

Kestrel TSCM[®] Professional Software

All Things Kestrel | Virtual Classroom for Authorized Kestrel TSCM Professional Software Technical Operators

November 2021 | Issue 77

Technical Research and Standards



Paul D Turner, TSS TSI

Virtual Classroom Success Story

The popularity among the Kestrel[®] community for our monthly “All Things Kestrel | Virtual Classroom” sessions; now running since July 2020, provide strong evidence of a positive success story fostered by the circumstances of a global pandemic. The need for a somewhat dramatic change to our existing business model is nothing new at Professional Development TSCM Group Inc., and adapting to a new training delivery model was not a significant challenge. Our

preference of formal classroom delivery for our Technical Security Specialist (TSS)[™] program did see disruption during the past 18 months, however, the delivery of our new “All Things Kestrel | Virtual Classroom” series and our new 5-day “Virtual Classroom | Certified Technical Operator (CTO)” training have proven to be considerably more successful than originally anticipated. Our commitment to the delivery of exceptional technical support and advanced training for the Kestrel TSCM[®] Professional Software is believed to have been an important factor that has been witness to an exponential increase in software sales even in the face of a global pandemic.

Generational Software

Our ability to adapt and develop new innovation and technology by engaging in scientific research and development in support of a modern moving target threat model, that is firmly based on the reality of advancing solutions to threat actor deployed technology, is spreading like a wildfire, by the most important of all successful marketing concepts—word of mouth!

An example of this important marketing concept was evident at MILIPOL 2021 this past month. For the first time in the history of our attendance as an exhibitor dating back to 2013, a large number of qualified government and military users, decidedly dropped by to tell us how much they liked the software and wanted to engage in expanding the scalability of their systems, arrange advanced operator training and many offered excellent suggestions about possible future features and functionality.

The Kestrel[®] community is expanding with every sale generating another, and after even brief demonstrations of our software, the vast majority of visitors indicated they were convinced we have the best product on the market.

This was exciting to hear first hand, and provides clear evidence that our innovative business model was the correct approach for the industry, by stepping outside of a complacent competitive cold war era strategy, and developing a new and powerful SDR technology and a powerful new deployment methodology in keeping with a real-world threat environment. In just a little more than a decade, the Kestrel TSCM[®] Professional Software has progressed from a non-existent industry option within a somewhat monopolistic industry, to what is now the leading brand name associated with Technical Surveillance Countermeasures (TSCM) and Signals Intelligence (SIGINT) globally, with deployment across all relevant sectors, from commercial applications to national security in 54 countries.

It is all about a unified approach that involves, a formalized standards based approach, new scientific innovation, advanced training, operator certification, excellent technical support, and meeting on-going milestones that just keep coming to meet tomorrows threat technology—Today!

Technical Operator Centric Approach

The focus of “in-the-know”, technical operators has decidedly changed with the reality and industry wide acceptance of modern Software Defined Radio (SDR) resources, combined with expertly delivered certification training as a method of qualifying technical operators in a modern deployment methodology, continues to achieve the necessary on-going competency skills training and professional development that are absolutely required by the modern spectrum warrior.

Training and certification that fails to address real-world signal-level detection and analytics, geo-location heat mapping, Remote Spectrum Surveillance and Monitoring (RSSM)[™], burst detection, advanced report generation, Time Differential Signal Analysis (TDSA)[™], and multiple radio, multiple band operation, are simply not up to any measurable technical standard and should be decommissioned in favor of a modern approach. Dimensional Geo-Location Heat Mapping is an essential technical security best practice for producing a total energy picture of the Operator Defined Target Area (ODTA)[™] an into a standards-based Functional Target Area (FTA)[™].

**Remember, in a Moving Target Threat Model the
Technical Operator is the Spectrum Analyzer...**

Kestrel TSCM[®] Professional Software

Introducing Kestrel Central Visualizer—Remote Radio Management (OPT KCV-RRM)

Professional Development TSCM Group Inc.

Technical Security Branch (TSB)

Kestrel Central Visualizer | Remote Radio Management

During the MILIPOL 2021 event, a powerful new Kestrel TSCM[®] Professional Software feature was demonstrated for the first time publicly. Our innovative Kestrel Central Visualizer (KCV)[™] | Remote Radio Management (RRM)[™] capability is the latest new technology, adding the ability to connect to any number of Kestrel (Satellite) resources (radios) via a (Master) instance of the application running on the operators host computer.

Analyzer Control | Displaying (2) Network-Based Remote-Satellite Radios

Analyzer Control										
Name	Type	Location	SN	FW	License	Port	Conne...	Spectrum	Demod...	Analysis
KS BB60c:53100197	BB60c	Home	53100197	7	01	KS:192.168.0.129	YES	YES	YES	YES
KS BB60c:20181893	BB60c	Home	20181893	8	01	KS:192.168.0.113	YES	YES	YES	-

The KCV-RRM[™] feature can operate across a secure private Local Area Network (LAN) or securely across an encrypted public cloud based network for global Satellite (Radio) access.

Our Kestrel Central Visualizer (KCV)[™] | Remote Radio Management (RRM)[™], also referred to as KCV-RRM[™] is now implemented and in Beta testing. Connected Satellite resources (radios), display, and are identify within the Analyzer Control group with the pre-fix “KS” with a blue background.

Analyzer Control | Displaying (1) Network Radio and (1) Locally Connected USB 3.0 Radio

Analyzer Control										
Name	Type	Location	SN	FW	License	Port	Connected	Spectrum	Demodulate	Analysis
BB60C:20181893	BB60C	-	20181893	8	Indefinite	USB3	YES	YES	YES	YES
KS BB60c:19304149	BB60c	satellite	19304149	8	01	KS:192.168.168.174	YES	YES	YES	-

This innovative new technology, allows the operator to access remote network-based resources (radios) as if they were locally connected to the host computer quickly and easily. The operator simply adds the Satellite (network IP address) to the Network Addresses menu option within the main Acquisition Menu. Our KCV-RRM[™] implementation is based on a (Master | Satellite) relationship, with the Master supported on any properly licensed instance of the Kestrel TSCM[®] Professional Software, running option KCV-RRM[™]. Initial KCV-RRM[™] support is available for the Windows 10 OS platform, with plans to support the Linux OS shortly after the official initial release.

The Satellite (Remote) can be quickly configured in a listening (watch) mode, allowing any properly configured and authenticated Master instance of the Kestrel TSCM[®] Professional Software to securely access any Satellite connected resources as standard band tabs at the application level.

The KCV-RRM[™] feature is a highly-complex resource that extends the reach of the technical operator across a private or public network. Our next generation of this powerful feature will see the addition of Time Difference of Arrival (TDOA) in addition to many other new features and capabilities. The ability to setup a local area network with any number of radio resources is realized for facility level deployment.

The complexity of deploying the KCV-RRM[™] feature is buried deep within the software, exposing only minimal operator setup and deployment controls. Like most of the software features, the KCV-RRM[™] capability is expertly and fully integrated within the existing control and display infrastructure.

The use and reuse of all existing controls and spectrum displays allows the operator to deploy the feature with minimal new training or experience.



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

Paul D Turner, TSS TSI | President | CEO | pdtturner@pdtg.ca

Andrzej Wolczanski, TSS | awolczanski@pdtg.ca

Gabriele Conflitti, TSS | gconflitti@pdtg.ca

Carol Fairbrother | CTSC Event Manager | cfairbrother@pdtg.ca

Kestrel TSCM[®] Professional Software is innovative industry leading, disruptive technology, sold in 54 countries worldwide!