

LARGE FORMAT DIGITAL CAMERA

AERIAL CARTOGRAPHICS OF AMERICA, INC.

"Going Beyond all Maps and Boundaries"



Coastal Ortho Photography

Vexcel UltraCam X

ACA has the latest advanced CCD technology with the UCX Digital Camera System achieving the largest digital imagery format at 216 gross megapixels. This latest technology creates superior color, resolution, and accurate ortho mapping results.

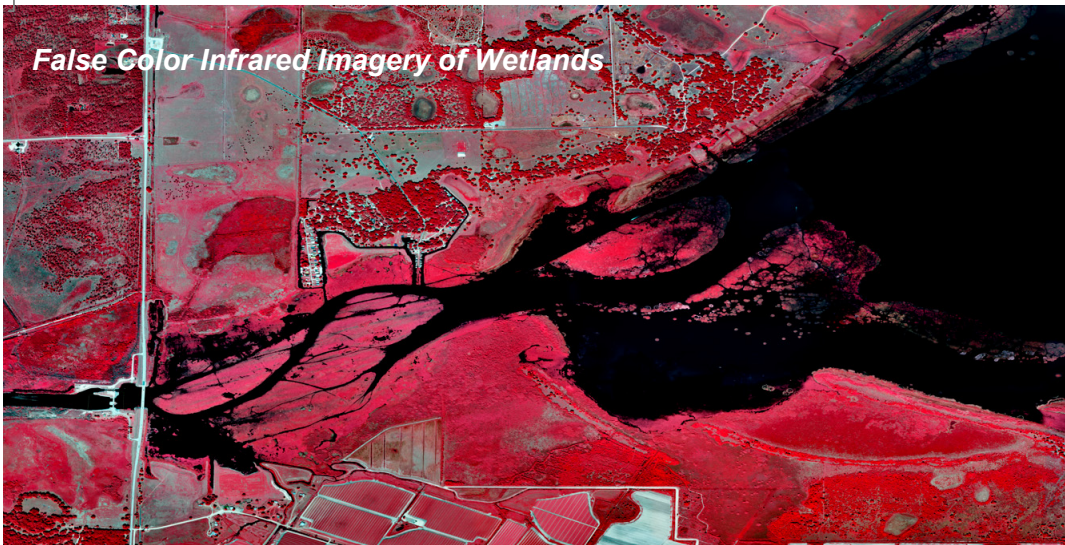
The UCX technology rivals film photography for generating photogrammetric derived Digital Elevation and Terrain Models.

With an all new optical system the UCX improves image sharpness and high radiometric range well into corners of each image. As mapping projects become larger the ability to

capture and deliver imagery at fast intervals is critical. The UCX collects pixels at an astounding sustained rate of 3 GBits per second. It maintains a forward overlap of 80% at 1" pixels at normal flying speeds. The results of this improved technology include: Increased Accuracy of Ortho Photogrammetric Maps, Digital Elevation Models (DEMs) with no spikes or holes and Urban/Suburban mapping with minimization of occlusions. The entirely new data flow concept allows unlimited image collection in the air.

UCX Project Applications

- Coastal Areas
- Watersheds
- Environmental
- Vegetation
- Seagrass
- Airports/Ports
- Transportation
- Intermodal Centers
- Rail Corridors
- Mines/Landfills
- Transmission Corridor
- Pipeline Corridor
- Forestry
- Land Development

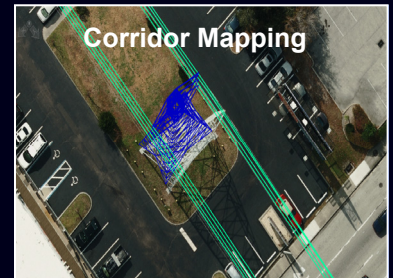
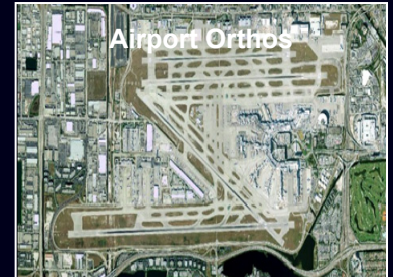


Overall Advantages of the UltraCam X

- Simultaneously collects Panchromatic, True Color, and Color Infrared
- Largest Format Digital Image: Panchromatic image size 17,310 x 11,310 pixels; color and NIR image size 5,770 x 3,770 pixels
- Pixel size at flying height of 1000 ft AGL is 1 inch GSD
- 14 CPUs for computation for in-the-air image quality assessment
- Post-processing begins in the air and is completed on the ground
- Processes imagery on board real time to compute quick views / histograms
- 6,600 uncompressed images (4.2TB) per storage unit
- 11 hours of collection time per single storage unit
- Image geometric accuracy is approximately +/- 2 μ m

The UCX can be configured to fly simultaneously with the Riegl 680i LiDAR Sensor and/or the Aisa Hyperspectral Sensor.

The UltraCamX is capable of collecting stereo imagery at a remarkable 1 inch GSD at a flight speed of 110 knots.



**WE ARE THE FULL DIGITAL
SOLUTION FOR YOUR
MAPPING AND GIS NEEDS**

