane?

A. Tie them to a chair, stand in front of them and draw pretty coloured random lines over a plan of survey

THE PROFESSION

Program Code	Undergraduate Program Name	Major	Program Length	
			Full Time	Part Time
ADSS	Associate Degree of Spatial Science	Surveying	2 years	4 years
		GIS		
		URP		
BSST	Bachelor of Spatial Science Technology	Surveying	3 years	6 years
		GIS		
BSPS	Bachelor of Spatial Science	Surveying	4 years	8 years
		GIS		
		URP		

Outline of the new USQ academic programs and their durations

On a more serious note, Paula has been appointed as a senior lecturer at the University of Southern Queensland in the new urban and regional planning major as part of the Surveying and Spatial Sciences program. Paula graduated from the University of Queensland with an honours degree in regional and town planning in 1993. During her career Paula has worked in both statutory and strategic planning roles delivering better places for people and held senior executive positions in local government across Queensland. Her career highlights have been working in Papua New Guinea to build planning capacity, delivering planning training to Council staff across Queensland in conjunction with the LGAQ, managing the preparation of a number of new planning schemes in North Queensland and managing major construction and organisational change projects for a number of local authorities around Queensland. Her recent achievements include winning a national award for project implementation in customer service in 2012.

Dev Raj Paudyal nominated as chair

Dr Dev Raj Paudyal has been nominated as a Co-chair of Technical Commission (TC) IV, WG IV/4-Geospatial Data infrastructure for the XXIII International Society for Photogrammetry and Remote Sensing (ISPRS) Congress (2012-2016). Dev has also been elected President-elect (Vice-president) of International Geospatial Society (IGS) which is the individual membership arm of the Global Spatial Data Infrastructure (GSDI) Association. Congratulations to Dev on the

conferral of his PhD at the USQ Toowoomba Graduation ceremony in April.

Student numbers for first year on-campus enrolments are significantly higher than last year with approximately thirty-five commencing on-campus students across all three majors and the external enrolments continue to be strong with about one hundred and fifty students nationally. A pleasing aspect for on-campus numbers is the continuing attendance of the 2013 Main Roads cadets for on-campus studies.

External students enrolled in Survey and Spatial Science practice courses two and three attended the Toowoomba campus in February and undertaking the selectable workshop module models for the first time with large class sizes. The practice courses were heavily populated confirming the high number of external students that have enrolled in the past few years.

The Surveyors/GIS General club has held its first function of the year with James Derksen as club president.

The Toowoomba 2013 graduation ceremony for the 2012 academic year was held on April 20, 2.30pm at the Clive Berghofer Recreation Centre. A report will be published in the next edition.

Shane Simmons
University of Southern Queensland



QSIC REPORT

PETER GERSEKOWSKI

QSIC sets the direction and provides coordination for the development and maintenance of spatial information in Queensland. QSIC is represented by all sectors of the spatial information industry - Queensland government departments, industry, professions, academia, local government and the community - meeting as equal partners to drive major spatial information initiatives in Queensland.

QSIC Office

The QSIC Office operates within the Land & Spatial Information Group in the Department of Natural Resources & Mines (DNRM). Contact the office by phone (07) 3896 3774 or by email qsic@qld.gov.au

QSIC meetings

The QSIC members meet quarterly with the next meeting scheduled for Thursday 21 June 2013. The endorsed minutes of the QSIC meetings are available on the QSIC website.

Utilising Data Smart



Data Smart is a calendar of professional development events and a newsletter subscription service. Registering as a Data Smart client enables you to receive newsletters and information on upcoming QSIC seminars and other spatial events. We encourage you to register in Data Smart to receive these notifications. Simply go to Data Smart, fill in your details and tick the required boxes.

QSICconnection

QSICconnection is a double page newsletter published after each ordinary meeting of QSIC -

four times a year. It outlines QSIC projects and upcoming QSIC and important industry events. Access to the newsletter is free through [Data Smart](#).

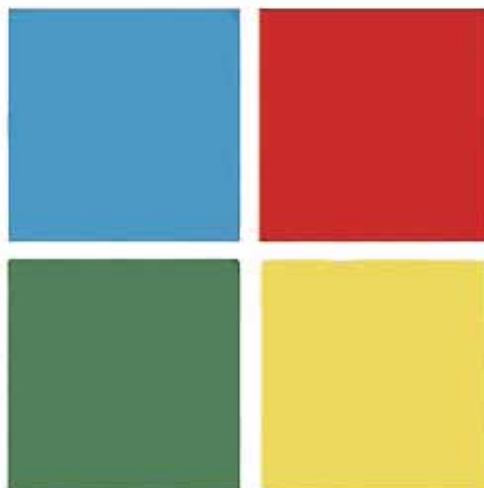
The Spatial Industry Calendar

The [Spatial Industry Calendar](#) is updated by QSIC Office on a monthly basis with information provided from leading organisations in Queensland's spatial industry. It shows scheduled events relating to the spatial industry in Queensland as well as major national spatial events.

QSIC Seminars

QSIC recently hosted a seminar titled 'Spatial Information for Students'. This half day seminar was targeted at surveying and spatial sciences students and recent graduates. It provided an overview of the history of spatial information management, governance arrangements, new developments and issues currently facing the industry. It was hosted in collaboration with QUT.

