

Applications, Challenges and Emplacement of Broadband Services

presented by the



Association of Communication Engineers

in conjunction with the



USDA Rural Development
Telecommunications Program

May 4-7, 2008

Marriott Memphis
Downtown

Memphis, Tennessee

SEMINAR OVERVIEW

The seminar is intended to provide an update on technology segments vital to the future of Telecommunications Service Providers. The topics chosen for presentation include IP Evolution, FTTH/OSP and Video Challenges. The Rural Development Telecommunications Program is also presenting two half-day sessions in conjunction with the ACE technology topics. Interspersed throughout the entire seminar are numerous vendor specific presentations that are offered in a dual-track format allowing for additional choices to customize the session.

ASSOCIATION OF COMMUNICATION ENGINEERS (ACE)

ACRS 2000 Corp. Inc.
CBW Communications Engineers, Inc.
CC&I Engineering Inc.
CCG Consulting, Inc.
CHR Solutions, Inc.
Communication Network Engineers, Inc.
Communications Engineers, Inc.
Design South Professionals, Inc.
Engineering Associates, Inc.
Finley Engineering Company
Fulton Engineering, Inc.
Gillespie, Prudhon and Associates, Inc.
Heberly and Associates
HunTel Engineering
Hutchins & Wunnenberg Engineering, Inc.
Joseph D. Fail Engineering Company, Inc.
Kadmas, Lee & Jackson, Inc.
Ladd Engineering Associates, Inc.
Martin Group, Inc.
McCall-Thomas Engineering Company, Inc.
Mid-South Consulting Engineers, Inc.
Mid-State Consultants, Inc.
Milford Engineering Corp.
Mitchell Engineering
Monte R. Lee & Company
Palmetto Engineering and Consulting, LLC.
RVW, Inc.
Telecom Engineers
Vantage Point Solutions, Inc.

Wednesday, May 7, 2008

- 7:15 a.m. Continental Breakfast and Registration
Sponsored Event
- 7:30 a.m. Early Bird Vendor Presentations
(Running simultaneously for 25 minutes in breakout rooms)
- 8:00 a.m. Broadband Program Update
Ken Kuchno
- 8:30 a.m. Broadband Loans -
Bringing it all together with a financial forecast
Deb Jackson & Wanda Lloyd
- 9:30 a.m. RUS specification for fiber optic cables
Norberto Esteves
- 10:00 a.m. Morning Break
- 10:10 a.m. Vendor Breakout Session
(Running simultaneously for 25 minutes in breakout rooms)
- 10:40 a.m. Wireless Equipment Grounding
Norberto Esteves
- 11:00 a.m. Draft Revisions of RUS Publications
Joe Mafnas
- 11:40 a.m. RUS Session Wrap-Up
- 12:00 p.m. Grand Prize Drawing and Adjourn

LOCATION

The seminar will be held at the Marriott Memphis Downtown, 250 N. Main Street, Memphis, Tennessee. Each attendee should arrange their own hotel accommodations by calling Marriott Reservations at (800) 228-9290 or (901) 527-7300. Reservations can also be made on-line. Please indicate you will be attending the ACE School when making your reservation to receive the negotiated room rate of \$139 (Government rates also apply). Reservations must be made by **April 18, 2008 the "Cut-Off Date"** to ensure getting this special rate.

COST AND MEALS

The seminar fee is \$395 per attendee which includes all of the receptions, sponsored events and entrance to the seminar, plus copies of materials presented at the seminar along with a 3-ring binder for assembling the material. Attendees will be responsible for their room and associated charges.

ASSOCIATION OF COMMUNICATION ENGINEERS
c/o Gregory Rise
150 2nd Street SW
Perham, MN, 56573

ASSOCIATION OF COMMUNICATION ENGINEERS
c/o Velocity Strategic Events
48377 Fremont Street, Suite 117
Fremont, California, 94538

Applications, Challenges and Emplacement of Broadband Services

Nametags/ Lanyards & Audio Visual Equipment
Sponsored Event

Printing, Supplies and Shipping
Sponsored Event

Sunday, May 4, 2008

- 6:30 p.m. Early registration and Welcome Reception
Sponsored Event
- 8:00 p.m. Dinner on your own

Monday, May 5, 2008

- 7:30 a.m. Continental Breakfast and Registration
Sponsored Event
- 8:00 a.m. Welcome and Housekeeping
Joel Williams, President of ACE
Mid-South Consulting Engineers, Inc.
- 8:10 a.m. **IP Evolution**
Rick Overman, Topic Moderator
CHR Solutions, Inc.
- 8:20 a.m. Fundamentals of IP
Clinton Campbell, Monte R. Lee & Company
- 8:50 a.m. Multi-Gigabit Ethernet Transport
Michael Heitland, CC&I Engineering Inc.
- 9:20 a.m. Next Generation IP Switching
Tom Fulton, Fulton Engineering, Inc.
- 9:50 a.m. Morning Break
Sponsored Event

