

55th ANNUAL IEEE BROADCAST SYMPOSIUM – 2005 SYMPOSIUM RECORD

Papers which are not included are indicated by an asterisk.

Click on Paper Title to go to that paper

WEDNESDAY OCTOBER 12

Mobile and Multimedia Broadcasting I

Session Chair - Thomas M. Gurley, BTS President - Rocky Mount, North Carolina

- 1) ***The Emergence of Digital Video Broadcast TV in Mobile Terminals: DVB-H***
Don Shaver, Texas Instruments – Dallas, Texas
- 2) ***DVB-H Field Trials and Implementation Plans***
Michael Schueppert, Crown Castle Mobile Media – Houston, Texas
- 3) ***Using Broadcast Standards for Handheld Devices: A DVB-H System Architecture***
Brett Jenkins, Thales Broadcast & Multimedia – Southwick, Massachusetts
- 4*) ***MediaFLO Technology and Implementation***
Kamil Grajski, Qualcomm – San Diego, California

Mobile and Multimedia Broadcasting II

Session Chair - Thomas M. Gurley, BTS President, Rocky Mount, North Carolina

- 1*) ***WRAL Wireless – Local News to the Mobile Phone***
Sam Matheny, Capitol Broadcasting – Raleigh, North Carolina
- 2) ***An ATSC Broadband Multimedia Datacasting System: Implementation and Tests***
Gilles Gagnon, Communications Research Centre - Ottawa, Canada
- 3) ***Mobile Reception Performance with 4-Branch Space Diversity for ISDB-T***
Maashiro Okano, NHK - Tokyo, Japan
- 4) ***Terrestrial Digital Multimedia Broadcasting (T-DMB): Technologies and Services***
Sangwoo Ahn, Electronics and Telecommunications Research Institute (ETRI), Korea
- 5) ***Mobile Broadcasting System***
Shigekazu Hori, Toshiba, Japan

Technical Regulatory Issues

Session Chair – William Meintel, Meintel, Sgrignoli and Wallace – Chantilly, Virginia

- 1) ***License-exempt Devices in the TV Bands***
The Goals of the IEEE 802.22 Standard for Cognitive Wireless Regional Area Networks (“WRANs”)
Carl R. Stevenson, WK3C Wireless LLC - Emmaus, Pennsylvania
- 2) ***Mitigating the Effects of Unlicensed Devices on Wireless Microphones***
Edgar C. Reihl, Shure, Inc. - Niles, Illinois
- 3) ***D-ENG***
Dane Ericksen, Hammett & Edison, San Francisco
Presented by: Andy Bater, Tribune Broadcasting - Chicago, Illinois
- 4*) ***Hardware Considerations for Low Power DTV Systems***
Greg Best, Greg Best Consulting - Kansas City, Missouri
- 5*) ***DTV Spectrum Planning for LPTV/Translators***
Dennis Wallace, Meintel, Sgrignoli and Wallace – Waldorf, Maryland
- 6) ***Panel: Broadcasters’ Emergency Preparedness Related to Hurricane Katrina and Other Events.***
Participants: Andy Bater, Raymond Carnovale, Steve Smith, Charles Cooper, Jerry Kalke

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THURSDAY, OCTOBER 13

9:00 **Audio Broadcasting**

Session Chair – Bill Ammons, RF Technologies – Lewiston, Maine

- 1) ***Bitrate-Efficient and Compatible Multi-Channel Audio Broadcasting Using MPEG Surround Technology***
Jürgen Herre, Fraunhofer IIS - Erlangen, Germany
- 2) ***Medium Wave Digital Radio Mondiale (DRM) Field Strength Time Variation in Different Reception Environments***
Pablo Angueira, University of the Basque Country – Bilbao, Spain
- 3*) ***Comparative Evaluation Tests on Terrestrial Digital TV Systems***
Charles A. Cooper, duTreil, Lundin & Rackley, Inc. - Sarasota, Florida
- 4) ***On the Crossed Field Antenna (CFA) Performance***
Valentín Trainotti, University of Argentina - Buenos Aires, Argentina
- 5) ***High Power Common Amplification for FM and Digital IBOC Systems***
Daniel L. Dickey, Continental Electronics Corp. - Dallas, Texas

DTV System Performance and Measurements

Session Chair - Eric Wandel, Research Associates of Syracuse - Syracuse, New York

- 1) ***DTV Systems Performance Analysis – The Canadian Experience***
Raymond J. Carnovale, Canadian Broadcasting Corporation Radio - Montreal, Canada
- 2) ***Comparative Evaluation Tests on Terrestrial Digital TV Systems***
Christiano Akamine, Mackenzie Presbyterian University – Sao Paulo, Brazil
- 3) ***Power Handling Comparisons for Television Mask Filters***
Dan Fallon, Electronics Research Inc. - Gray, Maine
- 4) ***8-VSB DTV Transmitter FCC Emission Mask Compliance Measurement Standard***
Greg Best, Greg Best Consulting - Kansas City, Missouri
- 5*) ***A Tutorial on DTV Measurements: What, How, and Why?***
Gary Sgrignoli, Meintel, Sgrignoli, and Wallace – Mount Prospect, Illinois

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FRIDAY, OCTOBER 14

9:00 **Satellite Broadcasting**

Session Chair – Greg Best, Greg Best Consulting, Inc. – Kansas City, Missouri

- 1) ***DVB-S2: Optimal Power and Bandwidth Efficiency for Satellite Transmission***
Raymond Pieck, Newtec America, Inc. - Stamford, Connecticut
- 2) ***Design of Communication Payload for the Broadband Services in a Hybrid Satellite***
Junghwan Kim, University of Toledo – Toledo, Ohio
- 3) ***Delivering a Real-Time HD AVC Platform***
Jon Dassler, Modulus Video - Sunnyvale, California
- 4) ***An Indoor Position Location System Using Transmitter Identification RF Watermark***
Yiyang Wu, Communications Research Centre - Ottawa, Canada

Distributed DTV Transmission

Session Chair: William T. Hayes, Iowa Public Television – Johnston, Iowa

- 1*) ***Adjacent Channel Operation of Distributed Transmission Networks***
Merrill Weiss, Merrill Weiss Group - Metuchen, New Jersey
- 2*) ***Hardware Considerations for DTx versus Single Site Transmission***
David Neff, Axcera - Lawrence, Pennsylvania
- 3) ***Areas of Cochannel Interference and Multipath Created by 8-VSB Modulated Distributed Transmitters in Flat Terrain***
Oded Bendov, TV Transmission Antenna Group, Cherry Hill, New Jersey
- 4*) ***Flat Earth DTx Implementation***
Andy Bater, Tribune Broadcasting - Chicago, Illinois
- 5) ***Panel Discussion on DTx Transmission Systems***
Participants: Merrill Weiss, David Neff, Oded Bendov, Andy Bater