Banana Jubilee (20 Fruitful Years) APAS2015 Conference

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ASSOCIATION OF PUBLIC AUTHORITY SURVEYORS
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APAS2015 conference

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The Association of Public Authority Surveyors NSW (APAS) was formed in 1994 primarily to cater for the needs of surveying and spatial information professionals working within state and local government and the education sector.

Nevertheless, private surveyors also benefit immensely from APAS events such as conferences and seminars, which form an important part of the annual professional development events calendar.

APAS prides itself on organising an annual conference that is highly informative, focussed on practical outcomes relevant to the surveying and spatial information community and provides ample opportunity for interaction with colleagues and exhibitors showcasing their newest technology. Traditionally, about one third of delegates belong to private industry.

The APAS2015 conference was held in Coffs Harbour on 16-18 March 2015, incorporating the 90th (and last) annual Staff Surveyors' Association conference. APAS celebrated its 20th conference. which was reflected in the conference theme "Banana Jubilee: 20 Fruitful Years".

APAS2015 included 7 sessions with 20 presentations, most of which included a full paper. It attracted 200 delegates from New South Wales and interstate, representing both government agencies (60%) and private industry (40%). Continuing the tradition of being a practically oriented conference, a wide range of topics relevant to the surveying and spatial information community was covered. There was also plenty of opportunity for networking and exploring the newest developments at the technical exhibitors' booths, as all the big names in the business were present.

APAS2015 was a highlight on the CPD calendar, satisfying the year's requirements in regards to both cadastral and surveying practice CPD points. As usual, the conference kicked off on

Monday afternoon with the annual APAS team building event (golf tournament).

17TH MARCH - MORNING

The first session started with Ian Jones (Sydney Trains) discussing the monitoring surveys on the Illawarra Railway, which was built in rugged and geologically dynamic terrain. The presentation included the terrain types encountered, the monitoring techniques involved and how techniques, equipment and documentation have evolved over the last 30 years.

Dr Volker Janssen (LPI) presented the current status of EDM baseline infrastructure in NSW and outlined updated best practice guidelines for EDM calibrations. These proposed guidelines are expected to flow on into the next update of Surveyor General's Direction No. 5 (Verification of Distance Measuring Equipment).

Peter Baxter (Baxter Geo Consulting) provided a discussion on the use of GNSS techniques in general and specifically for cadastral surveys. He presented a collection of observations and experiences gained in the day-to-day use of GNSS equipment for a broad range of everyday survey projects.

The Official Opening took place at the beginning of the day's second session. It included a Welcome to Country by Uncle Barry Hoskins, Elder of the Gumbayngirr People, followed by addresses from Dr Sally Townley, Deputy Mayor of Coffs Harbour City Council, and Andrew Fraser, Member for Coffs Harbour. Keynote addresses were given by Des Mooney, Surveyor General of NSW, Dr John Trinder, President of SSSI, Phil Hayward, President of ISNSW, and Joel Haasdyk, President of APAS.



Dignitaries at the Official Opening

Presenters captivated the APAS2015 audience with a wide range of topics



After the official opening, George Baitch (formerly LPI) traced the history of the Staff Surveyors' Association. It was formed in 1920, provided significant contributions to the profession over the years, was instrumental in the formation of APAS, and dissolved this year after its 90th and final conference. This history also showed how organisations that are alert to their environment can identify necessary changes, take bold initiatives and adapt to the times.

John Read (Emeritus Surveyor) discussed the advances in the determination of the absolute geographical position of the Bathurst Flag Staff over the last 200 years, also with regard to the position of Sydney upon which the geographical position of Bathurst (and towns elsewhere in NSW)

was initially based. As most surveyors will know. Bathurst is the oldest town in inland Australia and celebrates its bicentenary on 7 May 2015.

17TH MARCH - AFTERNOON

The first afternoon session began with Nic Gowans (LPI) outlining an effective strategy to preserve geodetic infrastructure across NSW. This includes connecting traditional survey infrastructure (i.e. trig stations) with modern-day satellite-based positioning (via AUSPOS), contributing new GNSS observations towards the next-generation Australian datum, and increasing the general public's appreciation of both the surveying profession and the importance of survey infrastructure. For this contribution, Nic later received the Keith

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Nic Gowans receives the best conference paper award from **APAS President** Joel Haasdyk

Haddon Memorial Prize for the best conference paper.

