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XCAM: the revolutionary airborne mapping system

Tom Huntley
Senior Systems Consultant
@t_huntley @GeoXphere

in partnership with
WALDOAIR

About GeoXphere

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XCAM
3D Aerial Survey

XCAM G
360 Mobile Mapping

XMAP
Cloud GIS Platform

PARTNERS
& Consultancy

Introducing XCAM

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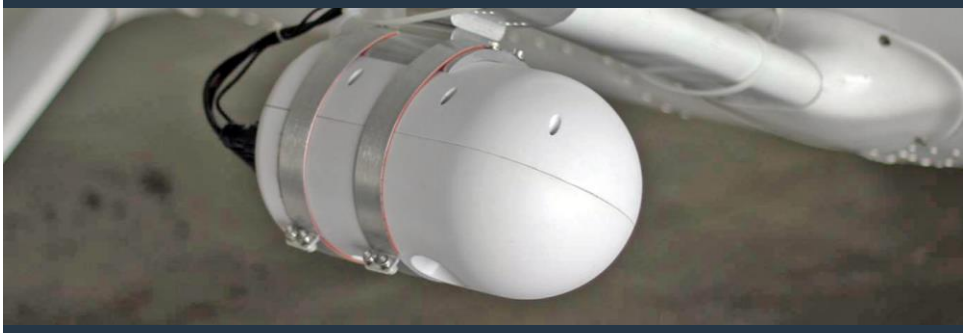

XCAM is a lightweight, high resolution aerial survey pod.

It was built to allow data to be captured faster and more efficiently than traditional survey.

Introducing XCAM

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XCAM is designed to fit on light aircraft that are cheap to operate.

It has also been mounted on other aircraft, including helicopters and gyrocopters.

Why XCAM?

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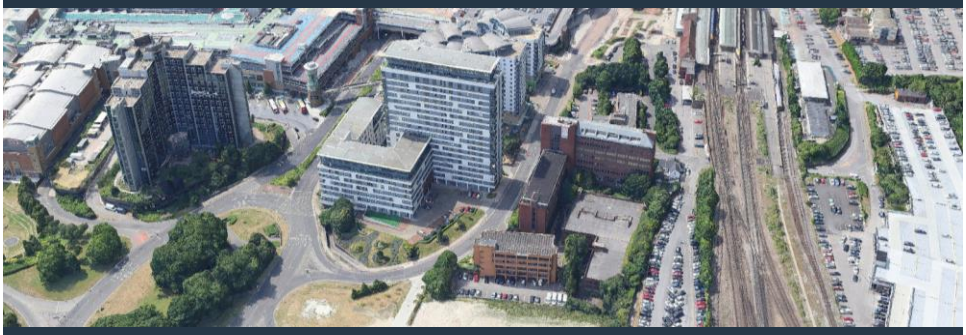

With the growing number of applications that rely on geospatial data,
a responsive and cost-effective solution is needed.

XCAM aims to commoditise 3D data!

Why XCAM?

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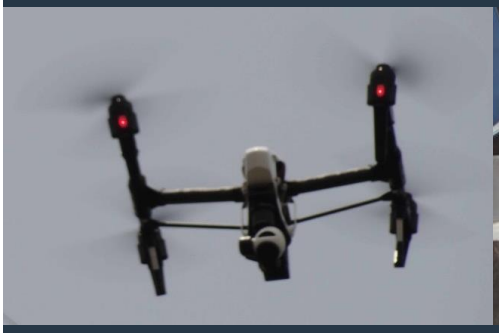

XCAM can capture larger areas than practical with UAV.

XCAM can capture data more often even in low cloud conditions.

XCAM can capture very high quality 3D data.

The Sweet Spot between Large Format & UAV

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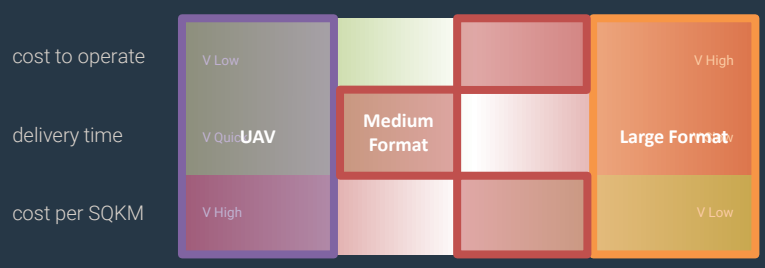

Aerial Survey options before XCAM

The Sweet Spot between Large Format & UAV

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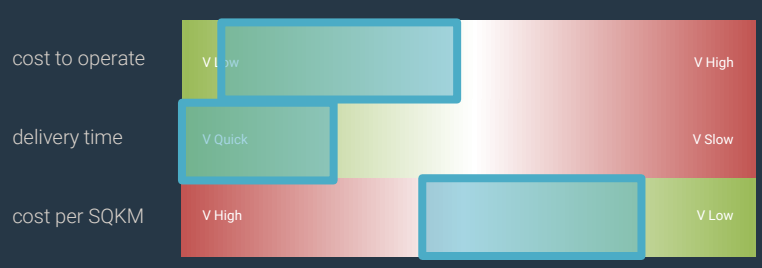

XCAM disrupts the aerial survey market with a viable challenger to UAV and even large format systems.

