ARSC New York Chapter
APRIL 2018 Meeting

7:00 P. M. Thursday, 4/19/18
→At the CUNY Sonic Arts Center←
West 140th Street & Convent Avenue, New York
Or enter at 138th Street off Convent Avenue
Shepard Hall (the Gothic building) – Recital Hall (Room 95, ground floor)
An elevator is located in the center of the building

Gary A. Galo
Audio Engineer Emeritus, The Crane School of Music,
SUNY at Potsdam, NY

Digital Phase Correctors and Stereophonic Recordings: To Phase Correct or Not to Phase Correct: That is the Question!

Phase correction software is included with many digital audio editing and restoration programs. Stereo playback of monaural source material, both disc and tape, has multiple advantages, and phase correction software can be extremely useful for aligning the two channels prior to summing them to mono. Engineers who have specialized in transfer and restoration of pre-stereo material can easily misinterpret the Lissajous patterns produced by stereophonic recordings as a defect requiring correction. This paper will examine the basics of stereophonic recording, the phase relationship of the two stereo channels created by common microphone techniques, and the need to exercise proper judgment before "fixing" something that may not be broken. This is a slightly expanded version of a presentation given at the ARSC national conference in San Antonio, TX in May 2017.

Transferring PCM-F1 Digital Audio Tapes

The PCM-F1 was a portable digital audio recording system introduced by Sony in 1981. Though originally marketed as a consumer product, the PCM-F1's excellent audio quality and affordable price made it far more popular in professional audio circles. This portable digital processor encoded digital audio onto a video carrier for storage on Beta-format video cassettes. Most users chose Sony's matching SL-2000 Beta recorder. The PCM-F1 digital processor was not equipped with a digital audio output, making it undesirable for transferring these recordings to modern digital formats. Sony subsequently manufactured F1-compatible digital processors with S/PDIF digital outputs, including the PCM-601 ESD. This paper will outline a procedure for transferring

PCM-F1 digital recordings using a PCM-601 ESD processor and a stand-alone digital recorder. Practical solutions to the four issues facing anyone transferring PCM-F1 recordings will be covered, including: the non-standard 44.056 kHz sampling rate, the 50 µSec /15 µSec pre-emphasis curve, the inter-channel time delay, and DC offset. The presentation will explain how a stand-alone digital recorder easily solves the first two problems, and how the remaining two can be addressed with most computer-based digital editing programs. This is an expanded version of the presentation to be given at the ARSC national conference in Baltimore, MD in May 2018.

Gary Galo retired in 2014 after thirty-eight years as Audio Engineer at The Crane School of Music, SUNY Potsdam, where he also taught courses in music literature and audio technology. He has been an ARSC member since 1982, was the Sound Recording Review Editor of the *ARSC Journal* from 1995-2012, was co-chair of the ARSC Technical Committee from 1996-2004, has been a frequent presenter at ARSC national conferences and New York Chapter meetings, and has written numerous articles, book reviews and sound recording reviews for the *ARSC Journal*. Mr. Galo is a widely published author with over three hundred articles and reviews to his credit on both musical and technical subjects, in over a dozen publications. He is a Regular Contributor to *audioXpress* magazine, has reviewed numerous books for *Notes: Quarterly Journal of the Music Library Association*, is the author of the "Loudspeaker" entry in *The Encyclopedia of Recorded Sound in the United States*, and has also written for *Linear Audio*, the *Newsletter of the Wilhelm Furtwängler Society of America*, and *Toccata: Journal of the Leopold Stokowski Society*. He is also a member of the Audio Engineering Society and the Société Wilhelm Furtwängler. Email: galoga@potsdam.edu

Our next meeting will be on May 17, 2018

"Soloists as Collaborators: pianists in concert with other musicians" with Joseph Patrych and Walter Winterfeldt

⌘

DIRECTIONS TO THE SONIC ARTS CENTER

Subway: Take the 1 train to 137th Street City College and walk north to 140th St. & Broadway, then go east to 140th St. & Convent Avenue. Take the A, B, C, or D trains to 145th St, go south on St. Nicholas to 141st St, (one long block), then west one block to Convent Avenue, and south one more block to 140th & Convent Avenue. **Bus:** M4 and M5 on Broadway; M 100, 101 on Amsterdam Ave. (one block West of Convent Avenue)

Sonic Arts Center

The Sonic Arts Center at CCNY offers 4-year Bachelor of Fine Arts degrees in Music with a concentration in Music and Audio Technology. Their program provides an in-depth curriculum emphasizing real-world skills with a project-based approach. Students enjoy a well-rounded program, with emphasis on audio technology, music theory, orchestration, and history to help them compete in a field that today demands an ever-growing and highly diverse skill set.

All ARSC NY Chapter meetings are free and open to the public.
Voluntary contributions to help defray our expenses are welcome!