

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

## Advanced Analytical Data Integration Across Geographically Co-located Clients

November 2017

Technical Research and Standards Group (TRSG)

### Paul D Turner, TSS TSI

Software Defined Radio (SDR) technology, by design, permits advanced concepts, simply not possible with expensive, and mostly obsolete spectrum analyzers.

There are a number of essential best practices that are significantly enhanced by the practical application of realistically, cost effective SDR component based, RF surveillance platforms.

As noted in the October 2017 newsletter.

*“The minimum recommended analytical best practice, as defined by the TSB 2000 (Technical) Standard<sup>™</sup>, includes continuous and simultaneous RF and PLC / BPL monitoring during an inspection, which cannot be accomplished, when the technical operator contaminates the PLC / BPL environment with self-generated signals”.*

The ability to import real-time collection data from any number of co-located client locations, that are geographically relevant to the target facility, can provide exceptional baseline spectra, for direct comparative with live, or historical data, captured from within the target area during the current assignment.

Powerful tools that are TSCM specific, bring advanced real-world capability, based on today's moving target threat model, that simply cannot be accomplished utilizing obsolete concepts, or expensive spectrum analyzers, with limited TSCM capability.

When SDR technology is deployed across several unrelated, but co-located clients, within the same geographical area based on potentially different time lines, this information can significantly enhance the Probability of Detection (POD), when ad hoc Technical Surveillance Countermeasures (TSCM) inspections are requested by the client.

While, the typical ad hoc inspection may permit a measure of radio-frequency capture and analysis, referred to as a “snap-shot”, fails to meet today's due-diligence standards, in a modern moving target threat model with agile, smart threat technologies.

Supplemental radio-frequency spectra, from one or more geographically co-located, fixed, mobile, or temporary collection sites, can be accessed remotely, and anonymously downloaded to the current collection location, and utilized as direct analytical comparatives.

TSCM, RSSM<sup>™</sup>, and SIGINT are counter-intelligence, counter-surveillance activities, and are not a do it yourself project, in today's high stakes, web of economic espionage, and illegal intelligence gathering activities, in support of compromising classified, sensitive, or confidential information.

To perhaps better understand the core benefits of the Kestrel TSCM<sup>®</sup> Professional Software, Signals Intelligence Support System (SISS)<sup>™</sup> platform, and a modern deployment methodology; professional technical operators, must embrace new concepts in deployment, and the technology that supports enhanced Probability of Detection (POD); are crucial to meeting today's extraordinary requirements for technical security.

When external spectra is available, the operator simply accesses one, or more remote collection sites, and downloads specific trace data files for use in the current Kestrel Project File (KPF).

It does not take much imagination to understand the potential of having multiple remote monitoring sites, from a new and recurring revenue opportunity perspective, and the advantages realized over competitors and manufacturers who simply do not understand the complexity of the RF environment.

The ability to apply advanced Time Differential Signal Analysis (TDSA)<sup>™</sup> capability, to current and imported spectra, allows the technical operator to compare specific targeted events based on an analytical, operator defined time line, bringing absolute clarity, as to the origin of specific targeted Signals of Interest (SOI), and potentially hostile spectral events.

Software Defined Radio (SDR), components and TSCM specific, software, such as the Kestrel TSCM<sup>®</sup>

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

“Powerful SDR Technology that Engages, and Firmly Positions the Professional Technical Operator, in Control of the Analytical Process”

Professional Development TSCM Group Inc.

Technical Security Branch (TSB)

Professional software, are easily deployed in a low cost, distributed energy platform, and utilized to collectively enhance all clients, within the geographical collective.

## Signal Hound (SM200A) | Update

Professional Development TSCM Group Inc., is continuing lab and field testing of the Signal Hound SM200A Spectrum Monitoring receiver prototype testing and evaluation, with the new Kestrel TSCM<sup>®</sup> Professional Software, Kestrel Support Profile (KSP).

