Kestrel TSCM ® Professional Software

The Mighty kestrel ® Launches the New Highly Anticipated RPAS Geo-Location Heat Mapping Mode

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Remotely Piloted Aircraft System (RPAS) | Part I

The mighty Kestrel TSCM ® Professional Software continues to evolve in producing a powerfully innovative and affordable commercially available technology with a TSCM specific purpose-built focus. Our ability to design a modern advanced counter-threat technology has caused a ripple-effect across competitive interests and sent a wake-up call to many industry stake-holders that are responsible for technical and tactical deployment within a TSCM or SIGINT role. Many professional technical operators are faced with the reality that their current equipment resources and approach is either obsolete or indeed nearing obsolescence. Those who choose to continue utilizing such resources, methods and techniques are fast becoming a liability to the ever-changing technical intelligence industry.

It is for this reason that many technical operators, particularly at the government and military level have embraced the Kestrel TSCM ® Professional Software as the next generation of threat identification, knowing that new features and functionality are released almost daily in the form of skillfully crafted drop in file extensions.

Dynamic Trace Autonomous Platform (DTAP-GPS)

Many operators have enquired as to the reason we used the word platform in the design of this powerful geo-location heat mapping resource. The answer is as always, watch this space for more to come! We have now delivered the next generation of the DTAP-GPS ™ capability. Our RPAS enabled TDAP-GPS ™ capability harnesses the mobile capability of the existing DTAP-GPS ™ feature and places the technology on a Remotely Piloted Aircraft System (RPAS) platform. Now you know!

Our Technical Research and Standards Group (TSRG) ™ is located at our 160 acre site and engaged in scientific research in the heart of Alberta Canada in cooperation with the co-located Red Deer Training Centre (RDTC) ™ and the home of our Virtual Classroom instructional technology centre.

Remember, in a Moving Target Threat Model the Technical Operator is the Spectrum Analyzer...

RPAS DTAP-GPS ™

The new Kestrel ® RPAS DTAP-GPS ™ is a powerful all-in one deployment ready sub-system platform that can be launched on a small inexpensive UAV containing the DTAP-GPS ™ technology and utilized to fly both manual and autonomous missions relative to a large Operator Defined Target Area (ODTA) ™ and the extended Functional Target Area (FTA) ™. You are likely beginning to see the light! We introduced new technology, and new methodology; all in preparation for the next generation of completing advanced flight operations within a geo-location heat mapping for mission critical environments.

Afterall, are you not focused on threats that emanate outside of the so-called target area? There are many threat technology options available to the threat actor that simply cannot be detected within the target area. If you are not seeing the logic, it is likely time to attend the Kestrel TSCM ® Professional Software | Signals Intelligence Support System; Certified Technical Operator (CTO) ™ program or our modern Technical Security Specialist (TSS) ™ program.

RPAS Regulatory Compliance

Utilizing the RPAS DTAP-GPS ™ sub-system requires that the operator comply with all regulatory requirements and local restrictions in airborne UAV deployment. This may involve an RPAS Pilot Certificate, Certificate of Registration, and / or a Special Operations Certificate from the regulatory authority.

The advantage of the RPAS DTAP-GPS ™ sub-system is the small payload requirement and ability to fly autonomous missions that can be repeated as often as necessary as a formalized component of the technical-intelligence role. The resulting geo-location heat mapping spectrum data can provide "Actionable RF Intelligence", as defined by the TSB 2000 (Technical) Standard ™ under the **Kestrel-net ™** umbrella.

RPAS Deployment Requirements

There are two (2) components relative the RPAS DTAP-GPS ™ deployment. The first is the Pilot in Command of the aircraft with the responsibility of safely flying and monitoring the progress of the flight. The second component is a technical operator who in real-time can access the telemetry from the sub-system, providing the analytical TSCM | SIGINT side of the mission. These are two (2) essential and separate roles.

Kestrel TSCM ® Professional Software

Definition: *Kestrel, "An Advanced Standards-Based Software Defined Radio Application for Enhanced National Security"*

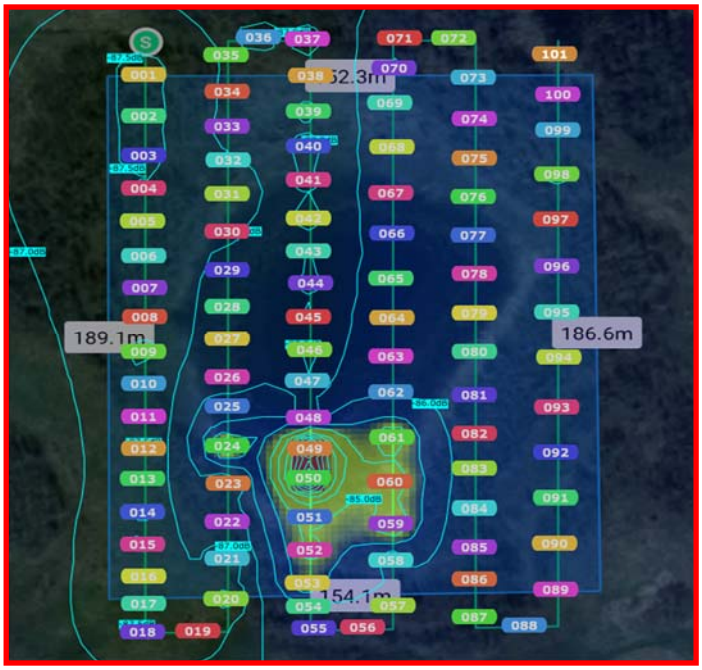
Professional Development TSCM Group Inc. **Technical Security Branch (TSB)**

The requirement of manually flying the ODTA ™ and FTA ™ have been replaced by modern RPAS Intelligence Flight Modes (IFM) providing the ability to pre-define the mission and repeat the mission with absolute precision as often as required.

This allows the operator to build a database of geo-location heat maps for comparative across any number of historical missions.

Custom navigational profiles can be saved and recalled for small targeted areas down to the facility level, or a larger multiple building business campus, or even an entire military base, for example, can be quickly scanned for potentially hostile emitters in a matter of minutes. In the examples above 11.8 acres can be grid searched in 6 m 58 s producing a wideband width post analytical tunable geo-location heat mapping process. The second example demonstrate a 7.1 acre autonomous grid search in just 5 m 14 s with operator defined search patterns of any relative size and shape. Kestrel ® RPAS DTAP-GPS ™ is truly an art that defines the future of TSCM!

The following DTAP-GPS ™ plot utilizes the same RPAS autonomous navigational plot on the left lower side of this page and illustrates the rendered geo-location heat map, against a 375 MHz 10 mW transmitter located on the ground between Auto-Location 048 and 049 with the antenna positioned horizontally pointing in the direction of 023 and 024.



The Kestrel TSCM ® Professional Software DTAP-GPS ™ sub-system is ready to take to the sky and navigate a tactical RF geo-location mission with the speed and absolute precision of a Kestrel ®. Effective immediately the basic concepts of RPAS DTAP-GPS ™ will be included in our Certified Technical Operator (CTO) ™ program and more advanced concepts included in our Technical Security Specialist (TSS) ™ program.

Innovation is Simply the Beginning!

Visionary Software Beyond the Technology Limitations...

| www.pdtg.ca | www.kestreltscm.com | www.ctsc-canada.com |

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Kestrel TSCM ® Professional Software is innovative industry leading, disruptive technology, sold in 48 countries worldwide.