Queensland Spatial Information Council



smart spatial solutions for Queensland

THE PROFESSION

QSIC Publications

All QSIC factsheets have been revised and are available through the [QSIC website](#). The QSIC factsheets are:

- o [About QSIC](#)
- o [Map Basics](#)
- o [3D Modelling](#)
- o [Using Location for Service Delivery](#)
- o [Addressing – importance of addressing to the Queensland community](#)
- o [Rural Addressing](#)
- o [Rural Addressing – information for residents and landholders](#)
- o [Rural Addressing – information for local governments](#)
- o [Spatial Statistics:](#)
 - o [How long?](#)
 - o [How many?](#)
 - o [How high?](#)
 - o [What's the area?](#)

QSIC Working Groups

- o QSIC Spatial Advisory Group - This group is currently focussing on revising the QSIC Foundation Spatial Data Standard. This standard was last published in 2011. The 2013 revision will be driven by the release of the state government's open data policy, DNRM's Queensland Globe release and ANZLIC's national Foundation Spatial Data Framework.
- o QSIC Spatial Imagery Working Group - At its last meeting the group was updated on DNRM's scanning of historic aerial photography negatives; the streaming of 2.5m SPOT imagery; and on the latest aerial imagery acquisition.
- o QSIC Spatial Imagery Subscription Executive - The Spatial Imagery Subscription Plan (SISP) has 381 imagery datasets with resolutions of 6cm to 60cm. Current uncommitted funds are approximately \$721K. Since 2008 the SISP has invested \$6.7M in imagery. On current projections approximately \$1M will be spent each year.
- o QSIC Roads and Addressing Working Group –

This group will be focussing in coming months on developing the QSIC Addressing Standard for Queensland. The standard will outline the process of addressing in Queensland taking into account the Australian Standard (AS/NZS 4819:2011 – Rural and Urban Addressing) and the ANZLIC National Address Management Framework (NAMF).



ANZLIC

The '[One ANZ Foundation Spatial Data Framework](#)', released in November 2012, outlines the background, scope and objectives for a national coverage of authoritative foundation spatial data. The ten national data themes will create data that is authoritative, consistent, reliable and widely available.

The themes are being developed in three phases over the coming year:

- Group 1 - Geocoded Addressing, Administrative Boundaries and Transport
- Group 2 - Water and Imagery
- Group 3 - Elevation and Depth, Positioning, Land Parcel and Property, Place Names and Land Cover

For information on ANZLIC activities, contact the [QSIC Office](#) or visit the [ANZLIC website](#).

For more information on any of these and other topics, visit the QSIC website or email the QSIC Office at qsic@qld.gov.au.





SBQ REPORT

MURRAY FOX

Competency Framework Review

In April 2013, the Board completed an extensive review of the competency frameworks. This was the first review since the frameworks were initially released in 2007. The framework review process included consultation with the profession via 15 meetings throughout Queensland, plus the review of numerous written submissions. After development of the draft frameworks a number of members of the profession were requested to review the draft frameworks and provide feedback. The draft frameworks were then released to the whole profession for feedback. After reviewing the feedback from the profession the Board made further amendments and approved and released the new competency frameworks.

The outcome of the competency framework consultation with the profession highlighted;

- ⊕ a number of changes were required,
- ⊕ confirmed support for the retention of a university qualification and,
- ⊕ that there were differing views within the profession about what were important elements within the frameworks.

The new frameworks have been developed with simple language and have seen the removal of a number of duplicated units across the surveyor and endorsement frameworks. As an example, the old surveyor framework contained 11 Units and 67 Elements while the new surveyor framework contains just 6 Units and 27 Elements.

The new mining frameworks remain in draft format and will become effective from July 2013. Surveyor Graduate Framework

One of the major changes has been to the Surveying Graduate framework which now requires a Surveying Graduate to demonstrate they are progressing to Surveyor registration status. The plan requires Surveying Graduates to gain an understanding of what is required to demonstrate competence and outline their progression to surveyor registration. The Board

recommends that the plan be prepared in conjunction with the graduate's supervisor, detail the timeframe, and how and what work experience will be progressively gained against all the elements of the surveyor framework. The Board acknowledges that Surveying Graduates with a number of years experience will develop a different plan as they may have already gained the competency required and may choose to seek a panel interview to demonstrate their competency and progress to Surveyor registration.

As CER's are progressively submitted and assessed the plan will be updated to record the progress made. Surveying Graduates will be required to submit their updated post graduate training plan to the Board on a yearly basis. The Board has an expectation that the progression to surveyor registration will be achieved within an acceptable timeframe and a Surveying Graduate is required to nominate a timeframe within which they will complete their surveyor competency assessment.

Registration Policies

(A) Professional Assessment Projects (PAP)

A PAP is no longer required for registration as a Surveyor. A Surveying Graduate seeking registration as a Surveyor now only has to demonstrate competency against the surveyor framework either via progressive lodgement or panel interview. A PAP is now only required when an endorsement is being sought.

