

# DRONE AERIAL SURVEY AERIAL IMAGING & FILMING

AERIAL SERVICE IN BANGLADESH, BHUTAN & NEPAL



---

## CYGNUS AERIAL PHOTOGRAPHY

---

Founded in 2010, As an Industry Pioneer Leading Drone Operator in Bangladesh.

Cygnus Aerial introduces Drone/UAV technology based commercial aerial imaging, filming & survey service first time in **Bangladesh**. Cygnus also provides service in Southeast Asian geographical zone especially in **Bhutan & Nepal**. Leading fully licensed commercial Drone operator in this region.

Cygnus Aerial also support Helicopter, Airplane Aerial Photography & Filming; Satellite image consultancy including LiDAR, IR - Thermal inspection.

“WE ARE PASSIONATE ABOUT PROVIDING THE HIGHEST QUALITY AERIAL IMAGING, FILMING AND SURVEY-INSPECTION SERVICES TO OUR CLIENTS. WE ALSO PROVIDE A DETAILED INSPECTION REPORT, DIGITAL-CLOUD BASED VISUAL ASSET MANAGEMENT SYSTEM.”

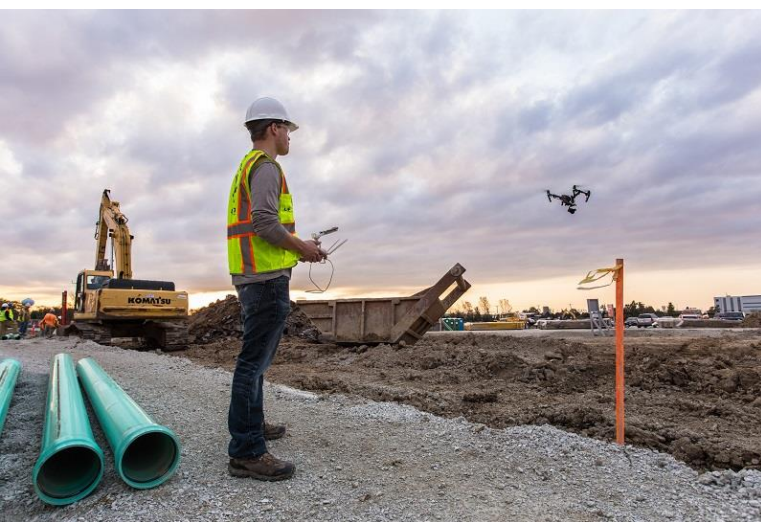
Over the past few years, unmanned aerial vehicles (UAVs) – more commonly known as drones – have increasingly become a popular tool for aerial data collection in construction, GIS surveying, and industrial inspection. Based on the latest surveying technology, our Drone/UAVs operate with high accuracy and updated mapping material.

Cygnus Aerial Photography is the leading marketplace for all your aerial requirements, one stop shop for all drone's professional applications.



## SERVICE & SECTOR

AERIAL PHOTOGRAPHY & FILMING	[SERVICE CODE PDF 1001]
HELICOPTER & AIRPLANE AERIAL SERVICE	[SERVICE CODE PDF 1002]
GIS MAPPING	[SERVICE CODE PDF 1003]
3D MODELING	[SERVICE CODE PDF 1004]
IR – THERMAL	[SERVICE CODE PDF 1005]
LiDAR	[SERVICE CODE PDF 1006]
CLOSE VISUAL INSPECTION (CVI)	[SERVICE CODE PDF 1007]
SATELLITE IMAGE CONSULTANCY	[SERVICE CODE PDF 1008]
ROAD & HIGHWAYS	[SERVICE CODE PDF 2001]
BRIDGES & SUPERSTRUCTURE	[SERVICE CODE PDF 2002]
FLYOVER	[SERVICE CODE PDF 2003]
METRO RAIL	[SERVICE CODE PDF 2004]
RAILWAYS	[SERVICE CODE PDF 2005]
AIRPORTS	[SERVICE CODE PDF 3001]
PORT & SHIPYARD	[SERVICE CODE PDF 3002]
OFFSHORE LNG TERMINAL	[SERVICE CODE PDF 3003]
MARITIME VASSAL	[SERVICE CODE PDF 3004]
CONSTRUCTION & REAL ESTATE	[SERVICE CODE PDF 4001]
ARCHITECTURE	[SERVICE CODE PDF 4002]
ARCHAEOLOGY	[SERVICE CODE PDF 4003]
TOURISM	[SERVICE CODE PDF 4004]



