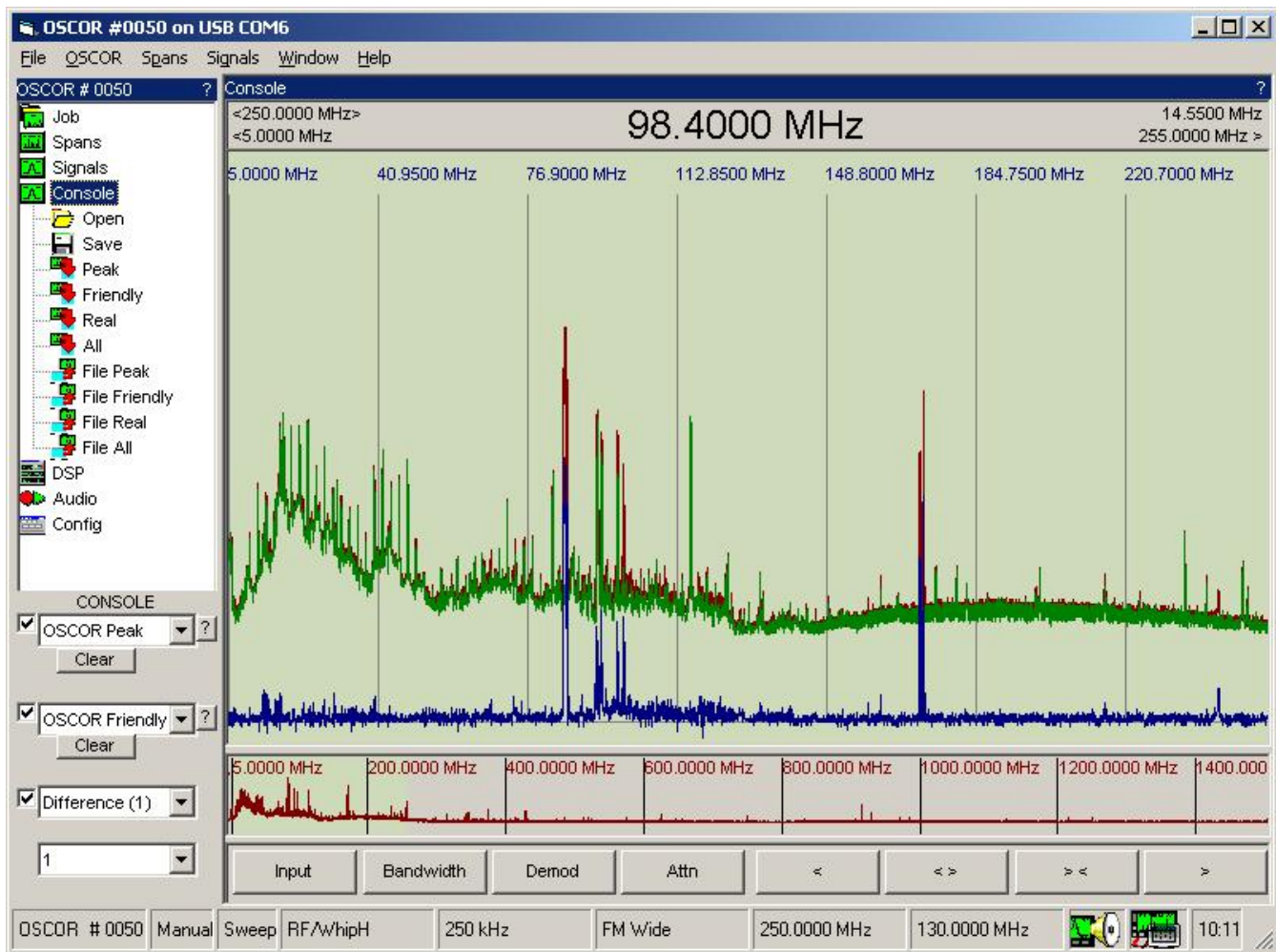


## NEW OSCOR Software Release 5.0 Available May 2004

With newer surveillance threats and advancing technology, REI is developing new software algorithms that are specifically designed to greatly increase the probability and speed of detection for sophisticated threats such as Frequency Hopping, Burst Transmitters, and Spread Spectrum signals.