10:20 a.m. Vendor Breakout Sessions
(Running simultaneously for 25 minutes in breakout rooms)

- 10:50 a.m. IP Wireless Loop Alternatives/
Wireless Broadband Access Platforms
Russ Hamilton, CHR Solutions, Inc.
- 11:20 a.m. IP Multimedia Subsystems (IMS)
Mid-State Consultants, Inc.
- 11:50 a.m. Break for Lunch
Sponsored Event
- 1:00 p.m. **FTTH, OSP, Inside Wiring & Loop/Access**
Tom Harter, Topic Moderator
Engineering Associates, Inc.

Fiber networks have changed with the evolution of FTTH. What are the latest means and methods for powering ONTs at the house? Should ribbon cables be considered? Any new ideas in LCP cabinet sizing and fiber cable sizing? Splicing drops - fuse or connectorize? Are ADS2+ and bonding providing opportunities to retain copper loops for video?

- 1:05 p.m. Inside Wiring Challenges: SWRD, HPNA, &
IPTV in the home
Tracey Brewer, Engineering Associates, Inc.
- 1:35 p.m. ONT Installation, including batteries,
powering & grounding
Mark Massman, RVW, Inc.
- 2:05 p.m. Afternoon Break
Sponsored Event
- 2:35 p.m. Vendor Breakout Session
(Running simultaneously for 25 minutes in breakout rooms)
- 3:05 p.m. Drops: Fuse or Connectorize & Fiber Testing
Gary Larson, Comm. Network Engineers, Inc.

- 3:35 p.m. Fiber Design, LCP Cabinet Sizing, &
Ribbon vs. Loose Tube Cables
Dean Mischke, Finley Engineering Company
- 4:05 p.m. Copper Loops - ASDL2+ and Bonding
Dennis Kent, Telecom Engineers
- 4:35 p.m. Recess for the Day

- 6:00 p.m. Hospitality Suite
Sponsored Event
- 7:30 p.m. Dinner on your own

Tuesday, May 6, 2008

- 7:15 a.m. Continental Breakfast and Registration
Sponsored Event
- 7:30 a.m. Early Bird Vendor Presentations
(Running simultaneously for 25 minutes in breakout rooms)

- 8:00 a.m. **Video Challenges**
Chris Roland, Topic Moderator
Palmetto Engineering & Consulting, LLC

Where is the industry in deploying video services? Is MPEG4 mature enough to meet the customer's expectations? What about set top boxes? Where do we stand with video resale? Will RF be able to hold off IP video much longer? How are the direct broadcast satellite providers preparing to meet the future? How is video over the Internet going to affect all of this?

- 8:10 a.m. IP and RF Video
Gary Beikmann, Monte R. Lee & Company
- 9:00 a.m. Video Highlights
Carmen O'Neill, Vantage Point Solutions, Inc.
- 9:50 a.m. Morning Break
Sponsored Event
- 10:15 a.m. Vendor Breakout Session
(Running simultaneously for 25 minutes in breakout rooms)
- 10:45 a.m. Ad Insertion, Programming & VOD
Sam Harlan, CHR Solutions, Inc.

- 11:20 p.m. Headend Aggregators
Steve Senne, Finley Engineering Company
- 12:00 p.m. Break for Lunch
Sponsored Event

RUS PRESENTATIONS

- 1:00 p.m. Intro. of the New Assistant Administrator &
Telecom Program Update
David Villano and Jon Claffey
- 1:30 p.m. FCC proposals for Reform of Rural High Cost USF
John Huslig
- 2:10 p.m. Afternoon Break
Sponsored Event
- 2:30 p.m. Vendor Breakout Session
(Running simultaneously for 25 minutes in breakout rooms)
- 3:00 p.m. *Getting It:* Making the Application Process Work
Jerry Brent and Ken Chandler
- 3:40 p.m. *Lighting It:* FTTH Financing Trends
Shawn Arner
- 4:00 p.m. *Using It:* Advance and Loan Security Issues
Peter Aimable and Richard Anderson
- 4:30 p.m. *Losing It:* Loan Rescissions &
How to Avoid Them
Craig Wulf
- 5:00 p.m. Recess for Day - Dinner on your own

(Schedule continues on back)

Company Name: _____

Company Address: _____

Telephone: _____

Fax: _____

Contact E-mail Address: _____

Name(s) of Attendees _____

Number of Attendees _____ x \$395.00 = Amount Enclosed _____

Please make checks payable to Association of Communication Engineers

Or register On-Line via credit card or check at www.ace-engineers.com