## SERVICE & SECTOR

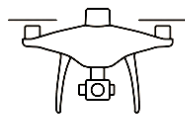
OIL	[SERVICE CODE PDF 5001]
GAS	[SERVICE CODE PDF 5002]
ELECTRIC TRANSMISSION POWER LINES	[SERVICE CODE PDF 5003]
ELECTRIC POWER PLANT	[SERVICE CODE PDF 5004]
NUCLEAR POWER PLANT	[SERVICE CODE PDF 5005]
HYDRO POWER	[SERVICE CODE PDF 5006]
DAM CONSTRUCTION & INSPECTION	[SERVICE CODE PDF 5007]
INDUSTRIAL INSPECTION	[SERVICE CODE PDF 5008]
MINING	[SERVICE CODE PDF 5009]
SOLAR ENERGY	[SERVICE CODE PDF 6001]
WIND TURBINE	[SERVICE CODE PDF 6002]
MOBILE TOWER	[SERVICE CODE PDF 6003]
ENVIRONMENT	[SERVICE CODE PDF 7001]
AGRICULTURE & RESEARCH	[SERVICE CODE PDF 7002]
RIVER & WATER	[SERVICE CODE PDF 7003]
SUNDARBANS MANGROVE FOREST	[SERVICE CODE PDF 7004]
POLLUTION	[SERVICE CODE PDF 7005]
MOUNT EVEREST & GLACIER	[SERVICE CODE PDF 8001]
EARTHQUAKE & DISASTER MANAGERMENTS	[SERVICE CODE PDF 8002]



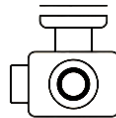
## KEY FEATURES

- Orthographic Projection Enable Aerial System
- Ground Resolution (GSD): 10 cm to 2 cm Approximately
- 2K, 4K Camera
- GPS Coordinate & Waypoint
- 30x Camera Zoom for Close Visual Inspection (CVI)
- IR-Thermal & LiDAR Sensor for Survey & Inspection
- Dual Downward Gimbal
- Orthophoto Mosaic
- Digital Surface Model [DSM]
- Digital Terrain Model [DTM]
- Contours Model
- 3D Point Cloud & Textured Mesh
- Vector Mapping (AutoCAD .dwg .dxf)
- Cut Filling Volume Calculation & BM, GCP Point Etc.
- Aerial Live Transmission / Online Upload

### APPLICATION



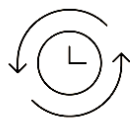
RTK Module



1" CMOS Sensor



GS RTK APP



TimeSync



OcuSync



D-RTK 2 GNSS Mobile Station

### MISSION TYPE



Waypoints Mission Planning



Area Mission Planning



Oblique Mission Planning

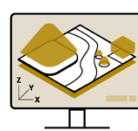
### PLAN-PROCESS-ANALYZE AND-EXECUTE



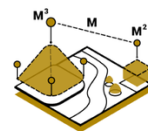
Mission Planning



Data Acquisition



Area Mapping



Data Analysis

### NEXT GENERATION MAPPING



1cm+1ppm  
RTK Horizontal Positioning Accuracy









1.5cm+1ppm  
RTK Vertical Positioning Accuracy



5cm\*  
(\*When flying at 100m height, 2.7cm GSD, sunny.)  
Absolute Horizontal Accuracy  
of Photogrammetric Models

## FLYER & SENSOR INFORMATION

[SERVICE CODE PDF MATRICE 200 V2]	[SERVICE CODE PDF PHANTOM 4RTK]
	
