Kestrel TSCM ® Professional Software

"Kestrel | Changing the Dynamics of Technical Security"

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Software Defined Radio (SDR) is all about the powerful and innovative features and tools that define the technical operator's ability to collect, detect, identify, classify, verify, and neutralize hostile emitters operating within an oftentimes complex, and challenging ambient RF spectrum environment.

As noted in the March 2017 newsletter.

"The next generation of Signal Hound receivers, referred to as the SM200A, which is scheduled for production release in September 2017 will see the ANF drop from the present receiver generation, at around (–100 dBm), down to (–132 dBm), providing a significant improvement in the Probability of Detection (POD) for signals previously at, or near the Ambient Noise Floor (ANF)".

With powerful new SDR hardware such as the Signal Hound SM200A (9 kHz to 20 GHz) on the horizon, and the recent release of the ThinkRF R5500-427 (100 kHz to 27 GHz), the obsolescence factor for once trendy all-in-one solutions are taking a serious popularity hit among professional operators. The future is clearly favouring modular based, highly customizable and budget friendly, scalable solutions that address complex multi-tasking requirements, allowing significant flexibility to be realized. Applications such as Technical Surveillance Countermeasures (TSCM), Remote Spectrum Surveillance and Monitoring (RSSM) ™, and a host of other modern deployment requirements, within and beyond the security apparatus, and government community, all have benefited from the SDR revolution, globally. However, the Software Defined Radio (SDR) hardware is just the starting point in a real-world deployment cycle. The Kestrel TSCM ® Professional Software, is a hardware agnostic, TSCM | RSSM ™ specific, operator centric, low cost, full featured application that is deployment ready in a modern, and very demanding moving target threat model, in the face of an increase in economic-espionage. The development of unique and innovative new features, with on going Research and Development (R&D), and an "always a work in progress" mandate, along with the development of a modern methodology, requires a strong and uncompromising team of software engineers, and highly experienced technical operators. Kestrel ® is a powerful RF application with a definitive track record, and years of proven experience within the public and private sector worldwide. Our ability to bring powerful new features and unique problem solving capabilities to the global counter-espionage threat, by positively integrating years of real-world field experience of professional technical operators; advances in RF design technology and engineering, has allowed the Kestrel TSCM ® Professional Software be deployed at all known and developing threat levels.

Autonomous Measurement Collection System (AMCS)

Professional Development TSCM Group Inc., is pleased to confirm that our Technical Research and Standards Group (TRSG) ™ has developed a new and powerful disruptive Software Defined Radio (SDR) capability deep within the coding architecture of the Kestrel TSCM ® Professional Software. The Autonomous Measurement Collection System (AMCS) ™ component within the Kestrel TSCM ® Professional Software allows the application to operate "headless" in an embedded computing environment. This is perhaps described as one of the most powerful features ever developed for professional development requirements and is configured from a Kestrel ® Configuration Script (KCS) ™ file located within the application installation directory. The Kestrel ® application will create all the project files and necessary configuration, to be able to immediately begin runtime collection activity. Client applications may be connected to the Kestrel ® software via a TCP/IP socket interface connection, to obtain the extracted data stream, and basic configuration information from the Kestrel ® application. Limited control is also offered to client applications. The AMCS comprises of a powerful sub-system within the Kestrel ® application. This sub-system is enabled when Kestrel is started with a valid Activation Security Key (ASK) ™ that contains the "AMCS"

Kestrel TSCM ® Professional Software

"Professional Software for Professional Applications"

Professional Development TSCM Group Inc. **Technical Security Branch (TSB)**

capability. On initial connection of a receiver to Kestrel ®, a license key request will be generated in the form of a Challenge and Response (CRC) TM code, and presented to the technical operator. When the CRC code is provided to the Technical Support (TSG) of Professional Development TSCM Group Inc., this will be converted into an Activation Security Key (ASK) ™ license enabling the AMCS capability. This Activation Security Key (ASK) ™ may then be installed into Kestrel ®, enabling that instance of Kestrel ® on that machine and receiver, to operate with the AMCS capability. Only one (1) receiver on a subject machine requires an AMCS key to enable AMCS operation across all receivers operating with that instance of Kestrel ®. The AMCS sub-system allows Kestrel ® to be operated in a stand-alone fashion. A configuration file allows autonomous collection to be set up and initiated on application start. Client applications can then connect to Kestrel ® and obtain a continuous data feed for the specified bands or channels of interest.

