Minutes of AES TC-4 Acoustics and Sound Reinforcement

The open meeting of the AES TC-4 took place on Friday, 8 october 1993, 17:30-19:00, at Jacob K. Javit's Convention Center, New York, immediately following the Auralization workshop. These minutes have been edited slightly so that the meeting discussions appear in their proper context.

Present:

    Mendel Kleiner (chairperson)
    Neil A. Shaw (AES TC-4 member)
    Wolfgang Ahnert
    Kurt Graffy (AES TC-4 member)
    Hellmuth Kolbe
    Jim Brown
    Kenneth D. Jacob (AES TC-4 member)
    James Angus
    Keiji Oguchi (AES TC-4 member)
    Brian Conolly
    David McGrath
    David Prince
    Paul D. Bauman
    Mark Ureda
    Bob Thurmond
    Akira Mochimaru

Not present:

    Søren Bech (AES TC-4 member)
    Joel Lewitz (AES TC-4 member)
    David Klepper (AES TC-4 member)

Mendel Kleiner opened the meeting and started by thanking Neil A. Shaw for his efforts in arranging the Workshop on Auralization and Kurt M. Graffy for his efforts in arranging

the sessions on Auralization - Progress in modeled and Reproduced Environments as well as Topics in Acoustics and Auralization.

Mendel Kleiner informed of the possible addition of Paul Bauman to the technical committee.

Neil A. Shaw reported on the practical problems of arranging a workshop and it was decided that Mendel Kleiner should bring these to the attention of the technical council.

The minutes from the meetings in San Fransisco 1992 and Berlin 1993 were reported on.

The meeting then concentrated on discussing possible activities for the 1994 AES conventions in Amsterdam (96th) and San Fransisco (97th).

Kurt M. Graffy brought up the question of verification of computer modeling programs in general and auralization systems in particular. Seconded by Jim Brown, Kurt M. Graffy stressed that it was time for an initiative by the committee in this respect. Kurt Graffy volunteered to try to put together a session. A long and intense discussion followed in which Kenneth D. Jacob, Mendel Kleiner, Hellmuth Kolbe, and Wolfgang Ahnert also took part. It was hard to reach an agreement on which form such a verification process should have. Mendel Kleiner informed of the verification activity with regard to general architectural acoustics prediction programs which has been initiated by M. Vorländer at the Physikalisch-Technische Bundesanstalt, Darmstadt, Germany. Kurt M. Graffy suggested the use of a hall in San Fransisco for the AES 97th convention excersize, since it would then be possible for the attendants at the convention to visit the hall and compare impressions with calculation results. Kenneth D. Jacob suggested the use of an acoustic teapot, i.e. a standard acoustic room. This room need not necessarily exist but could be specified in some way. (Peter D'Antonio wants to use a small room in his factory for

this purpose as discussed at the AES sc-4-2 meeting 93-10-07).
Mendel Kleiner discussed how various programs can work
differently depending on the size, shape, geometrical
complexity and properties of the boundaries of the room. There
is a need of verification for example of sizes 100, 300, 1000,
3000, 10000 m^3. It was decided that Kurt M.Graffy would try to
put together a session on Efforts on Auralization Verification.
This would allow system designers/manufacturers to present
verification results at their own pace. Hopefully competition
between system designers/manufacturers will lead to a
reasonable pace in these efforts. Kenneth D. Jacob promised to
think of how the acoustic teapot should be designed. Hellmuth
Kolbe stressed that "garbage in garbage out", i.e. new
recordings of audio source material should be made, can AES
sponsor this?

Kenneth D. Jacob then discussed the subject of virtual audio
reality in the context of games, entertainment, telepresence
etc., and feared that the AES would be run over by computer
freaks and IEEE-people if no initiative was taken to bring this
within the scope of the AES. Should auralization be merged with
virtual audio reality? Kurt Graffy felt that auralization was
now such a well-known subject that it was unsuitable to skip a
well established name and try to promote a different name.
Besides there are large differences between methods aimed at
professional use and those used for entertainment purposes.
Kenneth D. Jacob will however give consideration to how the AES
can be involved in virtual audio reality activity.

Paul D.Bauman brought up the subject of electronically
steerable large loudspeaker arrays for sound reinforcement.
This subject has been brought up at previous meetings of the
technical committee. The activity in the industry now seems
higher and there will be a symposium/convention in the near
future on this. Paul D. Bauman will attend this symposium and
report back to the committee. It may then be possible to get
something together for San Fransisco.

Respectfully submitted,

Mendel Kleiner