(B) Progressive Lodgement

The Board has made a number of changes to meet registration requirements and assist Surveying Graduates to progress to Surveyor registration. Career Episode Reports (CER) can now be lodged progressively as experience and knowledge is being gained with assessor feedback to be provided immediately after the CER is assessed. It is this CER feedback that will contribute to improving Surveying Graduates knowledge of how CER's are prepared, mapped to the framework and what is appropriate supporting documentation. The Board anticipates that

THE PROFESSION

Surveying Graduates can now commence preparing CER's for progressive lodgement within their first year of commencing work as a surveyor.

(C) Panel Interviews

The panel interview is an alternate way for Surveying Graduates to demonstrate competency. The panel interview requires an applicant to compile a work portfolio and map their evidence and experience against the relevant competency framework. While there is no definitive timeframe for the gaining of experience the Board anticipates that a Surveying Graduate will need a number of years experience to demonstrate competency via a panel interview. It must be stressed there is significant preparation required for a panel interview and it is not just a question and answer session.

Registration

The following new registrants were recently approved by the Board.

Surveying Associates

- Simon P Capp
- Benjamin M Rees
- Matthew A Williams
- Scott E Rowden
- Kevin J Clare
- Campbell R Hills
- Jaime J Lynn
- Jason D Smith
- Stuart Thistlewood
- Marcus A Haynes
- Rosanuro Junatas
- David A Allen
- Bruce W Glyde
- Todd J Teis
- Reigan B Crawley

Surveying Graduates

- Daniel K Maher (was surveying associate)
- Cater D Pickett (was surveying associate)
- John D O'Brien
- Trevor J Baker
- Dev R Paudyal
- Trevor J Baker
- Ashley Tibbles
- Joseph M Brabon
- Ivan C Salhus
- Craig D Sweeney
- Benjamin J Dawes (was surveying associate)
- Luke A Carmichael
- Kyle R Sippel
- Daniel J Pratt

- Steven Finigan
- Dermot Cronin
- Frank P Catrastellero
- Andrew R Clark
- Campbell R Hills (was surveying associate)
- Shakya A Jayalatharchchi
- Meshi Nematollahi
- Samuel R Brown
- Edward I Freeman
- Ronan A McGrath
- Walter T Nkomo
- Simon J Sager

Reciprocal

- Geoffrey E Osbaldiston
- Richard D Illingworth
- John B Macpherson
- Glenn M Wilson
- John A Morgan

Upgrade

- Ross Haxton – Surveyor with Mining O Endorsement
- Peter Edgar – Surveyor with Mining O Endorsement
- Thomas Pascoe – Surveyor with Engineering Endorsement
- Robert Nothdurft – Surveyor with Mining O Endorsement
- Alan Hosking – Surveying with Mining A Endorsement

Endorsements

- Shaun P Verrenkamp – Consulting
- Matthew J Inglis – Consulting
- Lachlan A McBurnie – Consulting
- Rodney Baxter – Mining O

Corporations

- Focus on Surveying Pty Ltd
- Queensland Surveying Solutions Pty Ltd
- Intrax Consulting Engineers
- Inglis Survey and Mapping Pty Ltd

Emeritus

- Maxwell G Locke

*Surveyors Board of Queensland
Telephone: (07) 3839 7744
Facsimile: (07) 3839 8341
Email: admin@sbq.com.au*

3DQLD BUILDING THE BOUNDARIES & POSITIONING QUEENSLAND

Imagine walking on to a multi- million dollar building site, GPS in hand, and being able to advise your contractor exactly where the existing utility services intersect with the building design (in 3 dimensions) and the boundary line. At the same time being able to pull up on screen where the 2011 flood reached in relation to your property boundary.

Imagine being in the field far west of Charleville and being able to advise your client of exactly how far inside their boundary that water bore is located, and where the petroleum exploration permit lease area intersects with their fence line. We can easily imagine the technology, so why are these scenarios so complex and time consuming to put into practice? Because we don't have all the elements in place that are needed to build a survey accurate spatial data infrastructure in Queensland.

With the technology readily available there is a growing expectation from the community and demand from industry that the state's property boundaries and associated data sets (the cadastre) are digitally available in a survey accurate state.

Farmers in Queensland are using machine guidance to farm to centimetre accuracy yet we can't provide them an accurate digital boundary framework that delivers investment confidence they are within their titled boundaries. The 3dQLD initiative will enable significant efficiencies in infrastructure delivery, negating major cost overruns such as occurred in the Ipswich Motorway project due total lack of survey accurate position of mining infrastructure. 3dQLD would incorporate statutory data sets of mine surveys and tenure.

Sophisticated handheld devices and Global Positioning Systems (GPS) are already widely used



*Image courtesy of Brisbane City Council;
Virtual Brisbane 20 April 2012*

by the public, but what is needed to make the dream a reality is a survey accurate spatial data infrastructure for Queensland.

Right now, Queensland has the opportunity to take greater advantage of the currently under utilised state asset that is 'the cadastre', and re-envisage it as something more useful, more efficient and more productive to achieve a more prosperous Queensland.

The immediate streamlining and modernisation of land surveying practice in Queensland is essential to take full advantage of technology and enable the emergence over time of a positionally survey accurate cadastre and so realise wide ranging economic and social benefits for the community of Queensland.