[SERVICE CODE PDF INSPIRE 1 V2]	[SERVICE CODE PDF MATRICE 600 PRO]
	
[SERVICE CODE PDF ZENMUSE XT2]	[SERVICE CODE PDF ZENMUSE Z30]
	
[SERVICE CODE PDF ZENMUSE X3]	[SERVICE CODE PDF ZENMUSE X5]
	
[SERVICE CODE PDF S800 EVO]	[SERVICE CODE PDF WINGTRAONE]
	



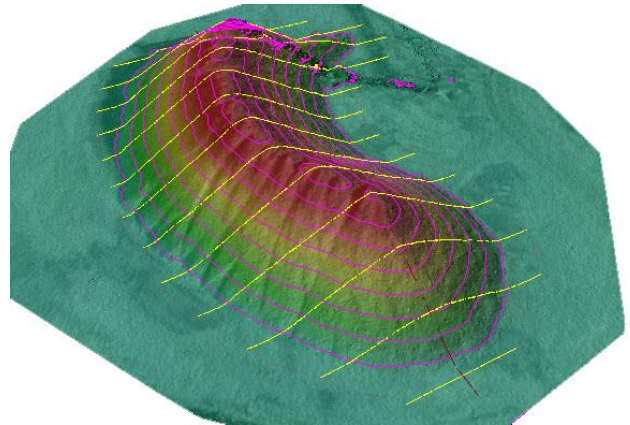
---

## REFERENCE

---



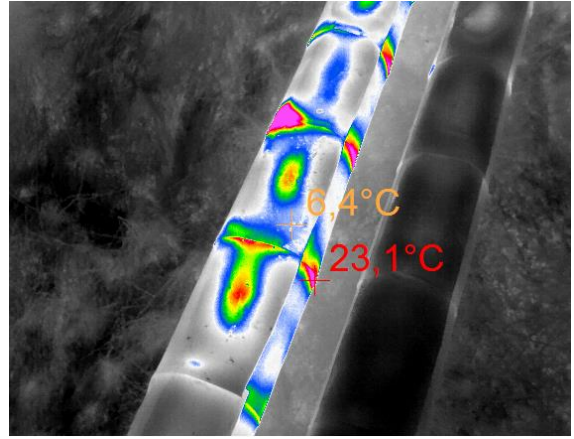
1-10 cm GSD orthomosaic



3D, volume calculation & contour



Pipeline, CVI



IR-Thermal, CVI



Gas flare stack, CVI

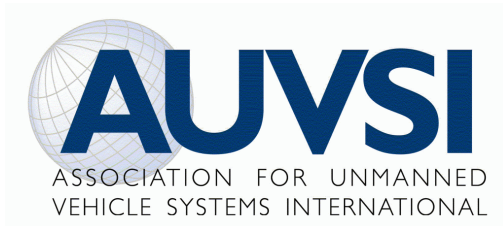


Vessel, Floating Terminal

**SAFETY:** Safety is our top priority. We have strict safety protocols which our operator will brief the clients on the aspects of safety concerns. The operator will usually choose not to fly until s/he feels safe to do so.

[SAFETY POLICY STATEMENT\_2020\_V1.1]

AFFILIATION / LICENSING / MEMBERSHIP



**PLEASE CONTACT US FOR AN OBLIGATION FREE QUOTE**

**CONTACT:** NAIMUL OPU | CALL SIGN: S21AO |  
TEL.: +88 01755557540 | [cygnusaerial@gmail.com](mailto:cygnusaerial@gmail.com) | [www.cygnusaerial.com](http://www.cygnusaerial.com)  
POSTAL ADDRESS: CYGNUS AERIAL PHOTOGRAPHY, JMC, SOUTH BREEZE CENTER (9TH FLOOR)  
BUILDING NO. 5, ROAD: 11, BLOCK: G, BANANI, DHAKA – 1213, BANGLADESH

