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THE AUDIO ENGINEERING SOCIETY

BULLETIN

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The Toronto AES Section Bulletin is published ten times yearly by the Audio Engineering Society Toronto Section and is available on the Internet at **www.TorontoAES.org**

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Joint AES-SMPTE Meeting

Broadcast Loudness

An in-depth look

date **Tuesday, 10 January 2012**
time **7:00 PM**
where **Ryerson University**
RCC 204, Eaton Theatre, Rogers Communications Building
80 Gould Street, Toronto, ON
Corner of Gould and Church, east of Yonge St (Dundas Subway)

For parking info and map, goto www.ryerson.ca/parking/

Pre-Meeting Pizza dinner 6:30 pm at RCC 204

This month's meeting will be available live on-line, courtesy of Ryerson University at www.torontoaes.org.

With the CALM Act already in place on the US side and the CRTC finalizing regulations for Canada to be implemented this fall, this meeting will help equip you with an understanding of the international standards, recommended practices, the difference and interaction between audio loudness and dynamic range, the various applicable terms/acronyms, how to assess compliance, the effect on the consumer and the technologies available for monitoring, processing and controlling loudness to ensure compliance.

Our presenters include Ron Lynch from Technicolor, Ken Hunold from Dolby Labs, Scott Norcross from the Communications Research Centre and Jackson Weigman from Evertz.

Details and Bios on following pages.

THIS MONTH"S MEETING IS SPONSORED BY

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PLEASE POST - MEMBERS AND GUESTS WELCOME

PRESENTATIONS

Scott Norcross, Senior Research Engineer, Communications Research Centre, Ottawa

The presentation will give an overview of the creation of ITU-R BS.1770 and various activities that led to the adoption of it. Also differences between the ATSC and EBU recommended practices will also be discussed, as well as potential regulations from the CRTC in Canada as well as the CALM act in the US.

Kenneth Hunold, Broadcast Applications Engineer, Dolby Laboratories, Inc., New York

The presentation will show loudness variation data on several programming networks and describe strategies for programmers and distribution partners to manage the loudness of the content before delivery. These strategies can be employed cooperatively by producers, distributor, and stations to maintain consistent program loudness.

Because many methods of traditional loudness processing end up reducing the dynamic range of the content, some examples of the interaction between traditional loudness and dynamic range will be demonstrated. Before-an-after charts will be presented, along with some listening examples.

Ron Lynch – Engineering Manager at Technicolor

This presentation will cover the new terms/acronyms, audio measurements from local OTA (over the air) and re-distributed broadcasts to assess our overall achievements in meeting compliance requirements.

There appears to be little standardization in the design of the consumer products that receive these signals and for the home viewer the ability to understand and manage the audio metadata arriving at their entertainment systems is not always consistent nor user friendly. Considerations for end user interfaces will be examined.

Jackson Wiegman, Evertz Product Manager - Multiviewer Systems and Intelli Technology

This presentation will give an overview of loudness monitoring and processing technologies that are available to broadcasters and MVPD’s to ensure that they are compliant with existing regulations, and also how they can utilize loudness monitoring and processing to provide a better experience to their viewers.

BIOS

Ken Hunold

Kenneth Hunold is a Broadcast Applications Engineer for Dolby Laboratories, Inc., based in their New York office. He works with broadcast and cable network engineers and production personnel as they transition to high definition television with 5.1-channel audio. He also works with Dolby's motion picture clients on audio mastering and presentation for film and digital cinema.

Before joining Dolby in 1999, he was with the ABC Television Network in a variety of engineering positions for 25 years. Most of that time was spent "on the road" for ABC Sports, and in ABC's Engineering Laboratory. He helped design ABC's Advanced TV Laboratory and evaluated the tools and systems for ABC's launch of HDTV in 1998. He has worked on many major television events and received an Emmy Award as a video engineer for his work on the 1988 Winter Olympic Games in Calgary.

He is a member of SMPTE, AES, and SBE. He is a former SMPTE Governor for the New York Region and a former New York Section Chair. He is a member of the ATSC study group that drafted ATSC Recommended Practice A/85 for television loudness and has contributed to NABA and WBU-ISOG processes. He is currently Chair of the AES New York Section and is certified by the SBE as a Senior Engineer for both Radio and Television.

Jackson Wiegman

Jackson Wiegman joined Evertz in 2007, and is currently the Product Manager for Multiviewer Systems and Intelli Technology. He is responsible for Evertz' signal visualization and monitoring, as well as audio loudness and lip sync product lines. Jackson previously held the role of Product Specialist for Modular Products. Since joining Evertz, Jackson has been a specialist in audio technologies and has presented at SMPTE and AES conferences as well as held meetings on various loudness, lip sync measurement and correction topics. Jackson holds a Bachelor of Engineering Physics and Management from McMaster University.

Scott Norcross

Scott Norcross received his B.Sc. in Physics from McGill University in Montreal. He received his M.Sc. in Physics from the University of Waterloo, under the supervision of Professors John Vanderkooy and Stanley Lipshitz, after which he taught audio technology in the physics department at American University in Washington D.C. for one year. He then joined the acoustics group at the National Research Council (NRC) of Canada in Ottawa, working on acoustical measurement systems with Dr. John S. Bradley. He received his Ph.D. from the University of Ottawa under the supervision of Professor

Martin Bouchard, where his topic was inverse-filtering for rooms and loudspeakers. He is currently a Senior Research Engineer in the Advanced Audio Systems group at the Communications Research Centre in Ottawa, working in various field of audio such as loudness, subjective/objective quality and multichannel systems. He is currently active in the ITU-R Working Party 6C group on Programme Production and Quality Assessment and the ATSC S6-3 group on loudness.

Ron Lynch

Ron Lynch is Engineering Manager at Technicolor's Toronto based post production facility. He oversees the design and installation of audio / video systems at Technicolor and works with IT staff on the ever growing data management requirements for picture and sound deliverables. He works with audio post staff and clients to assure optimum production and distribution of broadcast and film sound tracks.

Previously, Ron ran Dektek Audio Technologies, an audio engineering company. And prior to that he was vice president and general manager at Manta Electronics Group, specializing in audio and video systems sales and engineering.

Ron received an Electronics Technologist diploma from Ryerson and is an active member of SMPTE and the AES. He has served as the Toronto AES section chairman twice and has filled numerous positions as a committee member.

CLASSIFIEDS

Audio Technology Engineer
Technicolor, Toronto

> *Technicolor is home to industry leading creative and technology professionals serving motion picture, television and other media clients.*

Responsibilities:
Audio post production systems maintenance: Involves setting up, troubleshooting and repairing systems and software and conducting preventive maintenance programs.

Qualifications:
- High school graduate with addition training from a recognized technical institution or equivalent experience.
- Working knowledge of professional audio systems, basic electronics circuitry and computer systems.
- Experience with Macintosh and PC computers and software are essential.

Qualified and interested candidates are encouraged to submit their resume and application to hr1@technicolor.com.