The aim of the 3dQLD (three dimensional Queensland) is to build on successful centuries old land surveying practice and law, transitioning to a modernised and efficient system suitable to meet the needs of the 21st century. 3dQLD will be realised in part by land surveying professionals incorporating survey accurate, three dimensional measurements on the earth into their everyday practice and presenting this in a digital format.

This will create a 21st century digital cadastre

THE PROFESSION

capable of supporting the changing needs of the community for generations to come.

For the community 3dQLD means:

- ✓ Providing three dimensional certainty or point of truth at a local level for all forms of spatial data.
- ✓ Accelerated improvement in the accuracy and usefulness of the current Digital Cadastral Data Base (DCDB).
- ✓ Efficiency for the consumer by reducing duplication with current survey processes.
- ✓ An accurate infrastructure for simulation of the real world through spatial information technology.
- ✓ A more open and transparent system that consumers can visualise and understand, and that interacts with technology they are familiar with such as Google earth and global navigation systems.
- ✓ Retaining the integrity and security of the current land boundary system.

For land surveying and spatial professionals 3dQLD means:

- ✓ Facilitating a refinement of current practice and thinking in survey methodology.

- ✓ Creating a new sense of purpose to enhance our state's cadastre in the 21st century.
- ✓ Modernising our approach to how land surveying professionals acquire and present information.
- ✓ Enabling spatial professionals to become the custodians of a modern cadastral database.
- ✓ Playing a leading role in assisting the community in the digital simulation of the land and the built environment.
- ✓ Facilitating improvements in data management and the mainstream use of spatial information in the modern digital world.

The Plan for action

Private, government and academia - have a role in progressing the 3dQLD reform. For the transition to be successful and the benefits realised a proactive collaboration between all stakeholders and a well managed staged process will be need to be implemented

The action plan for the 3dQLD reform is proposed to consist of the following stages:

- ✓ Build support for a 3dQLD vision across business, academia, the regulatory body and



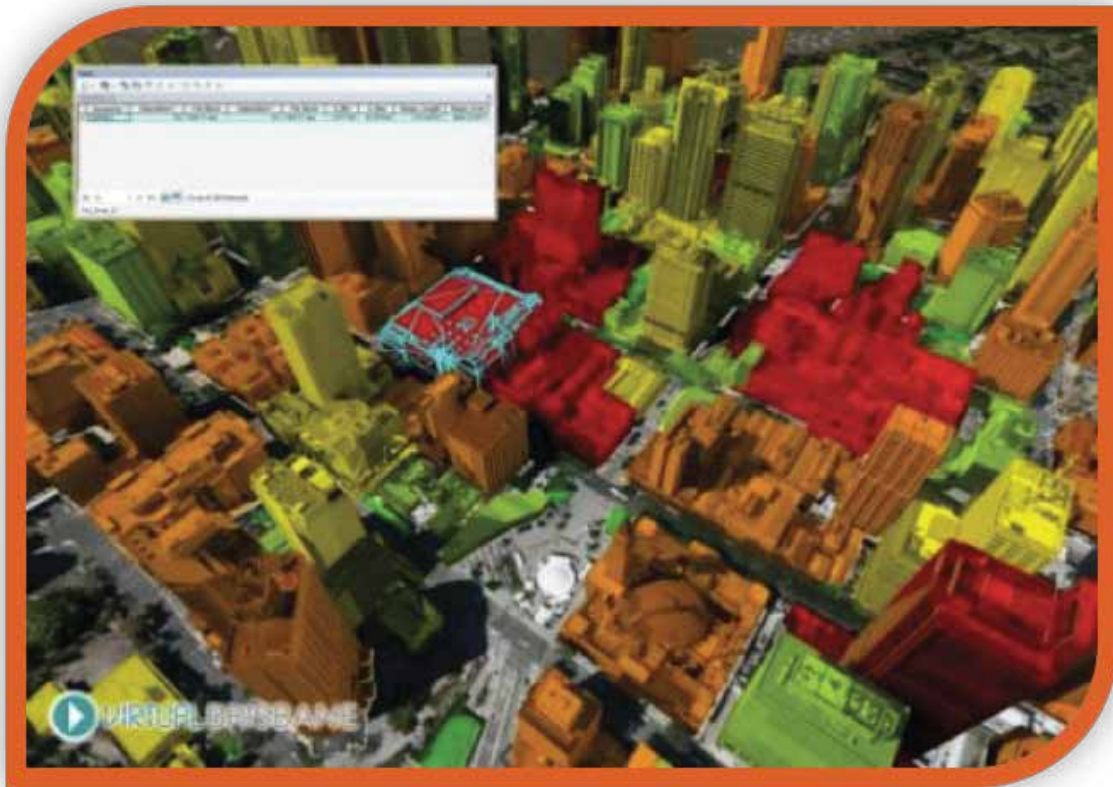


Image courtesy of Brisbane City Council; Virtual Brisbane 20 April 2012

practicing surveying and spatial professionals in Queensland.

