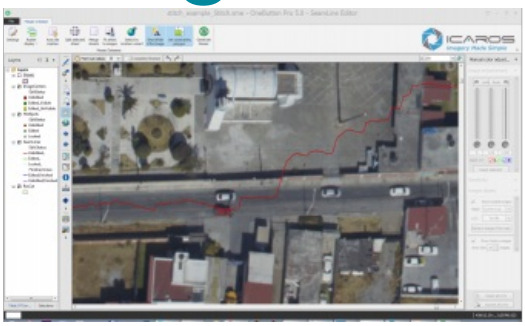
Icaros Launches New UAV Image Processing Software



Icaros, a provider of aerial imaging software, has released version 5.0 of OneButton Standard and Professional image processing software for unmanned aerial systems (UAS). The 5.0 release contains a significant number of major new features and hundreds of other improvements, including a new 2D and 3D map and model viewer.

Icaros developed the OneButton family for geospatial end users to easily and automatically generate precise, fully orthorectified 2D maps and 3D models from frame-based aerial imaging systems. Originally engineered for manned aircraft sensors, the OneButton software has been modified to accommodate the unique collection conditions of UAS. OneButton is application platform and sensor agnostic, and processes raster image data from small, medium, and large-format frame sensors capable of capturing visible RBG, multispectral, near-infrared, and thermal infrared data.

Professional Edition extends the Standard Edition with quality enhancement tools for more refined, professional results. It includes an innovative photogrammetric dashboard giving users fine tuning control over the photogrammetric process. Other tools in the Professional Edition let users enhance output results.

Image processing workflow

UAS manufacturer AeroVironment worked with many UAS image processing products, and OneButton sets a high standard. The Professional Edition is easy to use and provides many of the advanced photogrammetric options essential for producing the high-quality, accurate results that customers expect from AeroVironment, said Seth Merickel, senior software engineer at AeroVironment.

OneButton creates a complete image processing workflow for aerial image data and can front-end both GIS and analytics workflows to enable customers to solve challenging problems related to everything from agriculture and forestry to utilities and city planning. It is highly customizable to meet the needs of specific vertical market applications.

In addition, it automatically processes raw raster imagery with onboard GPS/IMU data to stitch the individual scenes together into seamless, colour-balanced orthomosaics meeting photogrammetric precision and quality standards. Outputs include digital elevation models (DEMs), true color 3D point clouds, and multispectral mosaics – all ready for ingestion directly into GIS and analytics software environments