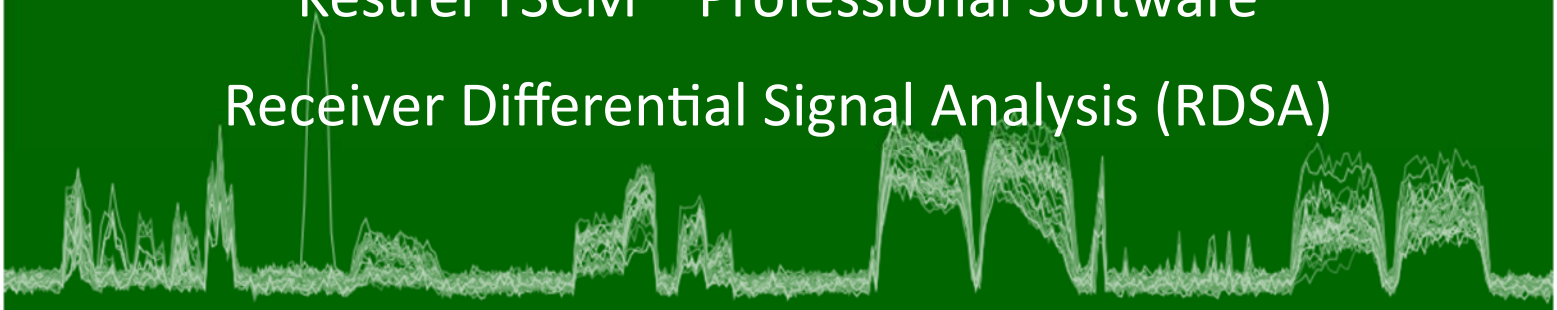
Kestrel TSCM ® Professional Software

Receiver Differential Signal Analysis (RDSA)



December 2017 **Technical Research and Standards Group (TRSG)**

Paul D Turner, TSS TSI

2018 Training Schedule | Update

Professional Development TSCM Group Inc., is pleased to announce additional 2018 training dates at our recently commissioned **Red Deer Training Centre (RDTC)**, located in the heart of Alberta Canada, on a scenic 160 acre site.

Our Technical Security Specialist (TSS), designate certification, and other related training programs will continue to be available at our long-standing **Resident Training Centre (RTC)**, located in Cornwall Ontario.

Our new facility is equipped with a shielded RF and software development and testing lab, and an on-site classroom for dedicated law-enforcement, government security apparatus, and military participants.

Certified Technical Operator (CTO) ™ training and certification for the Kestrel TSCM ® Professional Software, and Technical Analyst Certification (TAC) ™ program, are available at our secure Alberta facility.

As noted in the November 2017 newsletter.

"The ability to apply advanced Time Differential Signal Analysis (TDSA) ™ capability, to current and imported spectra, allows the technical operator to compare specific targeted events based on an analytical, operator defined time line, bringing absolute clarity, as to the origin of specific targeted Signals of Interest (SOI), and potentially hostile spectral events".

Advanced development work has also resulted in the official release of the new 64-Bit version of the software this past month, and further refining of our recently released Time Differential Signal Analysis (TDSA) ™ feature, which does not replace, our Location Differential Signal Analysis (LDSA) ™, formally referred to as DSA ™ in the original Kestrel ® software model, it does have a significant new approach when TDSA ™ is applied.

LDSA ™ can be inaccurate in the event of modern, power agile smart devices over time, and mislead the operator with respect to quickly locating the signal source, within a complex RF ambient environment.

LDSA ™ is a multiple location tool, defined by the operator, and is based on a comparative of Ranges of Interest (ROI), Bands, and / or Sub-Bands, down to the signal or channel level analytics, at the RSSI level.

TDSA ™ is an analytical filter defined by the operator during collection and / or post analytical analysis, to better refine randomly occurring events, as well as regular periodic events over a period of hours, days, weeks, or even months of runtime, at a single location, or across multiple LDSA ™ locations.

This concept, significantly modernizes the LDSA ™ model dating back to the 1960's, and later utilized by a number of government agencies, within the security apparatus.

LDSA ™ + TDSA ™ are powerful resources when deployed together, within a complex RF ambient signal environment, and provides comparative data blocks across the time domain of collection, and is easily referenced against single, or multiple locations.

RDSA ™ is yet another exciting development and is a new achievement and milestone under the Kestrel ® umbrella, as part of a standards based moving target threat model, and advanced deployment methodology.

RDSA ™ is a powerful new resource developed within a modern moving target threat model, that significantly enhances the Probability of Detection (POD), with a direct comparative overlay of real-time, multiple receiver spectra and waterfall data, and related control structure, on a comparative display, under full operator control.