- ✓ Facilitate support of allied stakeholders in 3dQLD across the four economic pillars of the Queensland economy; development, mining, construction and tourism.
- ✓ Support from the Government to commence reform of the regulations and laws that will support enhancing and modernising the cadastre.
- ✓ Commencement of training programs within the land surveying profession so they can maintain the proposed system with integrity.
- ✓ Testing and implementation of digital plan and data lodgment platforms.
- ✓ Commencement of Surveys to 3d Cadastre in specialist areas - e.g. larger scale master planned development sites.
- ✓ Industry funded research into database systems and methods of distribution and access to 3dQLD.
- ✓ Drafting of amendments to Surveying practice directions, laws and regulations in consultation with industry and review in partnership with industry.
- ✓ Progression to the 3dQLD model.
- ✓ Private and Public sector spatial information to be progressively lodged in digital form.
- ✓ Government to continue building 3d cadastre (3dQLD) database as private sector lodge digital spatial data.
- ✓ Mining lease and Grazing lease surveys are also added to the digital 3d cadastre - both existing and new tenements.

More information

For more information or to provide feedback discussion or get involved visit the 3dQLD website: <http://www.3dQLD.org> or contribute to the discussion via the Queensland Surveying and Mapping blog: <http://qldsurveying.blogspot.com.au/>

About the authors

This discussion paper has been prepared by a think tank of senior spatial and survey professionals from both private and government sectors.

Feedback is invited to Lee Hellen lee.hellen@landsolution.com.au or Peter Sippel peters@thg.com.au

QLD GOVERNMENT - OPENING THE VAULT

The Queensland State Government has opened up a vault of spatial data which will provide countless opportunities across the property, development, education and tourism sectors.

The 'Queensland Globe' is available in Google Earth, and allows users to overlay a variety of Government Spatial datasets, available for public use.

Some of the datasets available include:

- ⊕ land tenure status
- ⊕ property boundaries
- ⊕ postcode boundaries
- ⊕ locality boundaries
- ⊕ electoral boundaries
- ⊕ floodlines
- ⊕ aerial photography

Users are now also able to generate a Smart-Map using the tool.

Steve Jacoby, the general manager for information policy in the Queensland Department of Natural Resources and Mines, said the more sophisticated imagery included in Queensland Globe was drawn from the state's archives, mostly coming from programs in the departments of Transport and Main Roads and Community Safety.

"We've got 100-odd towns across Queensland mapped in the last couple of years [creating] very, very detailed, high-quality content which was just sitting there," he said.

"But now, throughout the day, we're making it available, connecting through to a range of other information assets for property reporters.

"Down the track we hope to go to titles and property valuations as part of the journey."

Protecting the privacy of individuals and commercial in confidence information has been a priority for the Government when releasing these datasets.

The Queensland Globe is expected to be used by a wide range of groups, including the private sector, educational institutions, community groups, teachers and investors.

At the launch of the Queensland Globe, the State Government also announced that they would be establishing an Industry Advisory Body to ensure that their efforts in opening up data stores will meet the needs of industry.

Queensland Globe can be freely accessed at www.nrm.qld.gov.au/mapping/queensland-globe.html and is fully compatible with Android mobile and tablet devices.



Steve Jacoby & Campbell Newman discuss the Queensland Globe - www.abc.net.au

BOOK & APP REVIEW

BOOK REVIEW

**THE MEASURE OF MANHATTAN:
THE TUMULTUOUS CAREER AND
SURPRISING LEGACY OF
JOHN RANDEL, JR.,
CARTOGRAPHER, SURVEYOR, INVENTOR**



John Randel Jr. (1787–1865) was an eccentric and flamboyant surveyor. Renowned for his inventiveness as well as for his bombast and irascibility, Randel was central to Manhattan’s development but died in financial ruin. Telling Randel’s engrossing and dramatic life story for the first time, this eye-opening biography introduces an unheralded pioneer of American engineering and mapmaking.

Charged with “gridding” what was then an undeveloped, hilly island, Randel recorded the contours of Manhattan down to the rocks on its shores. He was obsessed with accuracy and steeped in the values of the Enlightenment, in which math and science promised dominion over nature. The result was a series of maps, astonishing in their detail and precision, which undergird our knowledge about the island today. During his varied career Randel created surveying devices, designed an early elevated subway, and proposed a controversial alternative route for the Erie Canal—winning him admirers and enemies.

The Measure of Manhattan is more than just the life of an unrecognized engineer. It is about the ways in which surveying and cartography changed the ground beneath our feet. Bringing Randel’s story into the present, Holloway travels with contemporary surveyors and scientists trying to envision Manhattan as a wild island once again. Illustrated with dozens of historical images and antique maps, The Measure of Manhattan is an absorbing story of a fascinating man that captures the era when Manhattan—indeed, the entire country—still seemed new, the moment before canals and railroads helped draw a grid across the American landscape.



APP REVIEW

FLOODLINES

Floodlines App, for iPhone and iPad, uses extensive flood map data to provide a new 3D perspectives of the Brisbane River, surrounding suburbs and rising waters during the devastating Queensland floods of 2010/11. Using cutting edge augmented reality technology this App allows you to

see the flood waters rise from 2D to new 3D aerial perspectives and simulate the flooding across the Brisbane CBD and surrounding areas. The app extends exhibition visitors understanding of the power of technology to visualise and share information.

