

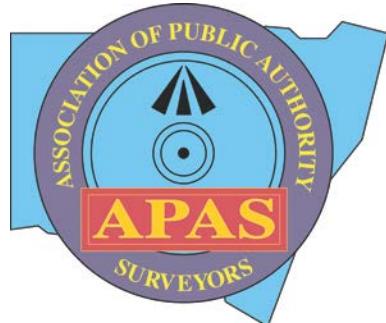
# AVALANCHE OF MEASUREMENTS

PROCEEDINGS OF THE  
APAS2018 CONFERENCE  
THE STATION, JINDABYNE  
9-11 APRIL 2018

Edited by Dr Volker Janssen

Presented by the Association of Public Authority Surveyors

[www.apas.org.au](http://www.apas.org.au)



23<sup>rd</sup> Annual Conference, Association of Public Authority Surveyors (NSW) Inc.

These proceedings are proudly sponsored by



## Table of Contents

<b>Office Bearers for 2017/2018.....</b>	1
<b>Editorial.....</b>	2
<b>Evaluating the Performance of AUSGeoid2020 in NSW</b> Volker Janssen and Tony Watson.....	3
<b>Using an Avalanche of Measurements to Improve National Datums</b> Nicholas Brown, Craig Harrison, Roger Fraser and John Dawson.....	19
<b>Which GDA94-GDA2020 Transformation Grid Should NSW Surveyors Use: Where, When and Why?</b> Nicholas Gowans.....	33
<b>Preservation of Survey Infrastructure in NSW</b> Vittorio Sussanna and Geoff Lenton.....	49
<b>Fast Tracked: V8 Supercars vs. Survey Infrastructure in Newcastle</b> Joel Edwards.....	50
<b>UAS Photogrammetric Mapping Workflow and Accuracy</b> Yincai Zhou and Craig Roberts.....	68
<b>Surveying and Spatial Information Regulation 2017: GNSS and Plan Requirements</b> Simon Hine and Les Gardner.....	69
<b>Discussion Forum: Review of the Surveying and Spatial Information Act</b> Narelle Underwood.....	103
<b>Hadrian's Wall: Boundary Monument for the Northern Frontier of Roman Britannia</b> John F. Brock.....	104
<b>Improving the Cadastre using Existing Information</b> Mark Butler.....	126
<b>DCDB Upgrade of the NSW-Queensland Watershed Border: The Tick Protocol</b> Les Gardner and Simon Hine.....	140
<b>The Sydney Harbour Bridge High-Precision Terrestrial Laser Scanning Survey and 3D CADD Modelling</b> Marijana Kokanovic and Josh Cowley.....	154
<b>Can the Spatial Industry Attract (and Keep) Gen Z Employees?</b> Charlie Higgs.....	182
<b>Cornering the Cadastre</b> Fred de Belin.....	190

<b>Railway Boundary Investigations</b>	
Ian Jones.....	205
<b>Images Provide a Thousand Measurements</b>	
Andrej Mocicka.....	206
<b>Battles, Bushrangers and Bogus Surveyors: Marks Left on the Rural Landscape</b>	
Peter Mayberry.....	222
<b>Integrated Reality Capture in the Rail Environment</b>	
James Black.....	232