

AES Audio Engineering Society - Pacific Northwest Section

Around the Puget Sound, Seattle, Washington, U.S.A.

AES PNW Section

June Meeting Notice

Presented by
The Pacific Northwest Section
of
The Audio Engineering Society

Inside A Cellular Telephone

Presented by Scott Mehrens
Software Engineer, Motorola, Inc

7:30pm, Monday, June 27, 2011
Museum of Communications
7000 East Marginal Way South
Seattle, WA 98108

1.5 miles south of the Museum of
Flight

[Museum Web + directions](#) [Picture \(from rear\)](#)

[RSVP Requested](#)

Please join us at the Museum of Communications for what promises to be interesting, informative, as well as a bit of Yin and Yang. If you are an AES Member, we ask that you especially attend this meeting because we need a quorum of 15 members present to hold our yearly officers and committee election.

Those of you who are old enough to remember the *Dick Tracy* comic strip will remember that Tracy had his share of technology, even in what could be truly looked upon as the Dark Ages. Tracy had a 2-way radio that was the size of a wrist watch, and it kept him in touch with HQ. Police radios still haven't gotten quite to that size... yet, but in the meantime, look what's happened to our telephone!

Now smaller than a Star Fleet Communicator, and considerably more capable, today's cell phone has evolved into something that some of us curse, some of us find tolerate, and still others find indispensable. It's certainly changed the concept of "Reach out and touch someone!"

At our June meeting, Scott Mehrens, software engineer with Motorola, will lead us thru the evolution of this amazing tool (now remember, a hammer is also a tool), and give some insight into what makes these things tick.

- Brief history of Motorola Communications Technology from Apollo to the Droid
- 40,000 ft overview of cellular RF

2011 Election Notice

At our June meeting, we will hold our annual elections to elect the Officers and Committee for our section. All members and associate members are invited to attend and vote.

The Slate of Candidates is:

Officers

Chair Dan Mortensen
Dansound Inc.

Vice-Chair Greg Mauser

Secretary Gary Louie
University of Washington School of Music

Treasurer Dave Franzwa
Maple systems

Committee

1 Bob Smith
Medtronic | Physio Control

3 Rich Williams
Lunchbox Audio

5 Rob Baum
Nytec | Microsoft

7 Rick Chinn
Uneeda Audio

9 Dr. Michael Matesky
Opus 4 Studios

Additional information, including biographical sketches of each candidate, [can be found here](#). (click the link)

(GSM/CDMA/3G/4G) (multi-path, channel coding);

The industry has YET to meet an acronym they didn't like!

- Handset side acoustics (mic/speaker selection, wired/bluetooth headsets & docks)
- Handset acoustic echo canceler, noise suppressor & other tricks to improve voice quality in narrow band audio (8kHz)
- 40,000 ft overview of the Android Gingerbread audio framework
- Handset multimedia (audio): how to maximize ringtone loudness, how to create virtual speakers with loudspeakers & headsets

About The Museum of Communications

The Museum of Communications reveals the history of the telephone and the central office switches that make it all work. Exhibits from 1876, starting with a model of Alexander Graham Bell's first attempt at creating a communications device, to the modern phone that we all take for granted today. Automated displays and special exhibits permit hands on participation. A self guided tour is available as well as guided tours provided by the volunteers. There are 3 working telephone switches on display. Trace a call through the switch from the caller's phone going off-hook, dialing, and the ring at the distant end.

n.b. The 'museum' doesn't look like a museum. It is a working Qwest switch building, and the 'museum' takes up some of the upper floors. Signage might be minimal. Parking in the rear of the building, access via Corson Ave.

About Scott Mehrens

Scott Mehrens has been working in the audio industry for 13 years. Scott started his career at International Jensen Inc in Schiller Park, IL as a loudspeaker test & measurement engineer; he worked on a semi automated loudspeaker test system used on the production line to check quality. The last ten years have been at Motorola working on speech & multimedia software including acoustic echo cancelers, noise suppressors, dynamic processors, graphic EQs & stereo spatializers.

Scott joined the AES in 1997 and is a charter member of the Audio for Telecommunications Technical Committee. Scott likes to experience Seattle's live music scene with the help of his trusty ER 20 Hi-Fi ear plugs. His young daughter enjoys attending AES meetings.

Bob Moses

AES PNW 2010-2011 Section Chair

n.b. *The material presented at our meetings is the opinion of the presenter and not necessarily that of the Society. You are encouraged to conduct your own research and to form your own opinions before adopting the presented material as Truth.*

Our meetings are open to anyone interested in Audio. AES membership is NOT required for you to attend our meetings.

2010-11 Officers									
Chairman	Vice-Chairman	Secretary	Treasurer	Refer to the Officers and Committee contact list for contact information.					
Bob Moses	Rick Chinn	Gary Louie	David Franzwa						

Program Committee									
Committee 1	Committee 2	Committee 3	Committee 4	Committee 5	Committee 6	Committee 7	Committee 8	Committee 9	Committee 10
Bob Smith	Mark Rogers	Dan Mortensen	Steve Malott	Aurika Hays	JJ Johnston	Greg Mauser	Dr. Ivan Tashev	Dr. Michael Matesky	Rick Senechal

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