The ability to deploy multiple, hardware based receivers and spectrum analyzers from any number of supported manufacturers, and dynamically hand-off the spectrum and demodulation process, between, any connected receiver or spectrum analyzer, at the facility level, within a targeted critical infrastructure, or across wide geographical regions, has not only changed the game, but has also tossed out the play book for professional TSCM, SIGINT, and RSSM ™ applications, and significantly enhances the POI and POD across the spectrum.

Kestrel TSCM ® Professional Software

"New Innovation Delivered—Again Today!"

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

The technical operator can deploy multiple receivers at multiple locations, and generate Ranges of Interest (ROI), multiple spectrum bands, and Sub-Bands, across, multiple receivers, and also operate on a single receiver to achieve powerful operator centric requirements.

The application of TDSA ™ is fully supported as a powerful analytical filter, under the direction of the technical operator, or in an unattended, autonomous runtime capability.

TDSA ™ is the ability to apply a time capture filter, with an operator defined PERIOD, to generate differential comparative traces, based on block time of event, within the Waterfall Display (WFD), and generate a Kestrel Super Trace (KST) ™ for each defined PERIOD, which can be any logical operator defined value.

Each PERIOD is then available as a comparative value and can be selected against one or more other comparative PERIODS to easily identify unique signal events, and identify reoccurring patterns, relative to periodic signal events.

RDSA ™ | Advanced Collection and Analytics

The ability to deploy multiple receivers at multiple locations, provides powerful real-time spectrum and waterfall data, returned for each operator defined location, for real-time RSSI based analytics, unlike LDSA ™ (formerly our DSA ™ feature), within the Kestrel ® application, which permits the operator to move from one location to another, and in rotation collect historical peak data, for post comparative analysis.

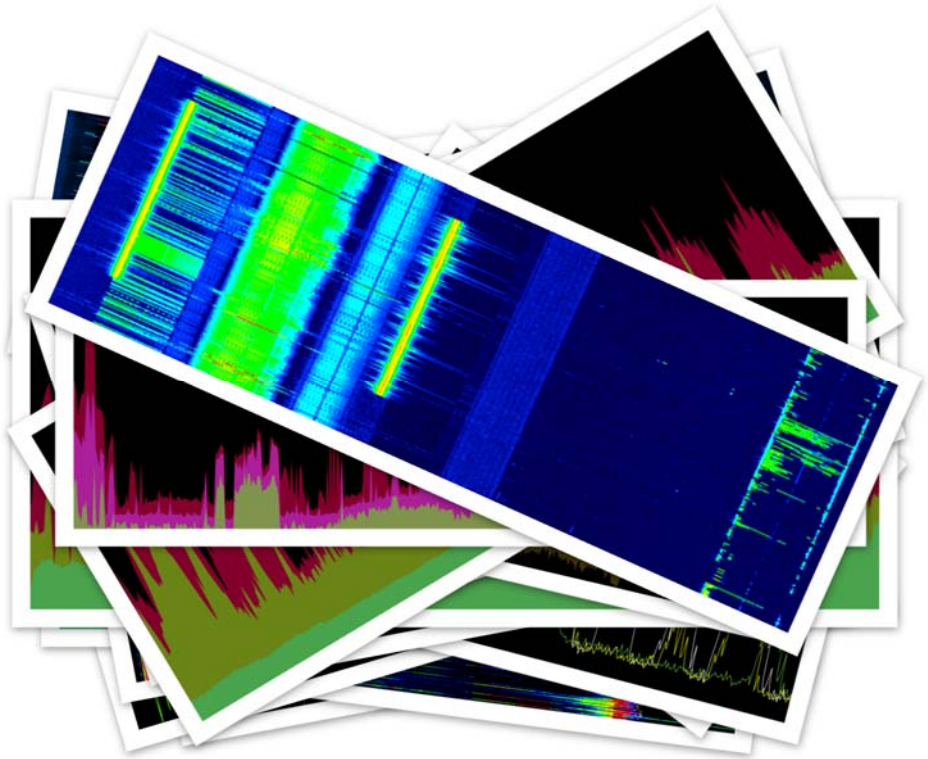
RDSA ™ provides the ability to collect real-time data from two (2) or more locations simultaneously, in an operator assisted mode, or in an unattended Remote Spectrum Surveillance and Monitoring (RSSM) ™ role.

The ability to collect and display data from multiple receivers and locations, opens the door for an entirely new feature class of advanced TSCM tools.

These features include, geo-location, direction-finding, and real-time integration with other security monitoring resources, via our Command Line Programming (CLP) capability, providing better situational awareness, with a 3D analytical analysis capability.

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

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



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