Aerial Reconnaissance Tactical Edge Mapping & Imagery System (ARTEMIS)

Since 2015, Tough Stump Technologies has set the pace for integrating sUAS mapping products and an organic mapping capability at the team level. Forging relationships with key industry partners enables TST to deliver knife point capability at the operational edge. Tough Stump Technology has engineered and perfected the integration of sUAS Tactical Mapping with the Google Earth Enterprise Platform (GEEP), serving as the sole vendor with platform and sensor certifications for operations.

Key Features:

• SOCOM approved capability

• Landing Zone/Drop Zone (LZ/DZ) Survey - Overlay the Orthomosaic in ATAK to provide high resolution imagery taken at the time of the survey negating need for CAD drawings; Derive longitudinal / transverse gradients, obstacle heights, aircraft criteria, approach and departure Minimum Safe Altitude (MSA) from the Digital Surface Modal (DSM) within EZAZ

• Capable of operations without baseline Map data

• 3 cm resolution per pixel / absolute accuracy 5 meters or less with stand-alone GPS

• Centimeter level absolute accuracy with RTK/PPK activation

• Route Reconnaissance – Conduct corridor mapping of routes to determine viability and risk to force

• Change Detection – Map areas of interest over a period of time to identify changes in the environment

• Gridded Reference Graphic (GRG) – Near real time imagery enables units to create high resolution GRG's of objectives

• GEEP Integration – Units can upload Orthomosaics and DSMs through Fusion to the Google Earth Enterprise Platform (GEEP) enabling high resolution, time sensitive information to be rapidly shared across the enterprise. Imagery is maintained on DoD and USG GEEP servers.

• Beyond Line Of Sight (BLOS) mapping of Named Areas of Interest (NAI) – Enables users to conduct BLOS mapping and NAI reconnaissance over terrain features, mitigating risk to force while remaining undetected.

• Multi-Spectral Analysis – Multi-spectral sensors provide the capability to identify signatures invisible to the naked eye including vegetative health, terrain disturbances analysis in support of humanitarian missions and identify unique signatures

• Thermal Mapping – Incorporates a thermal sensor for high resolution maps depicting temperature variations

• Enabling Partner Forces – The ARTEMIS kit is comprised entirely of unclassified COTS equipment units can share imagery with Partner Forces either through physical (printed PDF) or electronic (.kml) products.

ARTEMIS Package Components

▪ 2 eBee X Mapping Drones

▪ Contingency Kit, to include:
- • 4 x spare wings, 4 x propellers, 8 x batteries
- • 1 x GPS Tracking Kit
- • Toughbook
- • Enhanced Charger
- • Origin 3D Workstation
- • Google Earth Enterprise support

▪ 12 months service and support

▪ 5 days of training

For more information, call or email tst_tech@toughstump.com.

TOUGH STUMP TECHNOLOGIES

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