The current OSCOR system will certainly detect these types of transmitters, however we have developed new methodology to increase detection reliability and improve the user interface for detecting these types of threats. This new system is expected to be available for sale by 1 May 2004, and will be on display at

the ISC West Exhibition in Las Vegas at the end of March. A preliminary screen shot of the software is shown below; the blue lines on the graph indicate sophisticated intermittent signals. There will be more information to follow about this new development with the software release in May. **REI**



## New OSCOR Packaging to include OPC-5000 (OSCOR PC) Software

With the new release of the OSCOR OPC 5.0 software, OSCORs will no longer be sold without the OPC software beginning 1 May 2004. The OPC software will now be packaged with the OSCOR, and the OSCOR pricing will be increased to include the software.

If you wish to purchase an OSCOR without the software, it must be purchased before 1 May 2004. Also, any purchase of OSCOR and OPC together between now and the release of OPC version 5.0 will be upgraded for free.

**REI**

## REI receives new Patents for NLJD Technology in the UK

As the world leader in Non-Linear Junction Detector technology, REI has continued to advance the technology to new levels. REI currently holds two patents in the USA for NLJD technology and four patents in the UK. These patents are: US. 6,057,765; US 6,163,259; GB234 432; GB235 1154; GB238 1077; GB238 1078. The latest series of patent awards are from the UK and the focus of the technology is in the areas of Digital Signal Processing functions to increase gain and sensitivity, Frequency hopping algorithms to increase reliability and frequency avoidance to minimize interference with other RF devices in the area. **REI**



## NEW TSCM COURSE: Intermediate TSCM Concepts

REI's Center for Technical Security announces a new training Course: Intermediate TSCM Concepts (ITC 301). This 5-day course is a continuation of existing REI curriculum and provides TSCM equipment operators with an advanced understanding of RF signal analysis and theory. The course will also cover various equipment including RF receivers, oscilloscopes, spectrum analyzers, and harmonic receivers.

All course concepts will be reinforced with hands-on exercises. At the end of the course, students will have a good understanding of in-depth RF analysis including carrier current analysis, sub carrier analysis, microwave analysis, and base band analysis.

From frequency hopping spread spectrum to packet and burst transmitters, with today's continually changing technology, a proper combination of RF

equipment and techniques is mandatory to maintain standards of technical protection.

Contact REI for information or to register for REI's Intermediate TSCM Concepts (ITC 301).

**REI**

## 2004 REI Trade Show Calendar

### ISC International Security Conference West

March 31 - April 2, 2004

[www.iscwest.com/](http://www.iscwest.com/)

Las Vegas NV, USA

### NATIA, (Restricted to Law Enforcement & Government only)

July 13 - 15, 2004

Austin TX, USA

### Americas Security Expo (ASE)

July 20 - 22, 2004

[www.americassecurity.com](http://www.americassecurity.com)

Miami FL, USA

### ASIS International 2004

September 27 - 30, 2004

[www.asisonline.org](http://www.asisonline.org)

Dallas TX, USA

### Security Essen 2004

October 5 - 8, 2004

[www.security-messe.de/](http://www.security-messe.de/)

Messe Essen, Essen, Germany

### Milipol Qatar

October 4-6, 2004

[www.milipol.com](http://www.milipol.com)

Qatar

### ISC International Security Conference East 2004

November 3 - 4,

2004 [www.isceast.com/](http://www.isceast.com/)

New York NY, USA

## The Benefit of NLJD Frequency Hopping

About six months ago, REI introduced a Frequency Hopping function as a new functionality for the ORION (NLJD). Since that time, REI has been upgrading older units around the world with this new functionality. The main benefit of Frequency hopping is that many threatening devices respond differently depending on the transmit frequency of the NLJD. Below is a graph showing the actual detection strength at the 2<sup>nd</sup> harmonic receiver as a function of transmit frequency. In this test, the Cell Phone Detection was surprisingly high at certain frequencies (which were within the operational frequency band of the cell phone) and much lower at other frequencies. It would be more difficult to detect this cell phone if the NLJD only uses frequencies in the frequency band with poor detection. The

ORION increases detection reliability by rapidly hopping over a large frequency band, and displaying the results from the frequencies that provide the greatest response. There are also additional advantages to hopping over a wide frequency range, which include frequency avoidance with other transmitters, and decreasing the probability of identifying the ORION signature. There are other NLJD's on the market that have attempted to copy this patented functionality over very narrow frequency bands, however there is no realized advantage to frequency hopping if operational bandwidth is only a few hundred Kilohertz. If your ORION has not been updated with this new technology, please contact REI to learn about our upgrade program. **REI**

