



High-Res Oblique Imagery for Realistic 3D Modeling

Presented by Peter White

Corporate History



EagleView launched aerial measurement reports in 2008



EagleView merged with Pictometry International January 2013



Established in 2000, Pictometry International Corp. created the aerial oblique industry with a patented system for image capture.

EagleView holds 5 patents on image measurement

Pictometry holds 23 patents on aerial oblique image capture, processing and measurement



About Pictometry



40°

Innovated the capture of aerial metric oblique imagery and its measurement.

Images are captured from a 40-45 degree angle. Image resolution ranges from 3" to 12" ground sample distance (GSD).



Experience Matters

- Imagery for over 1,300 satisfied Counties/Cities/Provinces
- Captured imagery in 50 States
- 73 dedicated aircraft in the United States
- USGS-certified ortho and oblique camera platform



Qty 60 – Cessna 172

Qty 13 – Piper PA-23



3D Model Capabilities



- Imagery database - multi-petabyte database of high-resolution oblique and ortho aerial imagery for North America
- Imagery-derived models - feature high level-of-detail (LOD) 3D building models with accurate location and geometry, textured with oblique imagery.
- Premium as-built 3D buildings- industry-leading option for current conditions, as-built, photo-realistic building models



Innovative Process



- Building geometry - extraction process produces clean 3D polygonal boundary models
- Building textures - created from Pictometry imagery deliver to detail without geometric complexity
- Ground geometry - triangular mesh, derived from customer-supplied DEMs, modeled from source aerial photography or both
- Ground texture map - true ortho-rectified photography eliminates building lean and leaves streets fully visible



Use Cases



- Urban growth management, planning and development
- Emergency planning and management
- Effective public presentations
- Tourism and marketing tours featuring flight simulation
- Subsurface infrastructure engineering studies
- Terrain analysis with ortho-draped surface modeling



Availability

- Imagery coverage of 95% of U.S population. Always expanding and refreshing.
- Delivery options for most formats – DAE, 3DS, OpenFlight, KML, ESRI Shapefile, OBJ, X3D or VRML
- Texture maps delivery options: JPEG, TIFF, GeoTIFF, BMP or DDS.
- Speed and Capacity of Production





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