Virtual Surveyor to Unveil Enhanced Cut-and-Fill Mapping in Drone Surveying Package at InterGEO 2019

Faster, More Accurate Volume Calculations

LEUVEN, Belgium, 10 September 2019 – Virtual Surveyor has added cut-and-fill mapping capabilities to Version 7.0 of its popular drone surveying package. The new functionality enables users to quickly perform volume difference calculations and generate cut-and-fill maps from drone images captured on two or more different dates.

"Calculating volume differences between surface models derived from drone imagery now takes less than a minute instead of hours…and the results are more accurate," said Tom Op 't Eyndt, CEO of Virtual Surveyor nv in Belgium. "The entire workflow of cleaning the surface models and subtracting one from the other can be accomplished in Virtual Surveyor without exporting data to another application."

The Virtual Surveyor package enables professional surveyors to generate accurate topographic end products from drone data five times faster than traditional field work, bridging the gap between UAV photogrammetric processing software and engineering design packages. Virtual Surveyor 7.0 will be demonstrated in booth A1.073 at InterGEO 2019, being held Sept. 17-19 in Stuttgart, Germany.

"Cut-and-fill mapping will dramatically improve the efficiency of our core user base among quarry operators and open pit mine managers," said Op 't Eyndt. "In addition, the new functionality will expand our already growing share of the market for UAV mapping by contractors in Architecture, Engineering and Construction [AEC]."

The enhanced cut-and-fill functions are part of a new feature in Virtual Surveyor 7.0 called Terrain States. This allows the user to create separate Terrain States for surface models generated from UAV images captured over the same area on different dates. The user can easily delineate and delete objects, such as bulldozers or excavators, that appear in a single surface model. These changes are saved in only one Terrain State so they do not cause volume measurement errors when a surface model is subtracted from another.

"Managers whose projects involve moving large volumes of dirt and soil can be more confident in the accuracy of their cut-and-fill maps," said Op 't Eyndt.

Contractors on large construction projects can use drone imagery and Virtual Surveyor on a regular basis to map the progress of their earthworks excavations, ensuring the volume of dirt added or cut meets the design specifications. Virtual Surveyor 7.0 even allows users to model proposed cut-and-fill design plans to compare the costs of various Earth moving scenarios.

Virtual Surveyor users will find several other new or enhanced capabilities in Version 7.0:

Streamlined Button Ribbons – Tabs and ribbons work intelligently so that the user only sees button commands needed for specific functions.

Multipoint Item – Thousands of feature points and their location coordinates can now be recorded and managed as one item in the project view.

Enhanced Keyboard Navigation – Onscreen navigation can now be directed with either the mouse or keyboard.

Current subscribers to Virtual Surveyor will see their software being updated to Version 7.0 automatically.

To start a free 14-day trial of Virtual Surveyor, visit www.virtual-surveyor.com.

About Virtual Surveyor
Virtual Surveyor software enables professional surveyors to generate accurate topographic end products from drone imagery five times faster than traditional field work. Now used in 65 countries, Virtual Surveyor allows surveyors to create light-weight CAD models from drone data in very short timeframes. In a typical application, the suite takes the orthophotos and digital surface models (DSM) extracted from UAV imagery with photogrammetric software like Pix4D, Metashape or DJI Terra and generates an interactive virtual environment onscreen where surveyors can select the survey points and breaklines that define topography. Standard topographic outputs from the Virtual Surveyor software are Surfaces or TINs (Triangular Irregular Network), Contours, and Line Surveys. These survey-grade deliverables are ready for direct input into computer aided design (CAD) software packages such as AutoCAD, Civil3D, Magnet Office, Vulcan and BricsCAD. As such, Virtual Surveyor bridges the gap between UAV photogrammetric processing software and engineering design packages.

More information:
Global: Tom Op ‘t Eyndt
+1 (917) 789 1555

Graphics Caption:
“Cut and Fill or Fill and Cut? It depends in what time direction you look!”