

AES Historical Committee Project: History of Audio Engineering as Told Thru the Audio Engineering Society Journal – Introduction

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Here is the formal description and update of a project that I mentioned at the Historical Committee meeting at the San Francisco Convention in 2006-10.

The history of audio engineering is told in many professional journals¹ and popular magazines². But this project is about the AES Journal, which tells a history of audio engineering starting in 1948 and extending to the present. The first suggestions for an “Audio Engineering Society” were published in “Audio Engineering” magazine (AE) in 1948 [1], and later republished in the AES Journal (now online) [2]. The first AES Convention and Audio Fair was in 1949, and some of the papers from that Convention thru the 4th Convention (1952) were published in the “AES Journal” which was, at that time, a section of AE. Dave Dintenfass and I have collected and scanned these papers, and made PDF files, in order to make the early J AES papers available as “Volume 0” of the Journal. This paper is now called “How the Audio Engineering Society Began, and Volume 0 of the AES Journal – 1947...1952”, and is online at the AES Historical Committee website [1] .

In 1953 the Society started publishing its own Journal. The Journal contains two kinds of papers, that I have labeled “Technical”, and “History”. (At Headquarters, the former is called the “front of the book”, and the latter the “back of the book”.) The “Technical” papers are identified in the “Contents” as “papers” (formerly “articles”), “engineering reports” (formerly “project notes/engineering briefs”), “communications”, “letters to the editor” (at one time “forum”), and “corrections”. The “History” papers are “standards and information documents”, and “departments”. The “Features” are mostly “History”, tho there are some that are “Technical”.

In 2000-12 the Society had all of the Journals scanned professionally by Mira Digital Publishing to TIFF files, stored on a set of 19 CD-ROM disks for use by the headquarters staff. The “Technical” papers were then converted by Mira to PDF files and OCRed to what Adobe calls “text behind the image”, so they are computer searchable, and these were sold as the AES Electronic Library, copyright 2001. There is a free online index those papers [3], and the papers themselves are also available for purchase individually at that site, or by subscription online [4] .

The “History” part contains everything concerned with the history of the Society and its members (and some other miscellaneous things, too). These came to be identified in the Contents as “Departments”, “Standards and Information Documents”, and “Features”. An average Journal is about half “Technical” and half “Historical”, and the “Historical” half is itself typically half full-page advertisements.

¹ In the US: Bell System Technical Journal (BSTJ); Acoustical Society of America (J ASA), Society of Motion Picture Engineers (SMPE), later Society of Motion Picture and Television Engineers (SMPTE); Institute of Radio Engineers (IRE), later Institute of Electrical and Electrical Engineers (IEEE); and IRE Professional Group on Audio (PGA). Others of importance?

² In the US: Audio Engineering , later Audio; DB; and Recording Engineer/Producer (Re/p). Others of importance?

A more detailed listing of the “History” part includes the following:

- ! Advertisements
- ! AES Conventions and Conferences (Announcements, Programs, Reports, Exhibits and Exhibitors)
- ! AES News (in the first several volumes, includes most of the things in this list)
- ! AES Officers, Governors, Committee Chairs, Technical Committees, Editorial Staff, Review Board, and Administration (before 1981, this was included on the Contents Page).
Then, beginning with Vol 38:04, the **Standards Committee members** and the **Standards Subcommittee names** and **Working Group names** were added; and beginning with Vol 39:11 the **Subcommittee and Working Group numbers** were added.
- ! AES Officers (bios & photos)
- ! AES Special Publications
- ! Available Literature
- ! Book Reviews
- ! Bylaws
- ! Contents Page (before 1981, also included the Officers etc.)
- ! Current Publications on Audio
- ! Editorials
- ! Features and Tutorials
- ! Indexes (for each volume, by subject and by author)
- ! “In Memoriam” (obituaries)
- ! Membership Information and Membership Applications
- ! New Products and Developments
- ! News of the Sections
- ! Patent Reviews
- ! Sections news appears under various titles:
 Section Meetings, Section Meeting Reports, News of the Sections, Sections Directory” (1979 +).
- ! Shopping the Audio Market (new products)
- ! Sound Track (About People, About Companies, Courses & Seminars, and Conferences and Meetings)
- ! Standards News
- ! Sustaining Member Organizations
- ! Upcoming Meetings

I have used Microsoft Office Document Imaging to extract from the full set of TIFF files the “History” part of the Journal – that is, everything that is not in the “Technical” material already in the Electronic Library. After the extraction, I have processed these TIFF files thru Adobe's “Acrobat Version 7” “Batch” process, setup to make PDF files that have been “optical character read” (OCR) and “file size reduced”.

From this I have further extracted the Contents pages of all of these Journals. From these, one can search for and extract the “Technical” contents in their historical context, the titles of the “History” items (which are unfortunately not well indexed), and not only the things that are in Plunkett's “History” (see below – the officers, governors, and journal editors), but also the early [Vol 1 (1953)...Vol 25 (1977)] Committee Chairs, Publications Committee/ Editorial Board, Staff, and Sections that are not otherwise available electronically. For later years, you need the complete “History” (below) – at least until someone extracts those pages with the Officers and Chairs.

