TSCM Quarterly

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REI®

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## WHAT'S INSIDE



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# SPRING 2018 BIPS ANNOUNCED

REI's Business Intelligence Protection Seminars outline the risks posed to businesses and individuals by electronic eavesdropping and illicit surveillance. Wrongful exposure of sensitive information including merger or acquisition planning, marketing strategies, financial projections, or executive employee behavior can severely harm an organization. The mere perception of compromised information can lead to stock decline, negative publicity, damaged business relationships, and loss of customer confidence. BIPS offer practical instruction and techniques to guard against critical information loss.

### Each seminar includes:

- Countermeasures used to protect against information theft
- Telephone threat examples (how telephone systems can be compromised & how to detect vulnerabilities)
- Eavesdropping techniques used to steal information and methods to counter threats
- Technical surveillance threats including easily-accessible bugging devices
- Overview of TSCM equipment and REI's newest product offerings including the ANDRE™ Advanced Near-field Detection Receiver

### Dates/Locations:

- Orlando on February 6, 2018 at Homewood Suites International Drive Convention Center
- Ft. Lauderdale on February 8, 2018 at Hilton Garden Inn Ft. Lauderdale Airport
- Chicago on March 20, 2018 at Holiday Inn Chicago O'Hare
- Columbus, Ohio on March 22, 2018 at Columbus Airport Marriott
- Las Vegas on April 10, 2018 at The Flamingo

Each seminar will begin at 9:00 AM and conclude at 4:00 PM. Registration is free – lunch and refreshments will be provided. Seating is limited; attendees are encouraged to register early.

REI

*Register Now*

# NEW OSCOR FIRMWARE AVAILABLE

Recently a new OSCOR Firmware update was released on the REI website. This free download is available for the OSCOR Blue and OSCOR Green Spectrum Analyzers. In addition to performance improvements, two file and data operations have been added to the latest firmware.

### Frequency Allocation Information

When generating a signal list, the OSCOR will automatically populate the comments field with information about the frequency band that a signal might be a part of for the currently selected ITU region. This information contains known regulatory or other uses of given frequency bands. Depending on the frequency there may be multiple allocations given. The frequency allocation information is also provided anytime that a signal is added to an existing signal list.

### File Operations

The file dialogs on the OSCOR, such as the file open and file save dialogs, now contain Cut, Copy, Paste, Delete, and Rename operations which allow users to copy or move files from a compact flash card to a USB flash drive, as well as other file operations within the OSCOR firmware.

To download the new firmware, visit www.reiusa.net/downloads.

# TESTING GIGABIT VOIP SYSTEMS WITH TALAN 3.0

The TALAN is capable of detecting VoIP packets on VoIP phone systems using the 10/100 Mbps rate. The TALAN VoIP Test Adapter will force some Gigabit VoIP systems to auto-negotiate to the 10/100 Mbps rate. However, some VoIP network systems may not be fully compatible with the VoIP Test Adapter, or have been set up not to auto negotiate down. Below are compatibility issues that may be encountered and also solutions:

1. Gigabit VoIP phone systems that do not auto-negotiate down to the 10/100 Mbps rate supported by the TALAN Ethernet card.
2. Gigabit network systems where the VoIP phone system requires Power over Ethernet (PoE).
3. Gigabit network systems where the VoIP phone system is shared with the test site's data network. These systems may not desire to have the data network slowed to 100 Mbps speeds.
4. VoIP traffic collections where both transmit and receive sides of the phone traffic may be required simultaneously for determination of possible threats.

### Solution - A Configurable Ethernet Switch

There are third-party configurable Ethernet switches on the market which will enable the TALAN to analyze the IP packets to/from the network switch and local device even when the network may be incompatible. When purchasing a configurable Ethernet switch to use for VoIP Analysis with the TALAN, there are several features that you want to look for:

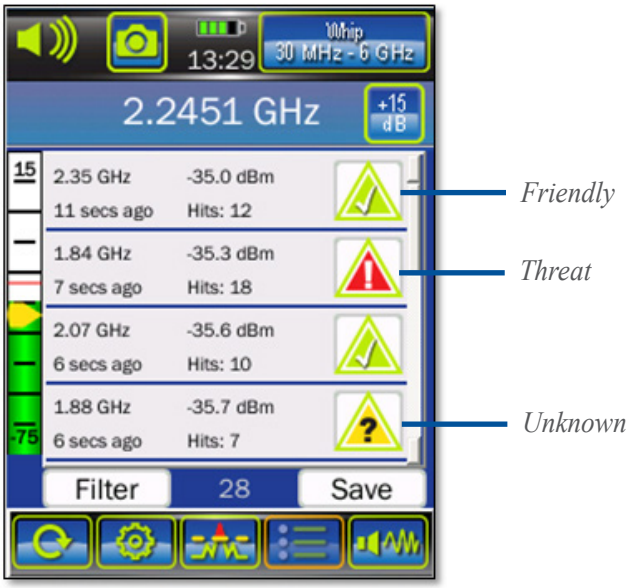
1. **Port Mirroring** – in order to monitor the VoIP traffic on a phone line, it will be necessary to mirror the port connected to the phone line to another port. This second port will connect to the Ethernet port on the TALAN.
2. **Auto Negotiation** – the switch will need to auto-negotiate down to 100 Mbps speeds when connected to the TALAN. This will only occur on the mirrored port connected to the TALAN – the other network connections will remain at the speeds supported by the network.
3. **PoE support** – In a VoIP system that uses PoE, the phones might not have a separate AC adapter for power; they instead receive their power from the Ethernet cabling. For gigabit systems which use PoE, you will need an Ethernet switch that supports PoE.
4. **Auto-sensing or 802.3af support** – Applying power through the Ethernet cabling to devices which are not designed to support PoE could potentially damage those devices. Select an 802.3af switch, also known as an active/smart switch or end-span device - one that uses auto-sensing to poll connected devices - to determine whether they support PoE before applying voltage (typically 48V).

# SPOTLIGHT: ANDRE SIGNAL LIST

REI's CPM-700 was the standard in RF broadband detection for over 20 years in the TSCM market. Now the ANDRE offers many more features to its users. The ANDRE includes robust tools to help identify what type of signals are being encountered and offers powerful post-sweep analysis functions not available in other broadband detectors.

## HOW THE SIGNAL LIST WORKS

The ANDRE automatically generates a list of detected signals that exceed the designated trigger level and register on the frequency counter. These signals display from strongest initial RF level at the top to weakest at the bottom and can be customized to show 10, 25, 50, or 250 signals. Even when the signal list display is full, the ANDRE continues to capture weaker signal information. If a newly-detected signal is stronger than another in the list, the list automatically re-sorts and weaker signals roll off.




## HOW TO CATEGORIZE SIGNAL TYPES

The ANDRE allows the user to categorize signals as Friendly, Unknown or Threat. By default, signals are designated as Unknown, which is marked as a question mark inside of a yellow triangle. However, every signal can be labeled as Friendly or Threat by tapping the icon.

## HOW IT HELPS SWEEP ANALYSIS

In comparison to the CPM-700, which only displayed RF energy as a bar graph, the ANDRE provides beneficial signal information which helps to identify or inspect specific signals. This information includes the frequency, ambient power level at the time the signal was detected, how much time has elapsed since detection, the number of detections, and the signal type designation. To view even more detail regarding a specific signal, users can view the signal information screen.


With the advanced signal data and analysis tools, the ANDRE is expanding the capabilities of RF broadband detectors.

REI is offering a one-day ANDRE training course on January 11, 2018 at our headquarters in Cookeville, Tennessee. The course provides a thorough overview of the ANDRE's functionality and hands-on exercises in dedicated project rooms. If you are interested in reserving your spot, visit the ANDRE training course page.

### Did You Know?

You do not have to power down the ANDRE in order to switch probes. Simply disconnect the current probe and reconnect the new one. The ANDRE will automatically recognize the newly-attached antenna.

# PREVENTING FRAUD AT EXAM TESTING SITES USING THE ANDRE

The newly-launched ANDRE Advanced Near-field Detection Receiver from Research Electronics International is helping prevent fraud at exam testing sites. Commonly used for counter surveillance operations and intelligence protection, the ANDRE is now also helping educators prevent cheating during examinations by detecting covert electronic transmissions.

According to news reports out of Brazil*, eleven individuals were arrested last year for using electronic devices during the high-profile National High School Examination (ENEM). This year, the Ministry of Education will be using ANDRE to locate and identify participants who attempt to use electronic devices during the exam and may have circumvented inspection by metal detectors.

