



# RF/Microwave Systems Technology Seminar

Wednesday, April 7, 2004

The Hilton Hotel – Pikesville, Maryland

Attend this one-day **RF/Microwave Systems Technology Seminar** to enhance your practical knowledge and ability to apply the latest technology to your RF and microwave system requirements.

## WHAT YOU'LL LEARN

You will gain invaluable insights into antennas, coaxial cable, lightning protection, and spectrum utilization from the industry leaders of Smiths Interconnect. Technical presentations will be made by experts from these leading companies who will also be available to answer your questions and address application issues.

<b>Antennas</b>	<i>Radio Waves, Inc.</i>	<a href="http://www.radiowavesinc.com">www.radiowavesinc.com</a>
<b>Coaxial Cable Transmission Lines</b>	<i>Times Microwave Systems</i>	<a href="http://www.timesmicrowave.com">www.timesmicrowave.com</a>
<b>Lightning Protection</b>	<i>PolyPhaser Corporation</i>	<a href="http://www.polyphaser.com">www.polyphaser.com</a>
<b>Spectrum Utilization</b>	<i>Summitek Instruments</i>	<a href="http://www.summitekinstruments.com">www.summitekinstruments.com</a>

## HOW YOU'LL BENEFIT

### Antennas:

- **Learn** about the many types of antenna available
- **Gain** knowledge of common antenna specifications including frequency, gain, size, beamwidth & windload
- **Find out** how to choose the best antenna for your system requirements
- **Understand** antenna installation and mounting issues

### Coaxial Cables:

- **Learn** how to select coaxial cables based on insertion loss, VSWR and electrical length considerations
- **Understand** the importance of phase stability and phase matching
- **Develop** a practical understanding of transmission line test data
- **Become skilled at** proper cable termination and learn its influence on transmission line performance

### Lightning Protection:

- **Develop** a working knowledge of lightning strike theory and surge currents
- **Understand** how coaxial surge protection really works
- **Learn** how to properly ground RF transmission lines to protect your valuable equipment
- **Discover** how to deal with problem sites

### Spectrum Utilization:

- **Learn** how to determine the potential impact of collocating with existing wireless services
- **Understand** how other RF emissions can adversely impact you
- **Discover** the sources of base station interference and techniques for mitigation
- **Find out** how to transform a spectrum analyzer (which really doesn't analyze anything) into a powerful tool for optimizing network performance

As an added bonus, "hands-on" workshops will be provided to give the attendees an opportunity to deepen their technical skills and knowledge in each area. You will be able to learn how to properly terminate a cable for optimum performance, learn how to use an *OASIS II* for spectrum monitoring and interference identification/mitigation, design a grounding system and calculate the link budget for an RF path.

## WHO SHOULD ATTEND

This seminar is targeted to engineers, supervisors, managers, technical team leaders, installation personnel and purchasing personnel involved with microwave and RF systems.



This one-day seminar is *free* to all qualified attendees. For those individuals requiring overnight accommodations, a special discounted room rate has been arranged with the Pikesville Hilton hotel.



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### Schedule for Wednesday, April 7, 2004

8:00 AM	- 8:30 AM	Registration & Buffet Breakfast
8:30	- 8:45	Introduction of Smiths Interconnect Group
8:45	- 9:30	Antennas (Radio Waves)
9:30	- 9:45	Break/Refreshments
9:45	-10:45	Coaxial Cables (Times Microwave Systems)
10:45	-11:00	Break/Refreshments
11:00	-12:15	Lightning Protection and Grounding (PolyPhaser)
12:15	- 1:00 PM	Lunch & Technical Exhibits
1:00 PM	- 2:00	Spectrum Utilization (Summitek)
2:00	- 3:00	"Hands-On" Workshops & Refreshments

→ **Important:** Attendance is limited - RSVP as soon as possible to secure a reservation:

- Call: Stephanie Wnek at either 1-800-TMS-COAX or 203-949-8429, or
- Email: [stephwnek@timesmicro.com](mailto:stephwnek@timesmicro.com), or
- Register On-line at: [www.timesmicrowave.com/register-sis.htm](http://www.timesmicrowave.com/register-sis.htm)



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 1726 Reisterstown Road  
 Pikesville, MD 21208  
 Phone: 410-653-1100  
 Fax: 410-415-6232

A Special Discounted Rate of \$98.00 per night (plus tax) is available for overnight guests. Please mention the **Smiths Technology Seminar** when making your reservations to obtain this special rate.

#### • Driving Directions:

The Pikesville Hilton Hotel is located on the South side of exit 20 (RT. 140, Reisterstown Rd.) off Baltimore Beltway I-695, Proceed South on Reisterstown RD. Hotel is located on right hand side of Reisterstown RD.