Floodlines is designed for use on Augmented Reflections feature within the Floodlines exhibition at State Library of Queensland. Download maps here: <http://www.slq.qld.gov.au/floodlines/exhibitions/memory>

SIBA APPOINTS NEW CEO

The Spatial Industries Business Association (SIBA) is pleased to announce the appointment of Richard Simpson to the role of CEO for the Queensland branch of the Association.

Simpson brings a wide array of experience to SIBA, having previously enjoyed lead roles on some of the largest digital urban infrastructure projects ever undertaken in cities such as Singapore, Shanghai, Hong Kong, Tokyo and Bangkok.

He co-founded New Zealand's first 3D computer graphics company which went on to become an internationally-respected pioneer in the field; has led the development of spatial platforms now deployed across 80 nations; and is a former Auckland City Councillor and Chair of Transport.

SIBA's Queensland Chair, Alistair Byrom, welcomed Simpson to the new role.

"Richard comes to SIBA with a career that spans telecommunications, water, energy, technology, architecture and politics," said Byrom.

"Involved at the cutting edge of spatial technologies, including 3D visualisation, for more than 25 years, the Regional Management Group is confident Richard is the best partner to help steer SIBA forward for the benefit of our members."

Digital cities and 3D visualisation is a key focus point for Simpson as he takes over the helm of SIBA, demonstrated through recent projects such as the 'Big Data: Changing Place' exhibition for the reopening of the National Library of New Zealand; his co-authoring of 'Next Generation Digital Earth' which was published in the prestigious Proceedings of the National Academy of Sciences Journal; and his role as co-editor of a book on the subject of Digital Cities. Simpson also recently delivered a 3D visualisation initiative for South East Water in Melbourne, which won the International Water Association's award for innovation.

"I am so proud to be taking on this role with the peak body for spatial industries in Australia and New Zealand, which has become the leading think tank for the fastest emerging industry in this new era of 'big data'," said Simpson.



New SIBA Queensland CEO, Richard Simpson

"I am looking forward to working with SIBA's Directors, its management team, and its members, as we strive to take SIBA to the next level and create continuing opportunities for our members."

"Richard comes to SIBA with a career that spans telecommunication, water, energy, technology, architecture & politics."

Alongside his SIBA duties, Simpson will also continue to serve on the Executive Committee of the International Society of Digital Earth (ISDE) and as Chair for its working committee dedicated to Digital Cities; while remaining as a Director for MetaBola – an international management and technology consultancy firm based in New Zealand.

Simpson takes over from Jack de Lange, who will stay on with SIBA in a consultative role.

"Jack has been in his role with SIBA since its inception and has seen SIBA grow to become a peak body for the spatial industry," said Simpson.

"It is an honour to take over from him and I hope I can continue the great work he has delivered over the past 12 years for our members."

*Spatial Industry Business Association
Queensland
Phone: 07 3217 2599
www.sibaqlld.org*

NEWS

SSSI JOINS FORCES WITH PITNEY BOWES

Pitney Bowes Software joins forces with SSSI to provide better services to the spatial professionals of Australia

SSSI is pleased to announce that Pitney Bowes has become one of SSSI's newest Bronze Sustaining Partners for the next twelve months. This partnership will continue to build on the strong relationship that the two organisations have established over the past few years.

Pitney Bowes and SSSI will be working together to maximise the potential gained by the partnership to offer opportunities for SSSI members. One such opportunity is a series of 1 hour webinars to help GIS professionals be more effective in their roles. These webinars will attract SSSI CPD points and will be advertised on the SSSI events page.

Together we will be working on improving industry insights into GIS and looking to provide effective solutions.

Roger Buckley, CEO of SSSI, comments "Pitney Bowes has been a long standing supporter of SSSI and has exhibited at most Regional and National Events. We look forward to working on outcomes in line with Strategy 2015 and hope that the alliance will be ongoing."

Pitney Bowes Software has been a leading provider of spatial technology for more than 25 years under the MapInfo brand. In more recent years there has been a focus beyond traditional GIS, to integrate Location Intelligence into more mainstream business applications such as enterprise data management, retail network analysis, financial risk management and multi channel communication management. "We are really enthused with the progress we have made educating whole new audiences of the power and benefits of Location Intelligence. Concepts the

spatial industry has taken for granted for many years still invoke surprise and wonder in the eyes of thousands of mainstream IT professionals" says Simon Bird, General Manager, Australia and New Zealand, Pitney Bowes Software.

"We continue to affirm our commitment to the spatial industry – an area we have proudly played in for more than 25 years – and our partnership with SSSI is an example of the investments we are making to support the spatial profession."

"Together we will be working on improving industry insights into GIS..."

Now, every SSSI member that attends MapInfo certified training in Australia can accrue CPD points towards GIS professional certification.



SSSI CEO Roger Buckley, SSSI President Gary Maguire and Pitney Bowes National Sales Manager Dan Woodrow

NEWS

AAM & VEKTA MERGER

Leading geospatial services company AAM has announced its merger with Vekta Pty Ltd, as part of a major investment in Australia's geospatial sector.

The combination of the two industry leaders, announced at this week's Surveying & Spatial Sciences Conference in Canberra, positions AAM as one of the largest geospatial services providers in Australasia and the Asia Pacific Region.