The Brazilian Minister of Education is quoted as saying "Our goal is to combat the electronic points that, unfortunately, are still used in high-profile exams such as ENEM." According to the Brazilian Federal Police, more investing is being done to repress fraud, stating that "there are now almost imperceptible electronic points. As organized crime increases, we will also introduce new security solutions."

Recent news reports have illustrated that exam fraud is also a growing problem in India:
*4 held for cheating in SSC exam:* https://t.co/j0vfcophTQ
*Google drive, bluetooth, micro camera: How wife 'helped' IPS officer cheat in exams:* http://bit.ly/2yjeCok

In China:
*High school exam cheating devices exposed in China:* http://dailym.ai/2hTSwyj
*High-tech devices used to cheat China's exams:* http://reut.rs/2yH4Ts1

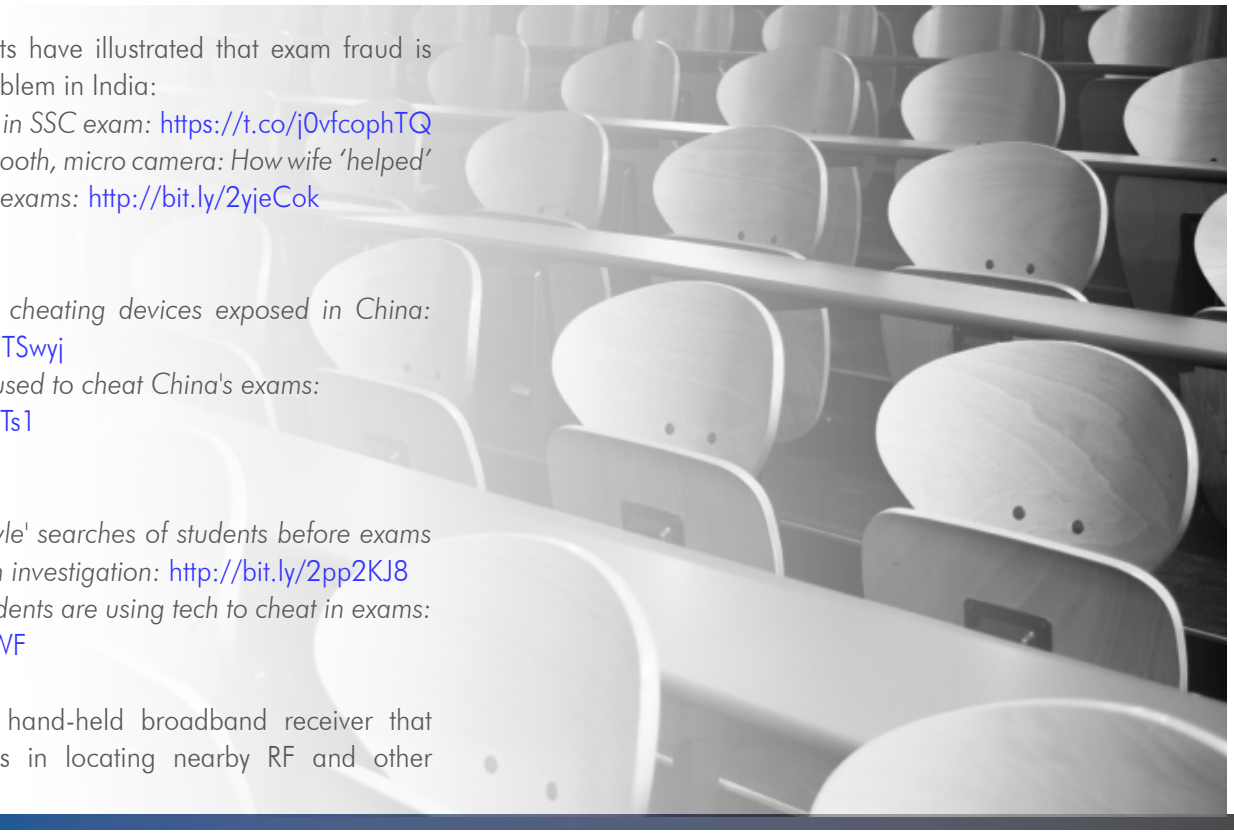
And the UK:
*Calls for 'airport-style' searches of students before exams following Telegraph investigation:* http://bit.ly/2pp2KJ8
*More university students are using tech to cheat in exams:* http://bit.ly/2ote4WF

The ANDRE is a hand-held broadband receiver that detects and assists in locating nearby RF and other types of transmitters, including mobile phones. Antenna probes included with the ANDRE can be used to search for known, unknown, illegal, disruptive, or interfering electronic transmitters.

