

# Kestrel TSCM<sup>®</sup> Professional Software

## Understanding the Generational Advantages of TCP<sup>™</sup> Dimensional Geo-Location Heat Mapping

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Technical Research and Standards

Paul D Turner, TSS TSI

### Tap Capture Plot (TCP) | Innovative New Technology!

The modern spectrum warrior can no longer rely on obsolete TSCM resources that fail to identify the essence of all energy within an Operator Defined Target Area (ODTA)<sup>™</sup> and into an extended Functional Target Area (FTA)<sup>™</sup> as defined under the TSB 2000 (Technical) Standard<sup>™</sup>.



The Kestrel TSCM<sup>®</sup> Professional Software is specifically engineered around the concept of a total functional energy evaluation that is simply not possible with typical industry spectrum analyzers, or commonly taught techniques; and includes many resources that are often marketed for TSCM use.

Our Technical Research and Standards Group (TRSG)<sup>™</sup> developed a standards-based concept in conjunction with a powerful well-established TSCM approach, that digs deep into the near-field region of the ambient RF spectrum environment, where a great many signals invisibly hide from ineffective TSCM techniques. The TCP<sup>™</sup> capability, not only captures signals invisible to the typical TSCM approach; but is capable of localizing all relevant energy sources that are present, across the entire operator-defined Range of Interest (ROI) during runtime, and provides enhanced geo-location during post analytical review, for a standards-based total ODTA<sup>™</sup> energy review.

### See What You Have Been Missing!

The core concept of the Tap Capture Plot (TCP)<sup>™</sup> technology is firmly-based on just how easily the resource can be deployed to immediately provide an essential total energy picture across the entire Operator Defined Target Area (ODTA)<sup>™</sup>. The TCP<sup>™</sup> process is extremely faster, when compared to the use of the unique Kestrel<sup>®</sup> Differential Signal Analysis (DSA)<sup>™</sup> methodology and results in an enhanced, Probability of Intercept (POI) and Probability of Detection (POD). POI and POD are subject to considerable discussion industry wide and often used to mislead technical operators, for the most part, into believing they are meeting an acceptable detection standard.

Please download the white paper “The Art and Science of Remote Spectrum Surveillance and Monitoring (RSSM)<sup>™</sup> to better understand Probability of Detection (POD). The PDF document is available for online viewing or download from:

<https://kestreltscm.com/kestrel-tscm-professional-software-newsletter-and-technical-papers/>

The TCP<sup>™</sup> resource can identify highly-localized low level energy sources such as TEMPEST emissions in both TEMPEST and NON-TEMPEST environments. Deployment is exponentially faster and more accurate, while producing positive location specific evidence of emissions and propagation parameters that are unlikely to be identified during typical TSCM deployment.

The deployment of ineffective TSCM resources and the application of ineffective techniques, set the operator up for failure. Tap Capture Plot (TCP)<sup>™</sup> is the only way to build a total energy picture of the entire Operator Defined Target Area (ODTA)<sup>™</sup> and extended Functional Target Area (FTA)<sup>™</sup>.

### Generational Software Methodology

The Kestrel TSCM<sup>®</sup> Professional Software is designed for the modern spectrum warrior for progressive technical operators and the next generation of technical operators who are willing to embrace the reality of a modern threat environment. The Kestrel TSCM<sup>®</sup> Professional Software continues to advance well beyond the capabilities of many competitive resources that focus on obsolete techniques and equipment designs. Training is often restricted to the equipment limitations and rarely focuses on the realities of the modern ambient spectrum environment or threat actor capability, unlike the Kestrel<sup>®</sup> methodology.

***Kestrel<sup>®</sup> instructors teach the possibilities  
and realities, not the limitations...***

Tap Capture Plot (TCP)<sup>™</sup> provides the technical operator with generational progressive innovation that focuses on capturing localized near-field emissions that contain extremely low-energy signatures that are often invisible and missed by standard TSCM techniques and equipment resources.

The TCP<sup>™</sup> process captures all ODTA<sup>™</sup> and FTA<sup>™</sup> energy and applies Algorithmic Artificial Intelligence (AAI) with advanced propagation modelling to produce precision localization of all existing RF energy, by frequency, across the entire radio range.