The Implications

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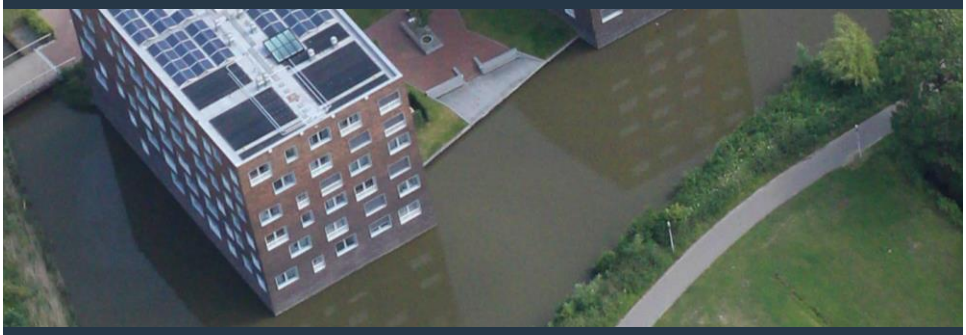

More aerial survey providers with lower overheads.

Leads to lower-cost geospatial data, driving accessibility.

Proliferation of 3D geospatial data.

XCAM Range

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XCAM
2 x RGB
(10,200px / 3,456px)

Transport
Planning
Utilities
Smart Cities
Engineering

XCAM
RGB + NIR
(5,184px / 3,456px)

Precision Agriculture
Habitat Analysis

XCAM
RGB + NIR + Thermal
(5,184px / 3,456px)
(640px / 512px)

Solar Panel Condition
Peat Mapping
Mining
Heat Loss
Building Usage

XCAM Ultra
2 x RGB
(17,100px / 5,792 px)

Wide area mapping

XCAM has a variety of sensor configurations designed for different markets and applications.

What makes XCAM special?

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XCAM fits to the outside of an aircraft and can be mounted to take vertical or oblique imagery.

What makes XCAM special?

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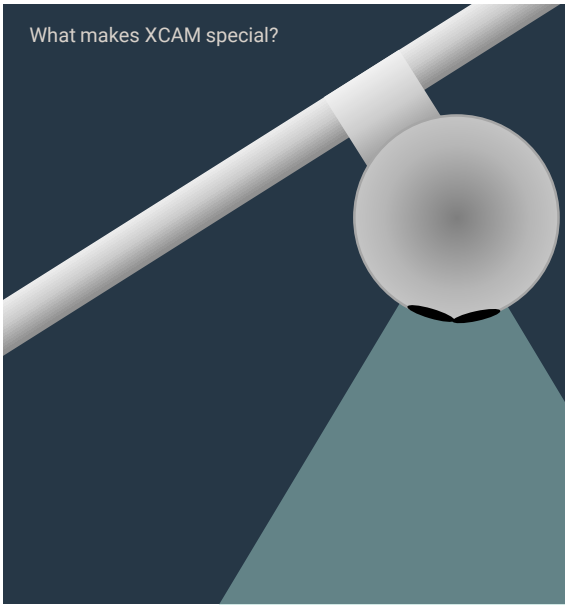

In a vertical configuration it can capture a wide swath to efficiently capture nadir imagery

(59.1° XCAM B 78.0° XCAM Ultra)

What makes XCAM special?

