



#### AUSTRALIAN INSTITUTE OF MINE SURVEYORS

19 - 20 MAY 2021

# MORANBAH INTERACTIVE DAY

MORANBAH COMMUNITY CENTRE

# Wednesday May 19 2021

8:30 AM Registration & Coffee

9.00 AM Welcome & Overview

9:10 AM Workshop One

**9:45 AM** Workshop Two

**10:20 AM** Morning Tea

**10:55 AM** Workshop Three

**11:30 AM** Workshop Four

**12:05 PM** Workshop Five

**12:40 PM** *Lunch* 

**1:40 PM** Workshop Six

**2:15 PM** Workshop Seven

**2:50 PM** Afternoon Tea

**3.20 PM** Workshop Eight

**3.55 PM** Workshop Nine

4:30 PM Daily Overview / Thank you / Drinks

5:00 PM BBQ Dinner

# **Thursday May 20 2021**

**9:00 AM** Candidate session

# Moranbah Community Centre

89 Mills Ave, Moranbah QLD 4744

**2021 Sponsors** 

**AAM** 

**Aerometrex** 

**Carlson Software Australia** 

**CR Kennedy** 

GeoCue Australia

**Maptek** 

**Position Partners** 

**UPG** 

# **CPD POINTS**

2.75 Mine Surveying

2.75 Survey Practice

The SBQ Candidate session is for both graduates and Supervisors

## **Workshop Information**

#### **AAM**

Rapid Turnaround of Mine Spatial Data

Project Case Study to show the evolution of supplied remotely sensed spatial datasets from points and strings from vector mapping to high resolution imagery, terrain models, surface models generated from Artificial Intelligence for automation and rich content visualisation.

#### Aerometrex

LiDAR Data has many uses

Aerometrex will be exploring the process of adding value to routine, expanding the application of a single monthly survey beyond a simple elevation output to a product that fits your needs.

Value expansions include:

- · Volumes reporting, calculated in parallel with the LiDAR processing
- Rehabilitation monitoring and 'greening'
- Haul road and windrow safety analysis and monitoring
- Change detection
- Reporting for data lineage management

#### Carlson Australia

Rapid blasthole surveys

Blasthole surveys are generally an after thought for many sites whether open cut or underground. With survey and tactical grade gyro technology being more accessible at a lower cost as well as greater regulations regarding safe blasting, more sites are interested in finding where the true toe of a drilled hole lies to ensure blasting is safe and effective. I will be introducing the Carlson Boretrak2 Gyro system and running through the full system that is used for drill holes surveys and how sites can fully validate the effectiveness of their drill and blast operations in the field using our Carlson Boretrak app.

The demonstration will include setup of the system (Probe, Reel and Software), gyro calibration, deployment methods and data interpretation.

## **Workshop Information continued**

#### **CR Kennedy**

C.R. Kennedy & Company is the largest national importer and distributor of surveying equipment in Australia, and the exclusive distributor for Leica Geosystems (part of HEXAGON). Our stand will be showcasing the DJI Matrice 300 series drone (M300) with PPK system, the Wingtra fixed wing and the Phantom 4 RTK solution, all built to measure and map the mining assets and extents.

3D Laser RTC360 Scanning System software and deliverables, to convert your data into useable spatial information for planning and quantification.

The LEICA GS18T "the world's fastest GNSS RTK rover", rapid mine surveys in adverse environments. Visit, experience and learn!

#### GeoCue Australia

GeoCue Australia will attend the Moranbah Interactive Day 2021 in strength. Our intention is to display to you worthy and highly effective equipment and what benefits this bring you and your business.

The GeoCue offering includes hardware and software all contained within the GeoCue family, this is a significant benefit to you which we intend to display via a LIDAR workflow demonstration. This will also include an explanation of our 'Ray traced' colorisation process.

This year we will demonstrate our new True View 515 3DIS LIDAR system. Considering our True View LIDAR range extends to include the Riegl Vux mini 3, the TV515 is worthy of significant consideration considering the value offered. A display of the EVO workflow will be central to this discussion.

We will also display and discuss our CHC Navigation systems and products including our GNSS Rover and base station systems. These are well constructed, easy to use, include user friendly software options and are very economical to utilise.

We will also display and discuss our recently released dual frequency McBathy RC platform, this is a locally built, tested and supported system. This flexible platform also offers above water LIDAR and colorised clouds should the task at hand require these things. We will display and discuss the work flow and benefits of this end to end solution.

Our focus in attending this event it to connect with you and through feedback gained, learn as much as we can about your business needs and how we can best meet these needs.

# **Workshop Information continued**

#### Maptek

Well-designed and maintained haul roads are the key to minimising costs and improving productivity. Many regions, including Queensland, have formal standards for their design and maintenance. In response to industry demand Maptek has developed a new Haul Road Conformance functionality which takes advantage of integration between Vulcan and PointStudio to identify issues and allow changes to haul road design to be made sooner.

Find out more about Haul Road Conformance, see how the powerful fragmentation analysis tool in PointStudio can help deliver downstream cost efficiencies and check out improved Maptek scanner tablet capabilities such as in-field scan registration.

# Position Partners Part one - RPAS solutions

Position Partners is in the unique situation where their two major drone manufacturers have released their new LiDAR solutions in 2021.

When we think of Survey Grade LiDAR, we instantly imagine huge \$\$\$ - but both these solutions have created a price paradigm which will please all those who have been waiting for the prices to drop.

The first is a survey grade LiDAR, housed in a Trinity F90+ Fixed Wing VTOL (Vertical Take-Off & Landing) drone with a longer flight time and the second is a DJI M300 multi rotor copter with half the flight time.

We will discuss the pro and cons of these two solutions.

# Part two - Mine4D Fleet Management Solution

The Mine4D fleet management system focuses on operational efficiency improvements directly related to production, maintenance, guidance, and safety. This enables our clients to increase productivity, cut costs and minimise risk.

Our technology solutions for mining focuses on delivering process and efficiency improvements, which directly relates to production, assets, maintenance and safety management. We provide the data so that you can feel confident in your decisions.

Mine 4D delivers real-time machine intelligence, enabling you to make smarter decisions to increase productivity, reduce costs and minimise risk

# **Workshop Information continued**

#### **Position Partners**

#### Part three - Monitoring

Wireless sensor networks have established themselves as a cost effective, precise, and reliable tool for the condition monitoring of road, geo-technical and structural assets. As the pre-eminent and proven solution manufacturer, Senceive have been able to provide remote, automated monitoring of assets using high precision, small, low cost, battery powered wireless sensor systems.

Position Partners are proud to be Senceive's distributor in Australia and work closely with our clients to understand what they need to monitor, and which solution is fit for purpose.

We will be workshopping the technology and discussing regional client examples.

#### **UPG**

UPG will be showcasing the newly released SX12 Scanning Total Station's suitability for underground surveying with the new green and focusable laser pointer. Also the newly released TSC5 Android-based survey controller featuring a five-inch screen and full keyboard.

We will also be introducing our new partnership with AutoMap, a revolutionary new high accuracy Lidar mapping system allowing real time, on the fly scanning for both open pit and underground mining.