Following up on a paper presented at last year's conference, Wayne Fenwick (Crown Lands) investigated the suitability of GNSS for cadastral surveying in practice from an angular perspective in relation to the current Surveying and Spatial Information Regulation. He argued that static GNSS points can be used at a spacing of three foresight lengths without adding azimuth swing into the survey.

Chris Arnison (RMS) described contract resources for RMS survey investigations. A clear understanding of the requirements, along with the structure of specification G73 and the Computer-Aided Drafting and Design (CADD) Manual for Surveying, will enable efficient contracting and provides a useful training resource for the industry.

The second session of the afternoon kicked off with Tony Baker (Forestry Corporation of NSW) exploring several of the spatially related solutions being used for plantation management within the forest life cycle as applicable to softwood plantations in NSW. The use of GIS and GNSS play a major role in this regard.

Geoff Songberg (formerly Crown Lands) continued his investigation into the determination of the mean high water mark. He showed that the mean of mean high water is not as reliable an answer as previously considered and that a new definition that agrees with current survey practice and takes into account sea level rise is required for the determination of tidal riparian boundaries.

Delegates then visited Southern



Cross University's National Marine Science Centre and learned how spatial information methods are effectively used to assist with marine science research. In particular, GIS, remote sensing and mapping are utilised to great advantage.

The Annual Dinner concluded the day with dinner speaker Major Simon Everett describing the work of the Army's surveyors and engineers under difficult conditions in Afghanistan. His team helped deliver infrastructure to support development and governance, aimed at increasing local capacity to deliver services and improved access between the provincial capital, Tarin Kot, and the district centres for agriculture and trade.

Annual Dinner speaker Major Simon Everett



18TH MARCH - MORNING

The day's first session started with Ed Garvin (Omnilink) outlining recent developments in property information management. He focussed on data capture and the functionality of the Asset Management System used to manage 2,400 school campuses across the state. A customised, cut-down version of the system is successfully being used in organisations with large property holdings.



Michael Batchelor (Resource Design & Management) discussed managing big data in a small office. He explored how surveyors can efficiently and economically lever useful information from LPI's large library of LiDAR and aerial photography data and what usable deliverables this data can provide, apart from pretty pictures and contours.

public road. Using a recent acquisition

as an example, he presented the

from its original position.

public road when the physical road formation no longer exists and when the

survey for the upgraded Pacific Highway

methodology used to define an undefined

road is found to have moved considerably

David Job and Peter Nedelkovski (LPI) provided some background on the survey audit program and outlined the procedures followed by LPI during such audits, along with several case examples. The audit program aims to establish procedures for conducting audit surveys to assess a plan's or registered surveyor's compliance with relevant legislation, improve the quality and consistency of DPs lodged, establish a process for the education of surveyors and provide a mechanism for referring cases of complaint and sustained non-compliance to BOSSI.



surveys.

APAS presidents past and present:

Joel Haasdyk (2014-16) Grant Kilpatrick (2012-14) Neil Bennett (2010-12) Graeme Paterson (2008-10) Warren Thomas (2006-08) Greg Livingstone (2004-06) Rob Addison (2002-04) Stephen Saunders (2000-02) Bob Lander (1998-2000) Les Gardner (1994-96)

Not pictured:

Col Blanchard (1996-98)

Rod Eckels (McMullen Nolan Group) discussed the capabilities and limitations of Mobile Laser Scanning (MLS) technology, the requirements of a successful MLS survey and the role of data processing, data extraction and survey deliverables. This helps surveyors assess whether MLS should be considered for any corridor survey task and better understand the role they can play in MLS

Graeme Paterson (Blue Mountains City Council) described the use of spatial data during and after the devastating Blue Mountains bushfires in October 2013. This included mapping the behaviour and extent of the fires, assessing the damage caused, and conducting the immediate response in the aftermath of the fires. An accurate database and associated damage register has been essential for many recovery activities.

At the beginning of the second session, Michael Lamont (Resource Design & Management) applied some common sense to the definition of an undefined

18TH MARCH - AFTERNOON

The last session commenced with Charlie Higgs (Handley Surveys) exploring various equipment and methodologies used to determine the verticality and position of steel structures along with their relative pros and cons. Examples were drawn from work undertaken in the Pilbara region of Western Australia.

Fred de Belin (City of Ryde Council) proposed options for the preservation of road reference marks and re-marking of existing road boundaries. Fixing the boundaries of roads so that the definition lasts a very long time necessitates a wholesale change of thinking as to the methods surveyors now use to mark road boundaries. Support from the surveying industry is needed to assist local government in 'reclaiming the streets'.