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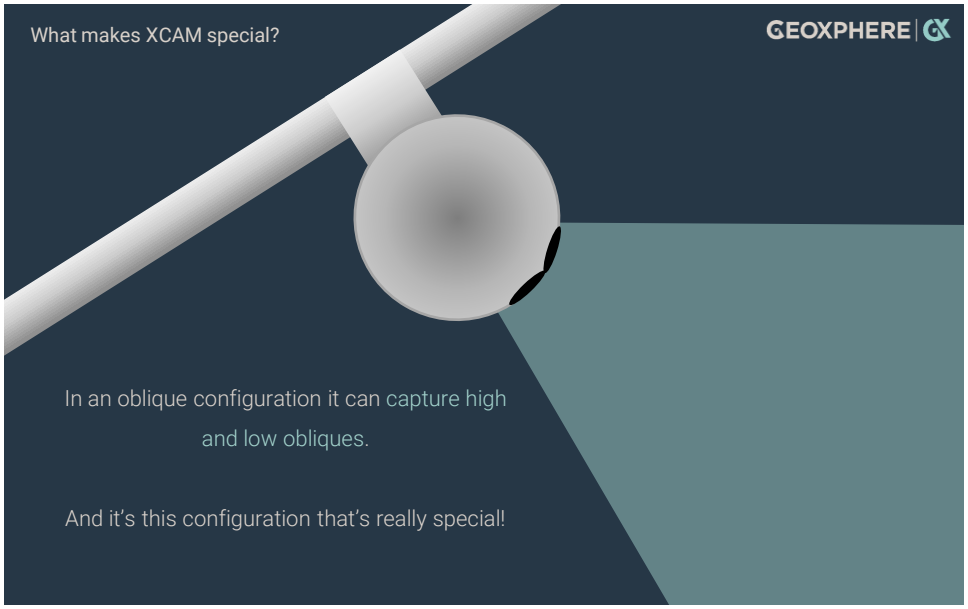

In an oblique configuration it can capture high and low obliques.

And it's this configuration that's really special!

XCAM Circular Flight Path

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Instead of flying in a track pattern or a grid, XCAM users can fly in circles.

The unique Flight Control System guides the pilot perfectly.

XCAM Circular Flight Path

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- Over 40 oblique angles instead of 8 (typically)
- Always see into urban canyons
- Create photorealistic 3D mesh using dense image matching software (skyline, pix4D, Agisoft etc.)

XCAM Circular Flight Path

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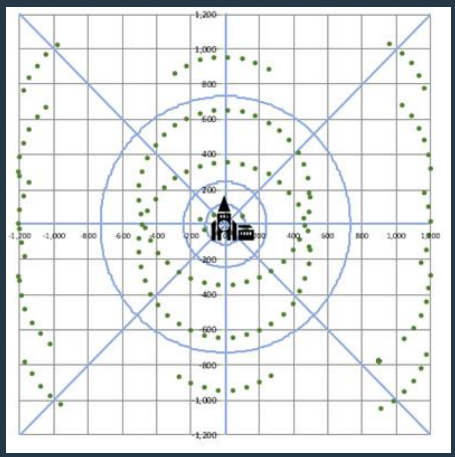

3D mesh rendering relies on matching multiple points from multiple images.

In this example the church can be seen from over 150 points from multiple angles and both high and low obliques.

XCAM Circular Flight Path

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- Easy to plan and fly
- Multi-use output (3D, oblique, true-orthophoto)

Example Data as a 3D model

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Example data in Oblique Software

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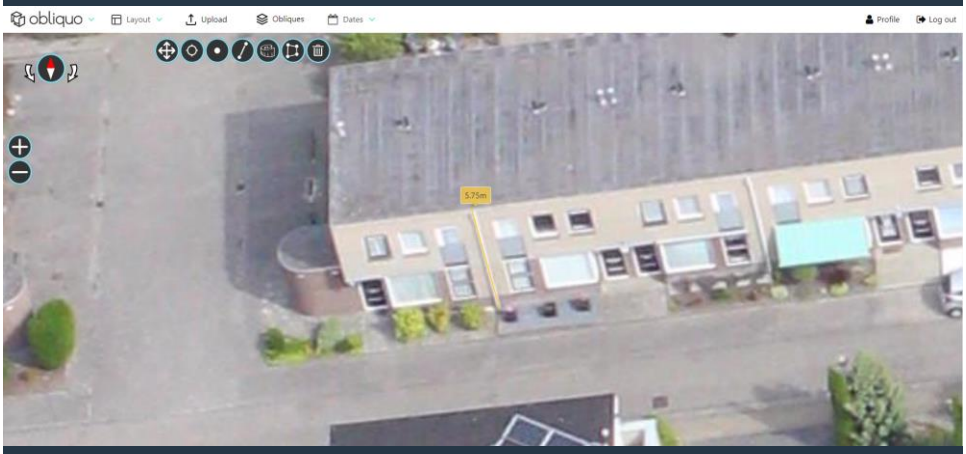

Data fits into oblique analysis packages easily

Example data in as Orthophoto

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We can generate stunning true-orthos from the circle survey

Our Network

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GeoXphere is working with an expanding network of companies all over the world using XCAM and producing high quality data.

Getting Started

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To get started with XCAM, contact the GeoXphere team and we will help you get established.

We look forward to working with you.

sales@geoxphere.com
www.geoxphere.com
+44 (0) 2034 114 544
@GeoXphere

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