

# Kestrel TSCM™ Professional Software | Operational Considerations and Deployment Review

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Technical Research and Standards Group (TRSG)

Paul D Turner, TSS TSI

Understanding the capabilities and limitations of TSCM equipment resources is essential in selecting, deploying, and operating any equipment resource.

The technical operators personal experience level plays an important role in what equipment resources are best for his / her mission specific requirements.

As noted in the September 2015 newsletter.

*“SDR systems are not simply, one system, and are in-fact, several mission specific modular equipment resources, adapted to meet the client’s challenging deployment requirements. Kestrel TSCM™ Professional Software provides full product support for industry relevant hardware products available worldwide.”*

Software Defined Radio (SDR) is now a dominate and preferred technology worldwide, given the versatility and adaptability too multi-task, and meet a wider range of known and developing threat environments in the field, lab, or classroom, and plays a role in operator training.

## Kestrel TSCM™ Professional Software

Kestrel is not just software, it is an entirely new and up to date deployment methodology that has gained the attention, and earned the respect of Technical Security (TSEC) professionals worldwide.

The Kestrel brand is responsive to the needs of the end-user from sale to deployment, and technical support.

**1 | Deploy** — Kestrel is an agile resource for use across an extensive range of deployment applications, including traditional, operator assisted TSCM assignments, unattended, managed Remote Spectrum Surveillance and Monitoring (RSSM), lab and field test and measurement, education and training, spectrum analysis, testing and evaluation of surveillance oriented Technical Surveillance Devices (TSD), and a range of other RF devices.

Kestrel specifically addresses and supports all of the above elements in a single SDR application.

Field setup is easy, and involves three major components, including a laptop computer, one or more supported SDR receivers or analyzers, and a wide band antenna.

**2 | Detect and Capture** — The runtime capability of hours, days, weeks, or months, is a key operational feature of Kestrel, and this allows the technical operator to capture the spectrum and waterfall data for real-time, and remote, post-event analysis and review.

It is possible to capture the ambient RF spectrum environment, at a level of detail consistent with the assignment, utilizing the powerful Project Activity Scheduler (PAS) to control multiple bands, across multiple receivers, all on unique operational schedules.

**3 | Analyze and Identify** — Key features, such as our Live View Analysis (LVA)™ functions in parallel with real-time data collection, extending real-time spectrum review.

Runtime and post event analysis, historical Kestrel Project File (KPF) review, is fully supported by our trace import feature that maximizes the POD, when analysis is accomplished over an extended period of time, providing comparative snap-shots of the target area.

Kestrel provides the ability to export all signal list data, raw spectrum trace data, alert based spectra, and RSSI data to CSV file format, for external analysis and review.

**4 | Confirm** — The ability to visually confirm Signals of Interest (SOI), via Live View Analysis (LVA)™ during runtime or post event review, and utilize the Kestrel Demodulation Visualizer (KDV) capability, provides the technical operator with an exceptional range of tools to confirm the significance of each Signal of Interest (SOI).

**5 | Locate** — The ability to locate a potentially hostile emitter once detected and identified, is an essential operational component of the Kestrel TSCM™ Professional Software.

Emitter localization is accomplished utilizing standard RSSI based Direction-Finding (DF) techniques, and the Kestrel, Differential Signal Analysis (DSA) feature.

# Software Defined Radio (SDR) | Due Diligence is at its Best — Under the Wings of the Kestrel

Professional Development TSCM Group Inc.

Geolocation based localization methods are supported when Multiple Receiver Operation (MRO) is utilized.

Our RSSI Tone Locator (RTL) is a powerful location resource allowing the emitter audio to be simultaneously monitored, along with an RSSI tone overlay and display visualization, of the IQ display, RSSI history, analog RSSI signal meter, AF spectrum, and audio oscilloscope.

**6 | Neutralize** — Quickly locate and neutralize hostile emitters and validate authorized transmitters both within, and external to the target area or facility.

Locate emitters efficiently utilizing a tablet computer as a powerful walk-around resource to identify the position of hostile RF based Technical Surveillance devices (TSD) including vehicle inspections.

Distributed peak RF energy patterns are easily identified during a walk-around inspection of the target, and adjacent areas, utilizing Minimum Detection Amplitude (MDA)™ threshold exceedance, and Kestrel Peak Combining (KPC)™ technique.

The Demodulation Visualizer, provides hardware based real-time IFBW capability, of near-field signal events, and allows the technical operator to detect, identify and neutralize threats, quickly, providing far superior operator awareness, over typical broadband detectors.

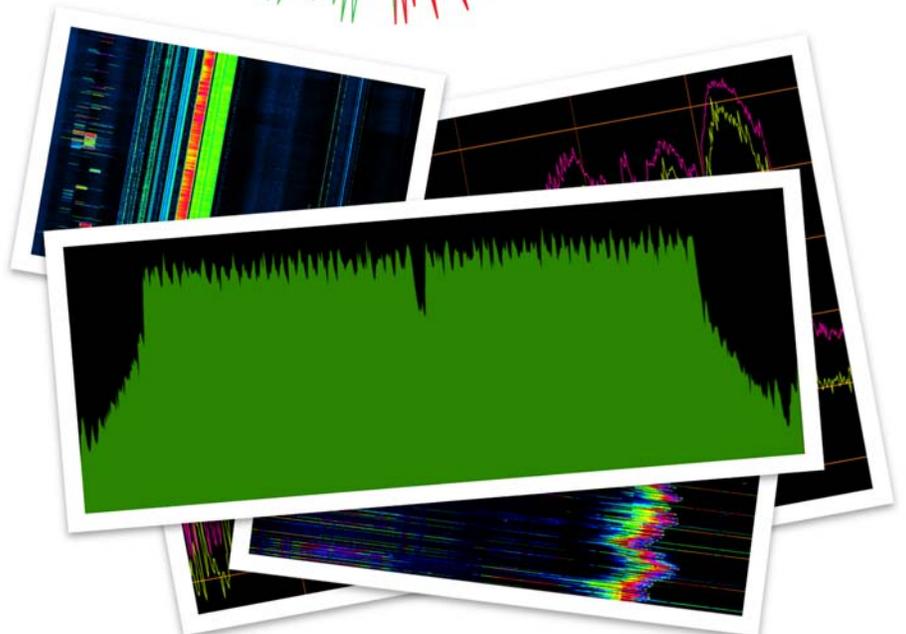
**7 | Report** — The Session Report Generator (SRG) provides the operator with the ability to generate comprehensive, runtime or post capture reports, and is fully supported within the Kestrel TSCM™ Professional Software, bringing order to complex technical data.

Kestrel can easily generate a wide range of customized reports specific to the intended end-user, and the ability to include a custom logo, support for the import of images and floor plans, a wide range of selectable output options, direct conversion to a ready to disseminate PDF file, all significantly reduce the time required for the report building process.

For additional information about the many innovative features of the Kestrel TSCM™ Professional Software, please visit;

<http://www.kestreltscm.com/siss016.htm>

*Innovation is Simply the Beginning*



*Kestrel TSCM™ Professional Software is innovative industry leading, disruptive technology, now sold in 20 countries worldwide.*