Mark Gordon (BOSSI) outlined how BOSSI ensures cadastral integrity in NSW through the examination of candidate surveyors, the investigation of complaints against registered surveyors and the robust and accountable supervision of unregistered persons by registered

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The technical exhibits provided plenty of opportunity to stay abreast of developments in stateof-the-art surveying technology

surveyors. He presented case studies of investigations, errors made by candidate surveyors and the expectations of the Board in regards to supervision.

The successful conference concluded with a conference review and an open forum, allowing further consideration of issues presented during the conference. At the Annual General Meeting, the following APAS office bearers were elected for 2015/16: Joel Haasdyk (President), Geoff Lenton (Vice President), Gavin Evans (Secretary & Public Officer), Michael London (Treasurer), Grant Kilpatrick (Past President), Dr Volker Janssen (Publications Officer), Thomas Grinter (Conference Manager). Graeme Stewart (ISNSW Representative), and Committee Members Jarad Cannings, Wayne Fenwick Ray Gilmour and Peter Nilon.

The APAS2015 conference proceedings are available online from the APAS website (http://www.apas.org.au/).

APAS2016

APAS2016 will be held in Leura on 4-6 April 2016. Please consider contributing to next year's conference by presenting a paper. There is a lot of fantastic work being done out there why not tell the profession about it?

For more information and to indicate interest in presenting at APAS2016, please contact the APAS Publications Officer, Dr Volker Janssen at LPI (Volker.Janssen@lpi. nsw.gov.au).

TOTAL SURVEY
SYSTEMS...

Signature for hire – who wins?

You may have heard the phrase "signature for hire" being bandied around lately and the purpose of this article is to review the implications of this practice and create an open debate on the true effects on the profession.

Some surveyors believe that signature for hire is wide spread and out of control in NSW. You will be pleased to know that the Surveying Practice and Legislative Committee of the Institution of Surveyors NSW actively reviews complaints from both our members and the general public regarding surveying firms and individuals that may be operating outside the law.

Why would anyone in their right mind make such an investment in a profession where you can simply buy your credentials when you need them?

> Generally if a complaint is received by the Institution against a member who is suspected of participating in signature for hire then the committee will write to that surveyor indicating that they should satisfy themselves of their obligations as a member to act professionally and ethically. Receiving a letter of this nature does not suggest that it has been proven that this is the case. It is purely a letter to inform the member that there has been a complaint and the member is welcome to respond to the committee if they so desire.

> If the complaint relates to a surveying firm that are not members of the Institution and if there appears to be evidence that the firm or individual is operating outside the law then the matter is referred to BOSSI to investigate.

Registered Land Surveyors act as agents for the government and their operations are governed by both Acts and Regulations. There is considerable education and training required to become a Registered Land Surveyor in NSW requiring significant financial investment and concerted effort by individuals to obtain their qualifications and subsequent registration within NSW.

Registration is available to anyone willing to put in the effort and investment

required to expand their career opportunities. The Institution actively supports and encourages candidates by sharing the wealth of knowledge and experience at workshops and trial assessment days.

Signature for hire directly undermines that effort and investment as these businesses generally offer their services at cheaper rates, not having to recoup the financial and physical debt laid down over many years.

This in turn causes the market value to drop for professional services where properly trained registered surveyors are forced to compete with businesses which have total disregard for the efforts of individuals and the profession itself.

These businesses are cheating the system and the registered surveyor providing the signature is directly devaluing the profession which leads to lower rates for all surveys as they are often very much price driven. The effects run right through the entire profession by devaluing the professional standing of surveyors for which many have worked very hard to achieve over generations.

The low numbers of surveying students enrolling at universities will continue while ever this type of activity continues. Why would anyone in their right mind make such an investment in a profession where you can simply buy your credentials when you need them?

The devaluing of the profession creates a barrier which impedes entry into the profession by younger people and also reduces the viability of existing surveying businesses. We need to stop the undermining of the profession and provide support and encouragement for more people to become registered surveyors.

It is incumbent on all of us to eradicate signature for hire to recognise the investment of those individuals that have obtained their registration. Also this will raise the status of surveyors in the community encouraging others to participate in the education and training ensuring the survival of the profession.

If signature for hire continues there are no winners.

Scott Murray Surveying Practice and Legislative Committee

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