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

# Kestrel TSCM<sup>®</sup> Professional Software

## New Wireless Communication Standards demand Generational TCP<sup>™</sup> RF Threat Detection Technology!

Professional Development TSCM Group Inc.

Technical Security Branch (TSB)



### TEMPEST | EMSEC

The acronym, TEMPEST defines a wide-range of specifications, practices and standards relating to the elimination, limitation or reduction of field-strength of electromagnetic emanations from communication, electrical and electronic equipment, reducing the vulnerability to interception by persons unknown. EMSEC defines the measures that are taken to reduce the risk of unauthorized interception of unintentional emissions from equipment resources that processes protected information.

In the reality of modern wireless communication standards, and the vulnerabilities inherent to the supply chain management of communication, computer and all associated components and cables, the necessity of including TEMPEST evaluation during all TSCM RF inspections is an absolute requirement in producing a standards-based qualifying TSCM inspection.

TEMPEST by understanding and definition is often considered outside of the scope of work by many operators working within the private sector. Many operators consider TEMPEST as an unnecessary deployment technique that is reserved only for classified work areas at the government or military level. This is far from the truth, given the significant and growing number of computers, laptops, audio visual devices, conferencing systems, and other modern office and communication equipment. All of the above resources produce significant unintentional radiation (energy) across the radio-frequency and power line spectrum. The Kestrel TSCM<sup>®</sup> Professional Software now provides a means to detect, identify, evaluate, visualize, decode (video), and by way of dimensional geo-location, precisely locate single and multiple energy emissions across the entire radio spectrum.

### Dimensional Geo-Location Heat Mapping

The Kestrel TSCM<sup>®</sup> Professional Software provides the unique ability to dimensionally visualize radio-frequency propagation of TEMPEST radiators, producing a clear picture as to which emissions and frequencies are of sufficient signal strength to be intercepted outside of the Operator Defined Target Area (ODTA)<sup>™</sup> and into the danger zone of the extended Functional Target Area (FTA)<sup>™</sup>. The visualization of RF is yet another essential and highly-innovative generational technology that enhances POI and POD of multiple TEMPEST radiators from a single source.

Option TCP<sup>™</sup> is just \$495.00 CAD and can be added at anytime to an exiting license.

It is not uncommon for a desktop computer to produce TEMPEST radiation across the radio-frequency spectrum at more than a single frequency. Advanced dimensional geo-location heat-mapping is a means of quickly identifying which devices are producing common or even unique emissions in a single TSCM collection pass across the facility.

*Visionary Software Beyond the Technology Limitations...*



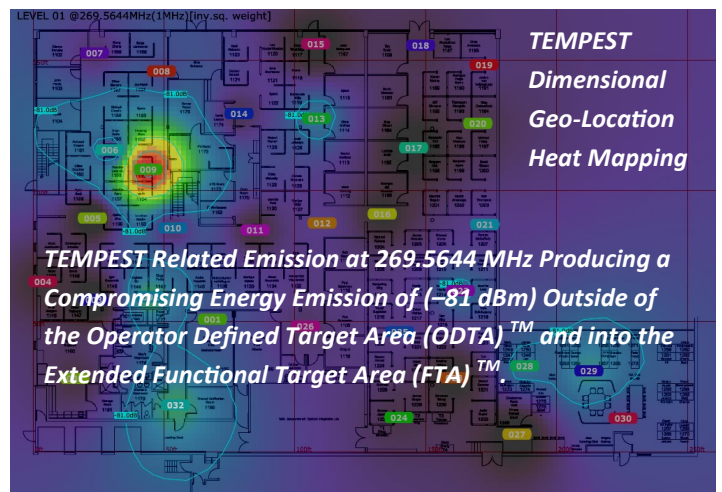
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Paul D Turner, TSS TSI | President | CEO | [pdtturner@pdtg.ca](mailto:pdtturner@pdtg.ca)

Andrzej Wolczanski, TSS | [awolczanski@pdtg.ca](mailto:awolczanski@pdtg.ca)

Gabriele Conflitti, TSS | [gconflitti@pdtg.ca](mailto:gconflitti@pdtg.ca)

Carol Fairbrother | CTSC Event Manager | [cfairbrother@pdtg.ca](mailto:cfairbrother@pdtg.ca)



**Kestrel TSCM<sup>®</sup> Professional Software is innovative industry leading, disruptive technology, sold in 52 countries worldwide!**