Hidden electronic devices are easily concealed in a variety of objects and access to eavesdropping and electronic bugging devices is becoming easier and more affordable. The ANDRE provides mobile RF search capability to help locate these hidden transmitters quickly and discretely.

If you would like more information on the ANDRE for the purpose of detecting fraud at exam testing sites, contact REI for more information.

*Segurança do exame será reforçada com detectores de ponto eletrônico
Governo vai usar aparelho de contrainteligência para evitar fraudes no Enem 2017
Detectores de ponto eletrônico vão reforçar segurança do Enem 2017



# 2018 TRAINING CALENDAR

**Countermeasures Core Concepts Level 1**
January 22 -26

**RF OSCOR Course Level 2**
January 29 - February 2

**RF Certification Level 3**
February 5 - 9

**Countermeasures Core Concepts Level 1**
February 12 - 16

**RF OSCOR Course Level 2**
February 19 - 23

**TALAN Telephone Countermeasures Course Level 2**
February 19 - 23

**VoIP Course Level 3**
February 26 - March 2

**Countermeasures Core Concepts Level 1**
March 5- 9

**RF OSCOR Course Level 2**
March 12 - 16

**TALAN Telephone Countermeasures Course Level 2**
March 12 - 16

SPANISH COURSE PACKAGE

**Spanish RF OSCOR/TALAN Level 1 & 2**
March 12 - 23

**RF OSCOR Course Level 2**
March 19 - 23

**Countermeasures Core Concepts Level 1**
April 2 - 6

**RF OSCOR Course Level 2**
April 9 - 13

**TALAN Telephone Countermeasures Course Level 2**
April 9 - 13

**TALAN Certification Level 3**
April 16 - 20

CLICK HERE TO REGISTER

# TSCM IN THE NEWS

### SOMEONE'S SPYING ON FLORIDA LEGISLATORS. SURVEILLANCE CAMERA FOUND AT CONDO BUILDING
*Source: Miami Herald*
*Article: http://hrld.us/2znR7dD*

### 4 HELD FOR CHEATING IN SSC EXAM
*Source: The Times of India*
*Article: http://bit.ly/2ykQqBP*

### THE RISE OF COVERT RECORDINGS IN FAMILY PROCEEDINGS
*Source: LexisNexis*
*Article: http://bit.ly/2gTqSk9*

### SPIKE IN SPY CAMERA SALES ONLINE CAUSES CONCERN
*Source: The Straits Times*
*Article: http://bit.ly/2A63BDP*

### ECUADOR PRESIDENT ACCUSES PREDECESSOR OF PLANTING SPY CAMERA
*Source: Chicago Tribune*
*Article: http://trib.in/2iSQAt6*

### USING MALWARE AND INFRARED LIGHT, HACKERS CAN TURN A SECURITY CAMERA INTO A BUSINESS SPY
*Source: Tech Republic*
*Article: http://tek.io/2il8Tn9*

## REI is on Twitter!

Want to keep up with REI's latest developments and get more #TSCM in the News stories? Follow us @REI_TSCM

# TRADESHOWS & SEMINARS

### BUSINESS INTELLIGENCE PROTECTION SEMINARS
**February 6 - 8, 2018**
Orlando, Ft. Lauderdale
*https://reiusa.net/news/bips*

### INTERSEC
**January 21 - 23, 2018**
Dubai International Convention and Exhibition Center
Dubai, UAE
*http://www.intersecexpo.com*

### EXPODEFENSA 2017
**December 4 - 6, 2017**
Corferias Exhibition Center
Bogota, Colombia
*http://www.expodefensa.com.co/*

### SECURITY AND POLICING
**March 6 - 8, 2018**
Farnborough International Exhibition & Conference Center
*https://www.securityandpolicing.co.uk/*

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