The merged company will continue to provide geospatial services to the Australasian, Asia Pacific and African markets. AAM now boasts a workforce of than 500 people and revenue exceeding A\$75 million.

AAM Chairman and Managing Director, Scott Ramage said the AAM and Vekta merger provides the company with the critical mass to make further investment in the rapidly growing geospatial sector.

"We see exciting opportunities to apply our innovative geospatial solutions in existing and emerging markets," said Ramage. "Joining AAM and Vekta enhances our ability to realise this innovation."

AAM has been at the forefront of geospatial technology for over 50 years. The company provides a diverse range of geospatial services and technology, including land survey, aerial and satellite mapping, and GIS solutions to industries including mining and minerals, energy, infrastructure, utilities and government.

With a history stretching back more than 60 years, Vekta specialise in the provision of land, engineering and aerial surveys. Vekta products and services are utilised across major national and international projects as well as within the property development, construction and mining sectors.



Gary Nairn, David Lowe & Scott Ramage

NEWS

SURVEYORS DISCOVER SEPTEMBER 11 LANDING GEAR

New York police say they have found a fragment of one of the two airplanes that slammed into the World Trade Centre on September 11, 2001.

Police say the wreckage, believed to be "part of a landing gear, apparently from one of the commercial airliners" was found wedged between two office buildings in Lower Manhattan.

A spokesman for the New York Police Department (NYPD) says the area will be thoroughly examined for human remains.

"The NYPD is securing the location as it would a crime scene, documenting it photographically and restricting access until the Office of the Chief Medical Examiner completes its health and safety evaluation protocol, after which a decision will be made concerning sifting the soil for possible human remains," a statement said.

The part includes a clearly visible Boeing identification number.

The aircraft was one of two commandeered 12 years ago by Al Qaeda extremists and flown into the twin towers, destroying the nation's most iconic buildings.

Authorities were alerted to the wreckage on Wednesday after surveyors hired by an owner of one of the two buildings found what they believed was damaged machinery.

*Landing Gear wedged between 2 buildings
in lower Manhattan*



*Photos: AFP, New York Fire Department
Original article abc.net.au/news*



*Landing Gear is believed to be from one
of the commercial airliners destroyed in
the 2001 terrorist attacks*

SSSI Regional & National Sustaining Partners



Department of
Transport and
Main Roads



NEWS & CONTACTS

SPATIAL INFORMATION & CARTOGRAPHY COMMISSION QUEENSLAND NEWS

Last night I went to the third GeoRabble event in Brisbane, with five speakers covering a range of topics in mapping, research, GPS, modeling and handling intelligence. GeoRabble has that irresistible mix of being fun and thought provoking whilst still on-topic. With over a hundred registrations, our Spatial Information community in Brisbane is obviously healthy and keen to network. The fact that most of the GeoRabble organisers are also volunteers on committees in SSSI speaks to the overlap and co-operation between the two organisations.

The SI&C commission has imported another URISA (Urban and Regional Information Systems Association) workshop from the USA, this time on Cartography and Map Design. Greg Babinski, past-president of URISA attended the Surveying and Spatial Sciences conference in Canberra to deliver a plenary speech. The day before he was training up a bunch of SI&C committee members in delivering the workshop so we can deliver it all over Australia and New Zealand. We're planning to run it several times in Queensland this year and the next. This follows on from the well-recieved GIS Program Management workshop we delivered the last few years.

A few months ago, flooding hit Queensland again, and volunteers travelled from Canberra to help out providing emergency maps and cartographic products, and were hosted by Red Cross Qld. These volunteers were members of MAPS <http://maps-group.org/> an organisation with links to government departments, spatial software providers and SSSI. Considering the number of willing and skilled volunteers already here in Queensland, we would like to adopt the same model here. We are still in the very early stages of planning, so watch out for updates on the SSSI website.

Nick Lawrence

SIC Commission, Qld Region, Chair

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WELCOME TO OUR NEW SSSI QUEENSLAND MEMBERS:

Lauren MacNair

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Jamester Fayofay

Mitchell Whittington

Chris Kiernan

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NEWS & CONTACTS

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LAND SURVEYING COMMISSION QLD

The last nine (9) months since being appointed Land Surveying Commission Chair has seen a number of industry matters resolved and a clear action agenda put in place. Many thanks go to Phil Pozzi for his great leadership as Chair of the Land Surveying Commission over the last eight (8) or so years. Phil has now taken on the role as National Land Surveying Commission Chair. As a state we are certainly well represented and will be at the forefront of policy and initiatives in the industry.

Many thanks also goes to Chris McAllister as Chair of the Queensland Regional Committee for her tireless work in the wider Spatial sector and for the many hats she has worn being Chair of Destination Spatial, on the Board of SSSI National and also on the Consultative Committee for SSSI. We have also weathered a difficult transition of Meredith's retirement last year, an interim REO and now the recent commencement of Barb Angus as the new REO. Last year also saw the commencement of Kaye Cleland as Admin Assistant. Through this time of change Kellie Davidson has charged forward as CPD coordinator as has done a brilliant job. Please make yourself know to all the ladies.

