

## Looking Ahead

- Final meetings of the season swap dates in late-breaking calendar change.

John Newton and Soundmirror will host the next meeting on **Wednesday, April 14**. See Page 2 for details.

- David Moulton presents the Rasch Model and an analysis of microphone pre-amp listening-test data at GTE on **Tuesday, May 11**.

- Are there meeting topics you've always yearned for or guest speakers you've always wanted to meet? The BAES has the contacts and the budget to make your dreams come true!

Join the executive committee and help plan the 1999-2000 BAES season. Contact any officer for information.

## Moog reflects on analog music synthesis at Berklee meeting

By MICHAEL FLEMING

"I know next to nothing about digital. I'm learning slowly. I like digital; I should say that...."

Robert Moog began his presentation to a capacity audience at the Berklee College of Music on March 29 with this gentle disclaimer. But a broad grin appeared on his face as he finished his sentence with the words, "but I *really* like analog!"

From the mid 1960s through the late 1970s, the Moog name was almost synonymous with the fledgling electronic musical instrument (MI) industry. After almost single-handedly creating a market in 1964 for modular, voltage-controlled music synthesis components, Moog went on to introduce the Mini-Moog synthesizer in 1970. This compact, keyboard equipped device had an initial production run of 100 units. Moog reported that close to 13,000 were eventually shipped during the glory days of the analog synth, and their distinctive sounds graced pop records from Emerson, Lake and Palmer and Paul McCartney to Mannheim Steamroller and Jan Hammer.

At this meeting co-sponsored by the Berklee College of Music student AES section and the Boston AES section, Moog reflected on the unique convergence of technology and artistry that created the MI industry. He also noted that "fashion goes around in circles." Thus, the renewed demand for well-crafted analog audio components has allowed Moog to continue to develop a range of synthesis and processing products, which he now markets under the tradename Big Briar.

Moog was an engineering student at Columbia University (1955-57) when he helped composer Vladimir Ussachevsky establish the university's first magnetic tape-based electronic music studio. In those years after WWII, the ability to manipulate sounds recorded on magnetic tape had

inaugurated a whole new approach to music composition. Meanwhile, the example of earlier pioneering instruments like the theremin and ondes martenot reminded musically-inclined engineers that simple electronic oscillators offered a great deal of expressive potential.

As manufacturing advances drove down the prices of semiconductor devices in the late 1950s and early 1960s, engineers began to experiment with a variety of custom-designed noisemaking circuits. Moog's modular synthesis products captured the convergence of these trends and tools at just the right time. And the audible results captured the attention of the mainstream public in 1969 with the release of Wendy Carlos' *Switched-On Bach* transcriptions played on a Moog synthesizer.

All of a sudden, Moog recounted, the synth was able to produce "real music." (What is "real music?" he challenged the audience. Answer: "Music that makes real money.") The failure of numerous copycat "Switched-On" albums, however, emphasized the fact that new high-tech sounds did not obviate the need for musical quality.

Moog's presentation included audio demonstrations of many features of the Mini-Moog synthesizer. Beginning with a saw-tooth waveform ("a very simple signal to generate using an analog circuit," he explained), Moog showed how simple, time-varying filters can be used to produce a remarkably diverse set of sounds ranging from thoroughly artificial species to others resembling horns and strings. He also illustrated the "musically-attractive" distortion characteristics of the analog circuits in two of his Big Briar effects boxes.

The enthusiasm of autograph seekers afterward seemed to confirm that the Moog name remains relevant, even in a highly digital world.

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**Next Meeting:  
Wednesday, April 14**

**By E. BRAD MEYER**

Our April meeting will take place on Wednesday, April 14, at John Newton's Soundmirror studios in Jamaica Plain. Soundmirror has offered specialized classical and acoustic music recording services to both local and national clients for over twenty-five years.

Since most Soundmirror recording is done on location, the studio is principally a post-production facility. After a brief talk on the current state of multichannel recording, we will split into three groups for presentations on editing, mixing and mastering.

Newton is currently mixing to two-track for most projects, but he will discuss future options for multichannel release. One of the demonstrations will likely involve mixing to picture.

There will be food and drink at the meeting, and after 9:00 p.m. we are invited to retire to Doyle's, the famous Jamaica Plain watering hole, for further discussion.

**Post-production  
at Soundmirror**

Location: Soundmirror  
76 GreenStreet  
Jamaica Plain, MA  
(617) 522-1412

Two blocks west of the Green Street T-stop on the Orange Line. (Local street parking available.)

Reception: 6:30 p.m.  
Meeting: 7:00 p.m.

**DIRECTIONS:** (1) by MBTA: Take the Orange Line to the Green Street station (the next-to-last stop). When you come out of the station, go left on Green Street for two blocks to reach Cheshire St. The studio entrance is off Cheshire.

(2) By CAR: Head south from Boston on Columbus Avenue via Tremont Street. Turn right on Centre St. and then left on Lamartine. Lamartine ends at Green Street one block east of Cheshire. Park on side streets where possible. Resident-only signs do not apply after 6 p.m.



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