### Paul D Turner, TSS TSI



2019 marks the 10th anniversary of the Kestrel TSCM  $^{\circledR}$  Professional Software.

However, 2020 marks yet another exciting milestone for Professional Development TSCM Group Inc., with the 20th anniversary of the TSB 2000 (Technical) Standard TM; the basis for our Technical Security Specialist (TSS) TM designate certification program, the

Canadian Technical Security Conference (CTSC) <sup>TM</sup>, Canadian Technical Security Professional Association (CTSPA) <sup>TM</sup>, and is the foundation of the Kestrel TSCM <sup>®</sup> Professional Software.

The concept of a "moving target threat model" continues to gain credibility worldwide.

Kestrel  $^{\textcircled{e}}$  is utilized in 43 countries worldwide for commercial, law enforcement, government and national security applications.

As noted in the April 2019 newsletter.

"Without a solid investment in operator certification training, technical operators will only achieve about 30% efficiency in the deployment of modern SDR hardware and software. Kestrel<sup>®</sup> advancements in technology and methodology require that technical operators learn new skill sets and fully understand the limitations of obsolete techniques, and gain a new appreciation and understanding of Probability of Detection (POD) by the numbers, as defined by the TSB 2000 (Technical) Standard. Probability of Detection (POD) has been the industry wide, single most misleading marketing hype of manufacturers and many service providers during the past 25 years. The deployment methodology and techniques generally result in POD realities of less than (1%), yet many manufacturers and service providers believe and / or claim to maintain POD realities of (100%) based on a particular equipment resource or physical search technique".

The message is being received loud and clear by national security professionals, as the demands for our advanced training have more than doubled this year, for the 3<sup>rd</sup> consecutive year, in Canada, the United States of America, United Kingdom, Australia, and across the European Union.

The first (Beta) release of the Advanced Report Generator (ARG) TM as a standard included, new feature providing full sweep report customization and project file management well beyond the existing Session Report Generator (SRG) TM, which will also remain in the software.

The ability of the technical operator to utilize the Kestrel TSCM <sup>®</sup> Professional Software as a total assignment-based report generator and database manager has a profound impact and ability to reduce report writing requirements by hundreds of working hours every year!

Even using modest calculations, I personally spend approximately 1820 hours a year writing complex technical reports for on average 280 technical inspections annually across three (3) technical operators.

The ARG <sup>TM</sup> is expected to reduce this workload from approximately 6.5 hours per full inspection report, to approximately 1.5 hours per inspection report, or just 420 hours a year, realizing a work load reduction of 1400 hours a year. This represents the working equivalent of 58.3 days every year!

The ability to build, import, export, load and edit report content from our "drag and drop" section types is the first of many new and powerful features and functionality to be rolled out over the next few months.

## Automatic Antenna Module (AAM) TM

Our Software Development Group (SDG) <sup>™</sup> is working on an automatic antenna switching capability to further enhance mission specific operational deployment requirements.

Remote Spectrum Surveillance and Monitoring (RSSM) <sup>TM</sup>, Technical Surveillance Countermeasures (TSCM), and Signals Intelligence (SIGINT) protocols require multiple radios and oftentimes a variety of specialized antennas.

The Kestrel TSCM <sup>®</sup> Professional Software is well positioned to support many types of external hardware with fully integrated software level (USB) command and control capability that brings advanced functionality new mission specific deployment requirements.

## Kestrel TSCM ® Professional Software

# 14-Day | TSS TM Advanced Designate Certification Training at our Canadian Resident Training Centre (RTC)

**Professional Development TSCM Group Inc.** 

**Technical Security Branch (TSB)** 

#### NTSC | PAL Video Demodulation

The Kestrel TSCM <sup>®</sup> Professional Software can demodulate and decode NTSC and PAL analog video transmissions and auto-detect the positive and negative synchronization pulse to automatically display the video with minimal operator intervention and display the video image in a dedicated window that can be resized to full screen.



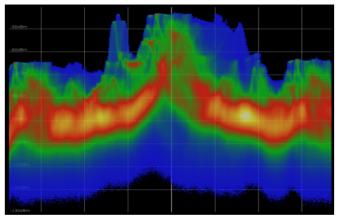
The above window represents actual video content captured and played back from an Kestrel IQ (KIQ) <sup>TM</sup> file utilizing the Kestrel TSCM <sup>®</sup> Professional Software without the need of a connected radio to render video and audio playback.

The detection, analysis, IQ capture, and IQ playback of analog NTSC and PAL video signals is further supported by various FFT demodulation visualizer windows.

The Audio Spectral Density (ASD)  $^{TM}$  display is particularly useful in providing a real-time visualization of the video signal content.

The Audio Oscilloscope Display (AOD)  $^{\mathsf{TM}}$  and other advanced FFT functionality provides an exceptional analytical overview of the decoded signal.

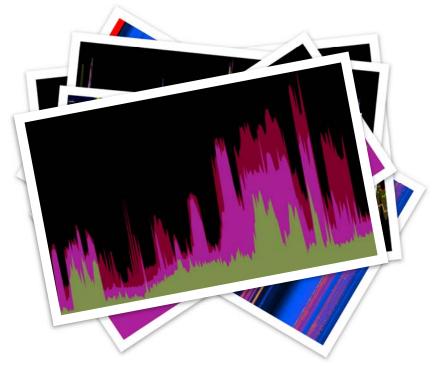
The capture of high-quality video IQ is fully supported, providing a powerful analytical capability simply not found in competitive products.



The Audio Spectral Density (ASD) <sup>™</sup> provides a real-time FFT visualization of the live "Over-the-Air (OTA), or streaming IQ playback of the video signal.

Innovation is Simply the Beginning!

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Kestrel TSCM ® Professional Software is innovative industry leading, disruptive technology, sold in 43 countries worldwide.