I'm pleased to say we have retained an active Land Surveying Commission Executive and have a few new committee members. Each member or group of members has been appointed a role on CPD

advice, New initiatives like EARL, ADAC and SUI, Forum topics, Advocacy (Ambulatory Boundaries, High Density Statutory Easements, Industry discussion papers, lobbying State Government etc), Industry Representation and Board Advice, Careers opportunities, Membership, QUT Advocacy, Survey Control (SP1), Marketing Concepts and new Initiatives such as 3D QLD "Positional Certainty of Cadastral Boundaries". You will hear much more about many of these issues in the coming months and at the upcoming forum in Brisbane. By the time you read this report Peter Murphy will have made a LSC presentation at the combined Central and Northern Group Conference in Rockhampton.

Most importantly our Executive members are well represented in the wider spatial sector and have prominent roles in industry with influence in their respective areas of business. This is important so that the LSC and SSSI remains relevant and at the forefront of new initiatives and policy changes.

At the coming Forum on 6th of June we will be providing an update on many of the above topics and will have a number of prominent industry representatives that will generate discussion. At this time I will also provide some feedback on the recent Spatial and Surveying careers web survey emailed to members.

Chris Swane

Land Surveying Commission Qld Chair

EVENTS CALENDAR

Month	Day	Date	Topic	Duration	Location
May	Friday - Sunday	3-5th	The Fast 15 Conference	2.5 days	Rockhampton
	Wednesday	1,8,15	Open Source	3 hrs/PM	SSSIQ Boardroom
	Thursday	9th	Risk Management	3 hours	Robina
	Friday	10th	YP event - Archive Beer Appreciation	2 hrs/PM	West End
	Wednesday	15th	YP event - Boundary Hotel - Trivia Night	2 hrs/PM	West End
June	Wednesday	5th	Cartography & Map Design Workshop	All Day	SSSIQ Boardroom
	Thursday	6th	LSC Forum	3 hours	Auchenflower
	Tuesday	11th	YP event - Boundary Hotel - Comedy Night	2 hrs/PM	West End
	Friday	21st	Hydro	3 hours	Brisbane
July	Wednesday	17th	Women in Spatial Breakfast	1.5 hrs/AM	Brisbane
August	Thursday - Friday	21st	Cartography & Map Design Workshop	All Day	Cairns
		22-23	LiDAR Technologies 2013	2 days	Cairns
September	Thur	12th	Social Media	1.5 hrs/PM	SSSIQ Boardroom
October	Friday	18th	QSEA dinner		Brisbane
	Thursday	24th	Cartography & Map Design Workshop	All Day	Townsville
	Friday - Sunday	25-27th	Northern Group Conference	3 days	Townsville

To register for any SSSI Queensland events, head to www.sssi.org.au/events or scan the QR Code with your smartphone & head straight there!



If you don't have a QR Code reader, head to the App store or the Play Store and download one!

LAST REPORT

The last report for this edition is an extract from a paper entitled "Indirect Tracking of Drop Bears Using GNSS Technology" by Volker Jaansen from UTAS. Check out the full paper at <http://dx.doi.org/10.1080/00049182.2012.731307>

The drop bear (*Thylarctos plummetus*) is an arboreal (i.e. tree-dwelling), predatory marsupial that closely resembles the koala (*Phascolarctos cinereus*) and is therefore difficult to spot. Colloquially, it is often referred to as the carnivorous 'evil twin' of the koala because it is a vicious creature sharing a very similar habitat. Based on megafauna bones discovered in Aboriginal middens, it is believed that the two present species evolved from a single ancestor during the late Holocene. Theories that its dropping skills follow from genetic similarities with sugar gliders remain empirically untested.

The drop bear is a strongly built animal with powerful forearms and claws for climbing and holding on to prey. In stark contrast to the very

similar looking but smaller koala, it has large canine teeth that are used very effectively as biting tools.

It generally hunts during the day by ambushing ground-dwelling animals from above, skilfully latching onto the victim's neck to kill its prey. Quietly waiting in a tree for several hours, it closely resembles a sleeping koala. Once prey is within striking range, the drop bear will drop several metres out of the tree to pounce on top of the unsuspecting victim (see Plate a). The initial impact generally stuns the prey, allowing it to be bitten on the neck and quickly subdued.

The examination of kill sites and scats indicates that medium to large species of mammal make up most of its diet (Hosking 2012). Often, the prey is considerably larger than the drop bear itself. A nocturnal variation of the species (*Thylarctos plummetus vampirus*) has resorted to draining the prey of its blood rather than feasting on its flesh (Lestat 2010).



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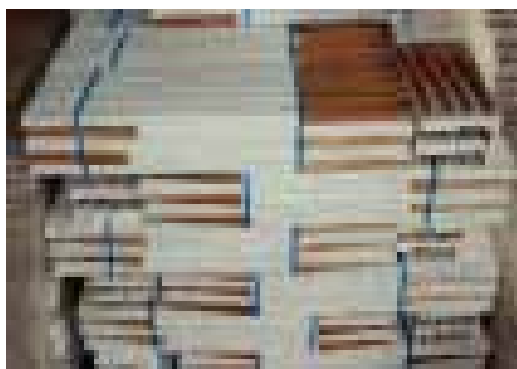
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