Hooray for Y'allywood -IAFSM 2017



The International Association of Forensic and Security Metrology (IAFSM) held its 2017 gathering in Atlanta, Georgia (nicknamed Y'allywood because so many television shows and films are now being made there).

IAFSM was truly an international event as it featured the work of attendees from all over the world. Several new technologies were previewed, these included the first Zoller and Froehlich (Z+F) IMAGER 5016 laser scanner to make its way to the US. The meeting also involved mock trials, onsite crime scene reconstructions, live virtual reality-based presentations and an exhibition area that was filled to capacity.

Mixed Realities

Organisations like the IAFSM provide great insight into non-traditional user communities of geospatial technologies. It was interesting to observe how application needs were being fulfilled outside of obvious survey based user groups, whether it was through virtual realitybased companies like Veesus or hybrid solutions like the Trimble SX10. Onsite demonstrations at a secret location also shed light on a piece of hardware hyped for some time: the BLK 360 from Leica Geosystems.

BLK 360 and REGISTER 360

Demonstrations of the BLK 360 highlighted how this US \$16,000 scanner could be used in conjunction with P series hardware and software like REGISTER 360. The one button touch functionality of the scanner made it appealing to all users. It was also indicative of a new wave of more affordable laser scanners that had emerged onto the market in 2017. Other options within a similar price bracket include the LASiris VR and Effortless 3D. It was REGISTER 360, however, that seemed most beneficial to the laser scanning community as a whole. This easy to use software contained many of the powerful registration features associated with other packages like Cyclone. It will be interesting to see how REGISTER 360 gets used in workflows tethered to other scanning solutions as time goes on.

Z+F IMAGER 5016

The IMAGER 5016 is a complete redesign of all previous system architectures developed by Z+F. It was a move that resulted in a pragmatic and stable way to miniaturise hardware. Juergen Mauer, CEO of Z+F USA, was quick to point out: "I would cite the "Blue Workflow" as unique advantage, as all processing is done in the field while scanning. That raises QA / QC to new levels, as it can guarantee data quality and sufficiency as well as registration accuracy while still on site." The scanner itself featured a unique metal bracket, one that made the IMAGER 5016 light enough to compete with other products of a similar size and, at the same time, other top tier solutions like the ScanStation P40 from Leica Geosystems. Sample data on a low-quality setting was incredibly clean, with level of detail in terms of signal return from dark and shiny surfaces impressive for a scanner of any size. Even at distances over 200 metres.

SmartLight functionality had also been incorporated into the scanner's onboard camera workflow. It allowed for perfect exposures in low to no light conditions, and complemented new settings tethered to the camera inside the scanner. For example, it was now possible to eliminate artefacts in the 360-degree panorama generated by simply retaking and replacing any unwanted image tiles. The "Blueview Workflow" described by Mauer was not just shaping the laser and registration systems in place. It was considering every aspect of potential onsite QA / QC.

Summary

The IAFSM 2017 successfully addressed any potential barriers in place with technology adoption. It crossed this chasm, for the forensic community, by facilitating open discussions. Fundamental topics included budget cycles in law enforcement communities, and how they impacted equipment use, as well as the need for standards of best practice within forensic driven workflows. The application of high fidelity 3D images in this market was in good shape across the globe.

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