

## Virtual Classroom Series | All Things Kestrel!

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Technical Research and Standards Group

Paul D Turner, TSS TSI

### Virtual Classroom Series

The pandemic and travel restrictions have disrupted much of our Kestrel TSCM<sup>®</sup> Professional Software training this year and we have committed much of our time and resources to offering licensed technical operators worldwide an opportunity to attend instructor led WebEx based training for the first time in 20 years of formal classroom training delivery. Our commitment to excellence in all things Kestrel has proven to be extremely successful with attendance worldwide expanding across commercial and government operators taking advantage of the training that started at the end of July 2020 and is currently scheduled through until the end of the year and into January 2021.

Training is conducted on Wednesday's every second week with two (2) sessions to cover time zone challenges. All licensed technical operators are eligible to attend and need only send an email to Gabriele Conflitti at [gconflitti@pdtg.ca](mailto:gconflitti@pdtg.ca) requesting an invitation to attend these informal sessions.

Training is conducted by Paul D Turner, TSS TSI taking participants deep into the unique methodology and disruptive technology that has placed the Kestrel TSCM<sup>®</sup> Professional Software at the top of the procurement short list worldwide.

### Kestrel<sup>®</sup> Demodulation Visualizer

The Kestrel TSCM<sup>®</sup> Professional Software includes a powerful demodulation capability that just got a lot more powerful over the summer.

Our Software Development Group (SDG)<sup>™</sup> has been busy working on the underlying code structure building, enhancing and developing powerful new filtering, algorithms and capability as we move decidedly to a digital demodulation package.

We are please to confirm that the first analog hybrid (digital) mode and decoder is now available. The new CW mode provides the ability to automatically decode Morse transmissions and display the intelligence within the demodulation visualizer.

Morse code is widely utilized across aeronautical and marine applications and by amateur radio operators worldwide.

### Automatic Threat List (ATL)<sup>™</sup>

At the request of a Kestrel<sup>®</sup> operator, we have recently added a number of additional table parameters to assist in the analysis of complex spectrum assignments. Table export (CSV) now includes the ability to render Noise Floor (dBm) | Minimum (dBm) | and | Average (dBm).

These new metrics provide additional insight during the signal analytics process and aid in advanced reporting requirements. For operators with OPT AEC<sup>™</sup> these additional parameters are also available within the custom elements options list.

### Command Line Programming (CLP)<sup>™</sup>

The Kestrel TSCM<sup>®</sup> Professional Software includes a powerful feature capable of email alerts, system actions, custom audio alerts and now, the ability to alert trigger our Image Capture Tool (ICT)<sup>™</sup> to render a (PNG) screen shot of the entire application window, the WFD and / or the RSD windows.

### Signal Hound (Preliminary) | Q3 2021

We are pleased to confirm that Signal Hound is working on the next generation of the SM200 series radios.

The SM435B will focus on the 100 kHz to 43.5 GHz range with 160 MHz of real-time bandwidth across a USB 3.0 connection. The SM435B can process 2 seconds of 160 MHz BW as a function of an onboard Block Transfer Buffer.

The significance and preliminary availability date for Q3 2021 are in keeping with the rollout and implementation of the global 5G infrastructure and the powerful new Kestrel<sup>®</sup> features.

A full Kestrel Support Profile (KSP)<sup>™</sup> will be available for the SM345B eliminating the need to utilize less capable test and measurement resources currently covering this bandwidth.

Signal Hound is a progressive technology company with a focus on high-quality Software Defined Radio (SDR) products that have set the technology bar well above the competition by delivering on-going new industry disruptive innovation, designed for tomorrows threat environment—Not yesterdays!

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

**Are you ready for tomorrow?**

# Kestrel TSCM<sup>®</sup> Professional Software

Definition: *Kestrel, “An Advanced Software Defined Radio Application for Enhanced National Security”*

Professional Development TSCM Group Inc.