Remote Spectrum Surveillance and Monitoring (RSSM) ™ | Setting up a kestrel ® instance and receiver at a remote location, permits a continuous monitoring data feed, can be obtained at a remote location. Kestrel ® , operating in this mode is suitable for operation on an embedded PC platform, providing a low-cost and very powerful remote monitoring solution.

Data Feed Integration | The remote feed configuration, utilizes an open "xml" style format allowing easy integration with additional data feeds to provide a richer data stream, and synthesizing multiple sources into a single data feed.

Alarm and Alerting Integration | The integration of the AMCS capabilities with the unique alarm and alerting architecture within Kestrel ® , provides the capability of obtaining RSSM TM data, when specific events of interest occur within the ambient RF spectrum environment, thereby reducing the data transmission load and providing advanced actionable intelligence relating to spectral activity.

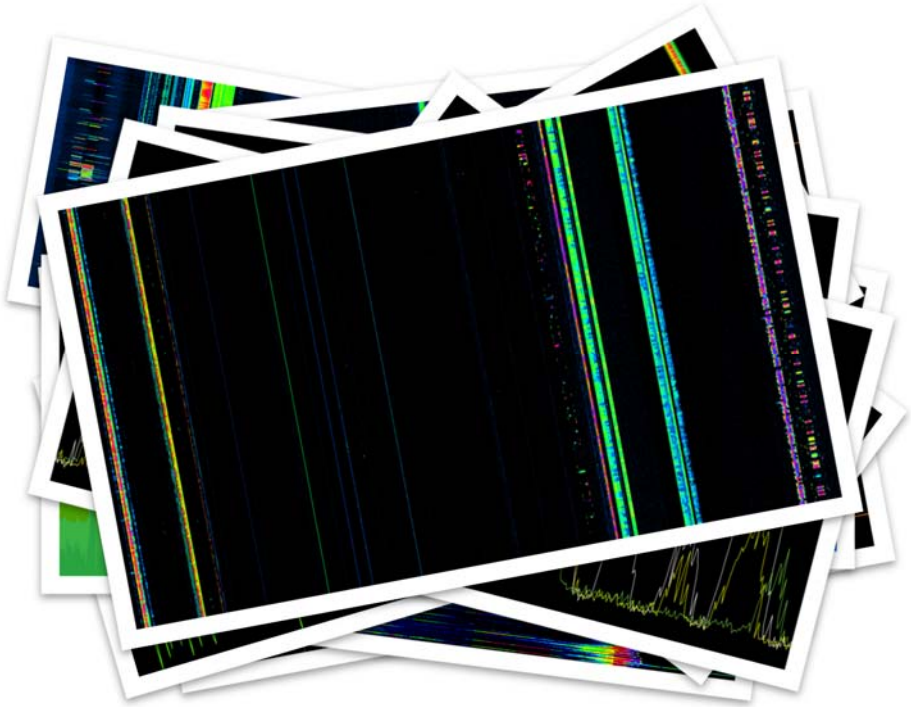
Distributed (Managed) Remote Spectrum Surveillance and Monitoring (RSSM) ™ | Integrating multiple instances of Kestrel ® with AMCS and integrating their independent data feeds, powerful RSSM TM solutions can be easily implemented at the facility level, or across national and international geographical locations.

Black Box Integration | The ability to utilize RF spectra as a sensory input to an existing black box system, or build powerful analytical solutions can be realized when the AMCS data feed is combined with other sensory inputs, including GPS, speed, altitude, temperature, RF interference, and other required parameters.

To learn more about developing an effective Technical Security (TSEC) program, or the benefits of utilizing the industry leading, Kestrel ® TSCM Professional Software | Signal Intelligence Support System (SISS) ™, please contact Paul D Turner, TSS TSI at Professional Development TSCM Group Inc.

| www.pdtg.ca | www.kestreltscm.com | www.ctsc-canada.com |

Innovation is Simply the Beginning



Kestrel TSCM ® Professional Software is innovative industry leading, disruptive technology, now sold in 28 countries worldwide.