Welcome to the June edition of UPdate, Ultimate Positioning’s Survey Division newsletter.

With plenty of Winter Promotions, Network expansions and new Survey Controller functions, this issue is once again packed with the latest information to keep you optimising your systems.

Simply click on various web links and photos throughout this newsletter to get further information, or contact Ultimate Positioning.

Paul Standen  
National Survey Product Manger  
paul_standen@ultimatepositioning.com

**Ultimate Positioning News**

**Winter Promotions**

Until the end of September Trimble are running 2 promotions:

(i) **Integrated Surveying (IS) Rover**

If you buy a Trimble S6 Total Station you can add a GPS receiver at a much reduced rate.
- Swap from GPS to Robotic at the touch of a button
- Easy GDA connections using Network RTK (see page 2)

Add an R8 GNSS (GPS + Glonass) $5000 discount  
Add a 5800 (GPS Only) $3000 discount

(ii) **NEW! Nikon NPR-352**

Purchase an RTK Rover, RTK Kit or Trimble S6 and receive a discount on an NPR-352. The new Nikon features:
- Long Range Reflectorless (300m to white)  
- Co-Axial Laser Pointer  
- Easy to use Software  
- Plug TSC2 controller in for seamless integrated data

Replace your old Jigger, this is a perfect accompaniment to any RTK team.

Discounted Rate for NPR-352 $7000 +gst
Australia’s Base Station Networks

One of Trimble’s fastest growing areas is Infrastructure, with a overwhelming market dominance in VRS networks and some 4000+ base stations in networks worldwide. Over the past 5 years and increasingly over the past 12 months, Base Station Infrastructure and VRS networks have been a hot topic. Below is an Update on Australia’s networks:

**GPSnet (Victoria)**
- There are currently 33 stations in the network.
- GPSnet has just received funding to complete the network with approximately an additional 70 stations over the next 3 years.
- The initial plan for rollout is in numeric order, as per the diagram to the right.

**SydNET (NSW)**
- Currently have 7 Stations around Sydney and another 4 further a field. With the planned purchase of more stations over the coming 12 months we can expect greater coverage.
- Stations are not currently networked and are only available for single station access, however they plan to move to a Network solution in the future.

**SunPOZ (Queensland)**
- More stations were recently added to the network, bringing the total to 7.
- Currently working on adding NTrip access to reduce daily costs. Telco charges will then be by the Mb rather than per minute billing.

**GPS Network Perth**
- Consisting of 8 stations, it is the only fully GPS + Glonass Network in Australia.
- It is also the only privately run network in Australia, setup by a Survey company with data sold for local use.

**TASpos (Tasmania)**
- Consisting currently of Hobart and Launceston it has gained good customer acceptance
- Together with 3 Auscope sites, Tasmania only needs another 6 stations to cover the state.

**Sapos (South Australia)**
- Currently 1 station is available but the 2nd and 3rd stations are about to be installed, extending coverage to the North and East.
- This will form the first triangle and cover most of the city and surrounds.

**Geoscience Australia – Auscope Project**
- GA have 26 ARGN sites around Australia and an aggressive and well funded plan with Auscope to implement 90 new stations in the next few years. GA is placing base stations approx every 200km around Australia’s coastline and major infrastructure corridors. At this stage they will not be real-time.
Feature Coding in Survey Controller

Survey Controller version 12.00 saw the introduction of FXL Feature Manager code library files. The FXL files allow coloured linework for on-screen stringing with Survey Controller. FXL files are created in the controller or on the PC using Feature Manager – a component of the new Trimble Business Centre (TBC) which replaces Trimble Geomatics Office.

Feature Manager lets you create and define codes, attributes, line styles and colours and measure code groups. The FXL files are the same format on the controller and the PC, which means that edits to the code library in the field can be copied back to the office PC easily.

We have created a Numeric.FXL based on Geocomp Codes which is attached to this newsletter. Alpha keys take you to the measure codes group with one button press if you are using a TSC2. ie: press “R” to open the Road group, “S” for the Survey Group etc.... For a free copy of TBC Survey Basic, please give your local office a call.

NEW! Survey Controller Options

Survey Controller now has 2 new modules which can be added for advanced users.

Engineering Option
- Tunnelling over and undercut
- Tunnel Scanning to a Design
- For Monitoring, it will refer to a CSV file of stored locations to measure rounds.

Advanced GIS Option
For many years Survey Controller has supported Code Libraries for feature collection and smart attributing. The Advanced GIS Option now allows you to link photos to points in 2 ways:
- Transfer files from a Wi-Fi camera straight to the TSC2
- Plug in your memory card and attach the photos after collection.
**Satellite UPdate**

As you can see from the graphs below, satellite coverage in the mornings has been a bit average lately if you are just using GPS.

However, those with GLONASS enabled receivers have been enjoying an additional 3-5 satellites for much of the day. A greater number of available satellites means better coverage under trees and most importantly better productivity.

The plots below are for Friday 6 June in Sydney, the bad time will gradually move to earlier in the day at a rate of 2 hours per month.
Baulkham Hills Shire Council recently put out a tender titled “Collection and Mapping of Constructed Stormwater Systems Assets”.

