

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

## Remote Spectrum Surveillance and Monitoring (RSSM)<sup>™</sup>



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Technical Research and Standards Group (TRSG)

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Developing an appropriate threat model for Remote Spectrum Surveillance and Monitoring (RSSM)<sup>™</sup> requires an experienced technical operator.

As noted in the April 2016 newsletter.

*“It [ RSSM ] requires the design and implementation of a threat model, identification of critical infrastructure, innovative system architecture design, deployment strategy, and a knowledgeable technical analyst to monitor the platform and analyze the extensive spectra produced”.*

Our Technical Research and Standards Group (TRSG)<sup>™</sup> has developed the necessary methodology for the deployment of RSSM<sup>™</sup> technology for corporate, government, and military applications worldwide.

### Understanding the RSSM Threat Model

There are many aspects to conducting a TSCM based RF inspection that are often not completed to an acceptable standard of practice.

There are many potential reasons for this failure, including, a general lack of knowledge and training, limited or inappropriate equipment resources, or equipment limitations, deployment restrictions, due to client budget and Scope of Work (SOW) limitations.

Remote Spectrum Surveillance and Monitoring (RSSM) by definition requires a scalable platform designed to collect data from a number of sensor types.

It is a widely accepted practice to collect Radio Frequency (RF) Spectra, however, the ability to collect Power Line Carrier (PLC), Broad Band Powerline (BPL), Infrared, even and Visible Light Modulation (VLM) at the same time is now a reality.

The ability to deploy multiple receivers, analyzers, antennas, and specialized sensors can maximize the Probability of Detection (POD) of potentially hostile Technical Surveillance Devices (TSD), across a wide spectrum of espionage related technology.

### Kestrel<sup>®</sup> Analytics | Operational Standard

The ability to deploy, capture, store, export, analyze, playback, and report, is the very foundation of Kestrel<sup>®</sup> Analytics, a modern standard in providing a very powerful analytical capability to corporate, government, and military technical operators.

#### Deploy

The system must be capable of rapid deployment, travel covertly, and consist of modular components that are rugged and field maintainable.

#### Capture

The RSSM platform must have the ability to autonomously detect, focus, capture, store, and process multiple sensor inputs, based on technical operator specific or global enterprise parameters, without the need for continuous operator intervention.

#### Store

The system must have maximized storage capacity that is scalable and transportable, with provisions for remote fail-safe data export, disk encryption and file back-up.

#### Export

The ability to export a wide range of technical operator determined, or programmed data reference sets provides significant analytical capability, and provides a fail-safe environmental reference library of Spectra, RSSI, Raw IQ, Exceedance and Loss alerts. Customized Spectra export based on operator determined trace number or frequency range, and / or location is possible.

#### Analyze

The ability to analyze data on the remote platform, or a local host computer is an essential element. The ability to utilize exported data for perhaps more detailed analysis utilizing third-party software or hardware is possible when cross-compatible file formats are considered and maintained.

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## We Are Future Ready—Are You?

Professional Development TSCM Group Inc.

### Playback

The ability of the technical operator to playback captured and stored data during the analysis cycle is a very powerful Technical Security (TSEC) resource in every respect.

The ability to dynamically review the RF spectrum or waterfall visually during runtime and within a historical project file is essential.

Threat and signal lists can create a powerful visual of the ambient RF spectrum environment, yet comparatively are significantly smaller in file size.

The ability of the platform to record alert based IQ samples can provide enhanced analysis of the RF Spectra with the ability to playback captured IQ data during the analysis cycle.

However, it is the deployment methodology and standard of practice that brings value to the operational capability of Software Defined Radio (SDR) platforms.

### Report

The ability to generate multiple real-time dynamic runtime reports is a necessity in bringing a multitude of seemingly separate data sources into the analytical spotlight.

Data sources can be extremely complex and require several layers of automated and operator filtering before an informed conclusion may be reached.

Session reports can also be rendered on the fly, or the operator can utilize historical files for post production of detailed deployment reporting.

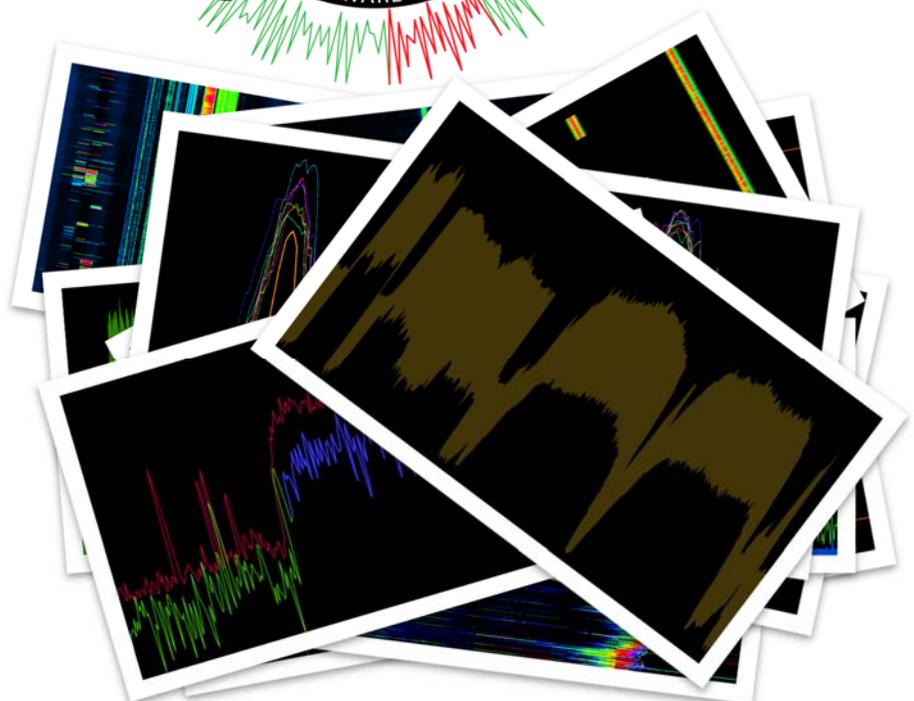
For information about the future role of Software Defined Radio (SDR) for SIGINT | TSCM | RSSM<sup>™</sup> applications, visit our website at [www.kestreltscm.com](http://www.kestreltscm.com)

### Technical Security Specialist (TSS) Certification Training

Visit our website for information and scheduling details for the next TSS Certification program at our Resident Training Centre (RTC)<sup>™</sup>, located in Cornwall Ontario.

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

### *Innovation is Simply the Beginning*



*Kestrel TSCM<sup>®</sup> Professional Software is innovative industry leading, disruptive technology, now sold in 24 countries worldwide.*