Kestrel TSCM ® Professional Software

The Importance of <u>Not</u> Contaminating the Inspection Environment

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The importance of <u>not</u> contaminating the target area sweep environment is an essential best practice in conducting a competent TSCM inspection.

It is essential to determine the nature of the Radio Frequency (RF) spectrum, and normalize the sweep environment from both an RF perspective, and the local ambient power grid, for unintentional radiators.

Utilizing so-called "convenient" devices and technology within an active sweep area prevents, the technical operator's ability to properly identify potential threats, and introduces a potentially authorized technology into the client's controlled facility.

There is also an inherent danger of a third-party traffic analysis, or compromise of any unsecured, accessible resource utilizing the Power Lines, or other conductive unintentional radiator path.

As noted in the September 2017 newsletter.

"The obvious is the obvious, and failing to understand the implications of a client (or technical operator) installed compromise is what every state-sponsored player involved in the economic-espionage tradecraft, can only dream of, when the target makes it so easy to compromise extremely sensitive information, or miss hostile devices, utilizing the same technology".

When the technical operator utilizes, cellular radios, Bluetooth, and PLC devices, potentially hostile signals and compromises are likely to be missed, as a direct result.

Many hostile signal events, by design, employ any number of methods and techniques to minimize visibility of the RF signature to an unexperienced, or unmotivated technical operator.

When the operator (or the client) permits the use of such technologies to be brought into the target area, the Probability of Intercept (POI), and Probability of Detection (POD) will suffer, significantly.

Once a Signal of Interest (SOI) is identified, it must be verified by the technical operator as a potential threat.

This is not always an easy task, and may be next to impossible when the technical operator has deployed the same technologies within the target area, preventing simultaneous detection of RF and electrical power grid compromises during live analysis, and Remote Spectrum Surveillance and Monitoring (RSSM) ™ assignments.

Of particular concern, is the Power Line Carrier (PLC) and Broadband Power Line (BPL) phase of the inspection, as the identification of such threats is extremely difficult, without the technical operator installing their own devices to facilitate the sweep process.

Professional technical operators recognize and understand this important concept, avoiding the dangers of contaminating the target area.

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

Signal Hound (SM200A) Preliminary Testing

Professional Development TSCM Group Inc., has received the first prototype SM200A receiver for testing and initial evaluation, with the Kestrel TSCM ® Professional Software.

The SM200A received significant attention at DSEI 2017 in the United Kingdom, in combination with the Kestrel TSCM ® Professional Software, with its powerful capability, speed, and solid RF engineering.

Our first observation, was simply wow!

The receiver is a solid example of professional SDR engineering, with a well designed, and completely shielded and sealed, unit with no requirement for a fan, making the receiver totally silent for covert installation.

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.

Kestrel TSCM $^®$ Professional Software

"Powerful 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)**

All connections are up-front on the SM200A making it easy to setup, complete with a locking power connector.

The SM200A connects to the PC via a locking USB 3.0 port, which allows remoting on multi-mode fiber optics up to CAT 6 standards (100 meters).

Although, the prototype unit is not a full production device, as far as firmware and temperature correction is concerned, the SM200A prototype is performing beyond our expectations for a hand-built, pre-production receiver.

We are seeing sweep speeds of 360 GHz per second with a 20 GHz sweep (18 FPS) @ 20 kHz RBW, after just a few hours of preliminary Kestrel Support Profile (KSP) ^{TM} development work.

The Signal Hound SM200A is clearly going to be a game changing and extremely powerful resource for private and public sector technical operators.

Signal Hound as a company, is both reliable and responsive, with progressive product development, by venturing head on, into new and innovative industry disruptive technology, to meet industry expectations, and the exacting requirements of the technical security industry.

Professional Development TSCM Group Inc., is now taking advance orders for the SM200A, scheduled for full production release in November 2017.

Secure your SM200A today, by placing your advance order now at a modest mid-range price of just $11,900.00 USD, making the SM200A budget friendly, bring exceptional value and powerful capability.

See the SM200A and the Kestrel TSCM $^®$ 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 capability, specifically designed and developed for Spectrum Monitoring applications.

Our technical operators have deployed the SM200A on several technical inspections during the past couple of weeks, as part of our qualification process, along with our Signal Hound BB60C, and the results have been outstanding, with the ability to sweep more spectrum, faster with a lower noise floor, providing better spectrum intelligence. Do more, See more, and Analyze more!

To learn more about developing an effective Technical Security (TSEC) program, or seek information about training and certification opportunities, please contact Paul D Turner, TSS TSI

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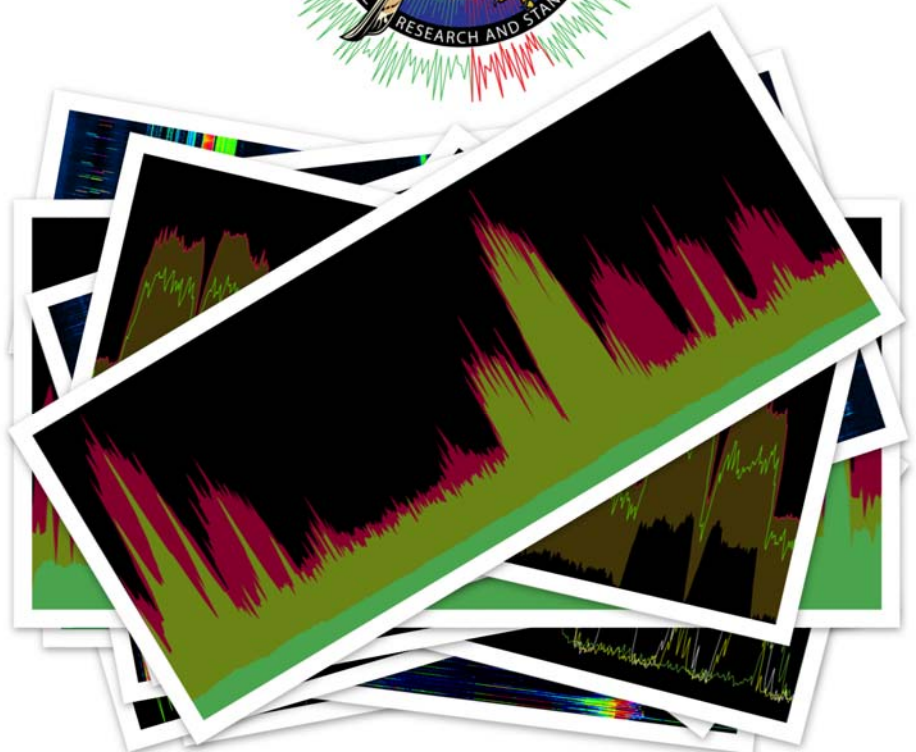
Kestrel TSCM ® Professional Software is innovative industry leading, disruptive technology, now sold in 29 countries worldwide.