Technical Security Branch (TSB)

## History of the Mighty Kestrel TSCM<sup>®</sup> Professional Software

Many people have asked how and why Kestrel<sup>®</sup> learned how to fly (or at least got started). After spending a lot of money on supposedly the best equipment on the market, we discovered that industry available hardware was all founded on the same old technology principles dating back to the 1960's and 1970's cold war era. The so-called new breed of equipment we were seeing was basically obsolete before it was released, as most of it was based on the past decade of research and definitely not looking forward 10 years ahead. In the early days there was much discussion with supposedly experts in the field (commercial and government) that revealed a lack of grounded understanding of the TSCM industry and visions of delusional bags of cash, without the ability to see or care about the real-world needs of operators. Without a clear focus and no actual field experience or business credibility, more than one of these so-called self-appointed experts failed to impress us with their disjointed and incoherent ramblings and lack of focus to repackage products and rather than build something new. The decision to go it alone with an experienced-based approach, an opportunity presented itself in parallel to our disappointment. The thought of any hope in finding viable TSCM resources that we could be comfortable deploying for high-threat level commercial and government sweeps seemed improbable. For a time leading up to this opportunity to actually develop powerful low cost Software Defined Radio (SDR) platform that even in its simplest form could out perform competitive systems, was developed as a well defined business plan. The missing element was the SDR hardware! The big opportunity arrived about 4-days after Signal Hound released the first in an industry disruptive series, SA44 (4.4 GHz) spectrum analyzer. I saw one of the early advertisements and had a vision of a resolution to the hardware question. After speaking to Bruce Devine at Test Equipment Plus (now Signal Hound) for less than 30 minutes, I knew that a powerful relationship was to be formed and we were established as the exclusive Canadian distribution partner for Canada. An early proof of concept prototype, now the Kestrel<sup>®</sup> TSCM Professional Software, was released and immediately started to gain significant market share worldwide. Our Software Development Group (SDG)<sup>™</sup> was well established in Canada and the fun began in earnest. Kestrel was not taken seriously by many industry proponents, nor did the competition

(big mistake). Kestrel<sup>®</sup> is founded on the principle that high cost and slick marketing does not guarantee any level of special status. Low cost, is an essential component in the TSCM industry monopoly. Our software is operator centric, TSCM specific and has powerful new technology features that are not available in less competitive products. Advantages include, low cost progressive hardware, budget friendly software and realistically priced optional modules that allow scalability for commercial operators and for the many public sector organizations faced with shrinking budgets and greater technical requirements in the face of a modern moving target threat model. We take pride in placing our extensive field experience into every line of source code, providing a totally new experience for technical operators.

## ***Innovation is Simply the Beginning!***

### ***Visionary Software Beyond the Technology Limitations...***

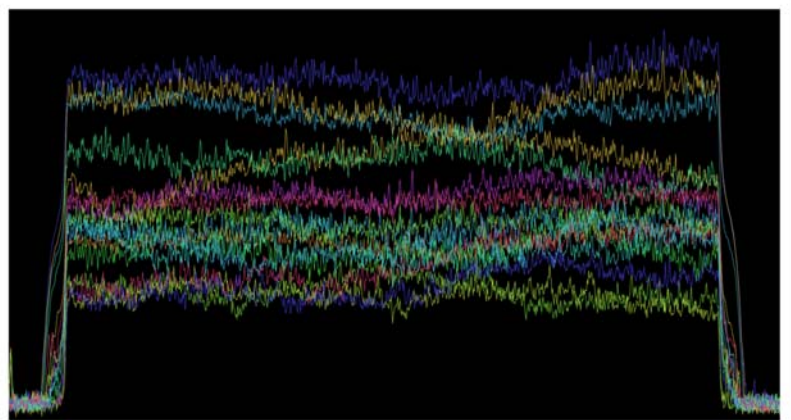
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*They say that the value of art is in the eye of the beholder! Every day a new never before seen artistic spectrum is developed within the Kestrel TSCM<sup>®</sup> Professional Software somewhere in the world. Whether impressionist, contemporary or abstract, the RF spectrum brings a commonly understood meaning for every professional technical operator who views it...*

***Kestrel TSCM<sup>®</sup> Professional Software is innovative industry leading, disruptive technology, sold in 47 countries worldwide.***