The Signal Hound SM200A support profile is now implemented and available for use with the Kestrel TSCM<sup>®</sup> Professional Software, pending the hardware production release, expected later this year.

The SM200A receiver is a solid example of professional SDR engineering, and is well designed.

The top of unit heat sink is solid, and very low in profile giving the receiver a very professional SDR physical profile that dissipates heat very efficiently.

We are seeing prototype sweep speeds of 360 GHz per second with a 20 GHz sweep (18 FPS) @ 20 kHz RBW with pre-production firmware (PC Specific).

You can see the SM200A and the Kestrel TSCM<sup>®</sup> Professional Software at ISC EAST 2017 (New York), and MILIPOL 2017(Paris), both leading up to the official production release of this long awaited for product, that is specifically designed and developed for Spectrum Monitoring applications.

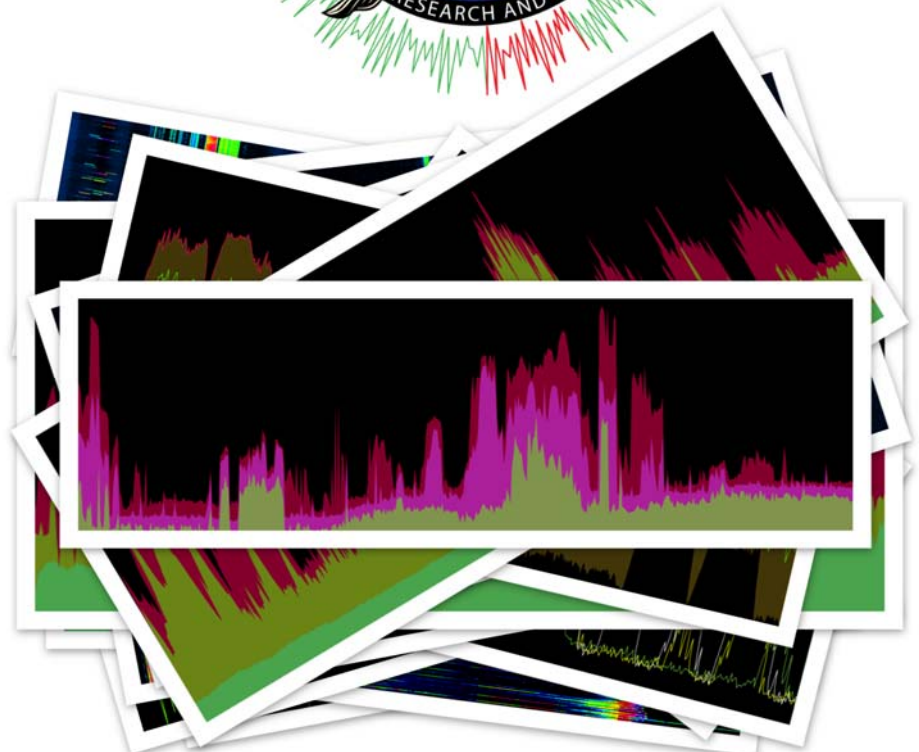
With the addition of the optional, Kestrel TSCM<sup>®</sup> Professional Software, the SM200A becomes the most powerful TSCM platform available for corporate security, private sector sweep teams, national security apparatus, law-enforcement, government, and military entities worldwide.

The advantages are clear, bringing a very powerful SDR technology to the TSCM industry.

The recent release of the latest Kestrel software 64-Bit application, v1.35xx, also provides a very powerful tool, for demanding professional requirements.

To learn more about developing an effective Technical Security (TSEC) program, or for information about training and certification opportunities, please contact [Paul D Turner](mailto:Paul.D.Turner@tss.tsi), TSS TSI

| [www.pdtg.ca](http://www.pdtg.ca) | [www.kestreltscm.com](http://www.kestreltscm.com) | [www.ctsc-canada.com](http://www.ctsc-canada.com) |



***Kestrel TSCM<sup>®</sup> Professional Software is innovative industry leading, disruptive technology, now sold in 29 countries worldwide.***