It was felt that their GIS system had only 40-45% of the existing assets captured and the attribute data such as structure type, location, condition and performance was insufficient. The successful tenderer was Civic Design which “together with offered options satisfied all of the evaluation criteria”.

There is an estimated 40,000 pits to pit up and using the new SydNet or Ultimate Positioning base station Civic Design were able put 4 field crews on the job each using just one R8 GNSS rover with a laser rangefinder.
Join the Trimble Survey Team Today

The Trimble survey team is a web based forum for all Trimble users to share information and ideas.
As a Trimble Survey team loyalty program member you will enjoy:
• Exclusive access to the Trimble survey team website.
• Networking with your industry peers around the world.
• “Ask the coach”- Trimble Survey experts ready to answer your questions.
• Receive unique Trimble Survey team gear.
• Lots of free giveaways and more.

To become a member today:

Step 1. Go to www.trimblesurveyteam.com/register
2. Enter email address – ‘next’
3. Enter distributor code – 1276
4. Click confirm distributor name
5. Fill in / confirm registration details and click ‘opt In’ to register for the Trimble Survey Team Loyalty Program
6. Click ‘back to Login Page’ after signing up to access the Survey Team Program Website

Second Hand Equipment for Sale

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 X Geodimeter 600 Robotic GDM CU data collector</td>
<td>$5000+ GST ea</td>
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<tr>
<td>Robotic cradle</td>
<td></td>
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<tr>
<td>Mono RMT prism</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>2 X batteries &amp; Chargers</td>
<td></td>
</tr>
<tr>
<td>Geodimeter 600 Autolock GDM CU data collector</td>
<td>$2000+ GST</td>
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<tr>
<td>Leica TCA1100 (Instrument only)</td>
<td>$1500+ GST</td>
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<tr>
<td>Sokkia Set 3000 Powerset Battery &amp; charger</td>
<td>$2500+ GST</td>
</tr>
<tr>
<td>Topcon GTS-701 (Instrument only)</td>
<td>$1500+ GST</td>
</tr>
<tr>
<td>Trimble 5600 Servo DR 200+ (Instrument only)</td>
<td>$6000+ GST</td>
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<tr>
<td>Wild T1600</td>
<td>$900+ GST</td>
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<tr>
<td>Wild T1000</td>
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<tr>
<td>Sokkia Set 3</td>
<td>$1200+ GST</td>
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<tr>
<td>Leica TCA1100 (Instrument only)</td>
<td>$2000+ GST</td>
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<tr>
<td>Geodimeter 500 Servo Chargers &amp; batteries</td>
<td>$1500+ GST</td>
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<tr>
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<tr>
<td>Sokkia Travers Kit (APS12)</td>
<td>$500+ GST each</td>
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<tr>
<td>3 X Geodimeter Super Charger</td>
<td>$300+ GST each</td>
</tr>
<tr>
<td>Second hand heavy duty tripods</td>
<td>$120+ GST each</td>
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<tr>
<td>Second hand CST poles</td>
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<tr>
<td>New Peanut prism in padded case</td>
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Accessories

• 2 X Sokkia Travers Kit (APS12) $500+ GST each
• 3 X Geodimeter Super Charger $300+ GST each
• Second hand heavy duty tripods $120+ GST each
• Second hand CST poles $120+ GST each
• New Peanut prism in padded case $240+ GST each

Instruments come with the accessories listed. Some kits may need additional accessories to be complete. Please ask for details.
NEW! GeoExplorer XH 2008

Is 10cm Accuracy all you need? The New GeoExplorer XH features:

- Real-time H-Star technology for decimetre to subfoot accuracy in the field
- High-resolution VGA display for crisp and clear map viewing
- Bluetooth and wireless LAN connectivity options
- 1 GB onboard storage plus SD slot for removable storage cards
- Rugged handheld with all-day battery

The GeoXH 2008 is ideal for many applications including:

- High Accuracy GIS (Local Government)
- Utilities (Water, Gas, Electricity)
- Survey, Engineering, Construction

For more details please email simon_best@ultimatepositioning.com or phone any of our offices.

Current Software Versions

<table>
<thead>
<tr>
<th>Trimble Office Software Version</th>
<th>Trimble GPS Receivers</th>
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<tbody>
<tr>
<td>Trimble Geomatics Office 1.63</td>
<td>R8 GNSS 3.50</td>
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<tr>
<td>Trimble Business Centre 1.12</td>
<td>SPS 880 3.50</td>
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<tr>
<td>Data Transfer Utility 1.37</td>
<td>5800 / R8 2.32</td>
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<tr>
<td>Configuration Toolbox 6.0.3</td>
<td>SPS 780 2.32</td>
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<td>Microsoft Active Sync 4.5</td>
<td>R7 / 5700 2.31</td>
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<td>4700 1.30</td>
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<table>
<thead>
<tr>
<th>Trimble Conventional Instruments</th>
<th>Trimble Radios</th>
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<tbody>
<tr>
<td>Trimble VX/S6 12.21</td>
<td>TrimMark 3 1.28</td>
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<tr>
<td>Trimble 5600 11.40</td>
<td>HPB450 2.42</td>
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The latest versions of firmware are all available from the Trimble website: Trimble Support A - Z

EDITOR-IN-CHIEF: Anthony McLaren