I have combined the issues of “History” into five ten-volume groups (0...9, 10...19, etc). Each group is by issue (Vol 1N1, Vol 1N2, etc, about 2...10 MB per issue), for ease of searching a particular issue or decade for a name, subject, etc. The PDF files have “tabs” on the left side: “Bookmarks” leads you to the individual issues, by Volume, Number and Date; “Pages” gives thumb-nail views of the pages. If you frequently need to search *all* of the volumes for something, I suggest that you use a PDF editor to combine all five groups into an “ALL” file (about 3 GB total), for ease of searching all of the Journal Volumes 0...49 at one time. With such text you can use Acrobat or a free Acrobat Reader to read these files as an image, and to search³ for words, or to copy words, lines, or blocks of text, which are “text behind the image”, just like the “Electronic Library”.

³ The Acrobat OCR does a pretty good (but not perfect) job of reading the characters with continuous English-language text, but I have not proof-read any of the text, so there are errors, and for any critical application, you must proof read the text. (This is also true with the Electronic Library.) In particular, some of the Journal pages are “fancied up” by the Journal production staff with half-tone gray or color backgrounds, and these defeat the Acrobat OCR function. So a search of, for instance, the file of “Contents” pages (some of which have gray backgrounds) will not actually search all of the pages. I do not know how to repair this, short of perhaps re-scanning these pages, with the scanner set up to suppress the gray or color background. But that's a project for another year. Sometimes an item is listed twice, once with half-tone background, on once without, and you may have to look at *both* entries to find what you want.

The “History” DVD-ROM, which includes this paper and all of the contents pages, extracted, is about 3 GB, which will fit on one disk. With this, those who are interested can extract specific topics, such as those listed above.

About half of the “History” part is the full-page advertisements. In many cases the same advertisements are run many times in consecutive issues, so it might make sense to extract the full-page advertisements, in order to make the “History” part into two parts, “ads” (ads only) and “-ads” (without ads). Rick Chinn and Brent Punshon will be working on this project. How the finished “History” will be made available is still under discussion. But organization into categories such as those listed above will be necessary to make the material useful.

In some cases it is also necessary or convenient to edit the PDF pages – such things as removing advertisements from the obituary pages, for example. This is easily done on the TIFF files by using “Photoshop Elements”. With the finished PDF files, this is easily done with the “Foxit PDF Editor”⁴.

Some of the “History” part has already been extracted and published:

Don Plunkett, former Chair of the Historical Committee, manually extracted and published the History of the AES [5], including the Founding of the AES, Officers and Governors, Conventions and Conferences, and Awards.

I have prepared an index of the obituaries, and placed it online [6]. I have also placed all⁵ of the actual obituaries files there, linked to the index.

MAKING THE REST OF THE “HISTORY” FILES AVAILABLE

The Society has not as yet republished the entire “History” part online or on disks, so there are still many things in the “paper” Journal that are not generally available unless you have a paper copy of the Journal⁶. This also includes all of the monochrome and color photographs which are not very well reproduced in the “History”: The original Mira scan has no color, and the monochrome is generally too-low resolution for good and moire-free reproduction. It also includes many Journal pages that have text over half-tone backgrounds, and this cannot be read by OCR.

Roger Furness has indicated that we should not make the “History” available free. Just how we should publish this material is yet to be decided. In my opinion the raw (unorganized) “History” would be of less interest to most readers than extracts of particular topics. Perhaps we could entice some volunteers to extract and organize a category by giving them (for AES use only) the DVDs of the “History” material. Roger has given permission to do this.

At this time (2008-09) we have one volunteer working to extract all of the Convention material from the History, and two volunteers to extract the advertisements.

Now that the all of the “History” is done – extracted, PDFs made and OCRed – I would like to hear from everyone who would be willing to organize a subject of their choice. I would also appreciate suggestions from all, but especially Roger, on how we should eventually make this “History” available.

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Journal\History-of-Audio-Engineering-as-Told_Intro\history-of-audio-engineering-as-told-thru-the-aes-journal.wpd

References

[1] J. McKnight, “How the Audio Engineering Society Began, and Volume 0 of the AES Journal – 1947...1952”, an index of publications with links to all of them, <http://www.aes.org/aeshc/how-the-aes-began.html> .

[2] “How it all began”, reprinted from, J AES V21:09, pp 762, 764, 766, 768 (1973 Nov), http://www.aes.org/aeshc/AES_How-It-All-Began.pdf .

[3] Index of articles in the AES Journal, <http://www.aes.org/journal/search.cfm>

[4] AES On-line E-Library, <http://aes.org/e-lib/online/>

⁴ Foxit PDF editor, <http://www.foxitsoftware.com/> , about 100 \$.

⁵ The set of Mira TIF scans of the Journals from 1953...1998 Issue 11 takes 19 CD-ROM disks. We have not been able to find the scan of the Journals from 1998 and 1999 , so the “History” from these two years is so far missing from my files. I have scanned the missing obituaries from the paper Journals and placed them on line.

⁶ The full TIFF set of the Journals in the original TIFF form is 11 GB, which fits on three DVD-ROMs, which I have sent to Roger Furness at AES HQ. The TIFF files are easily read and edited with the “Microsoft Office Document Imaging” program.

[5] Don Plunkett, several Histories of the AES, <http://www.aes.org/aeshc/docs/aeshist/history-of-the-aes.html>

[6] J. McKnight, Cumulative Index of Obituaries in the AES Journal, with Links to All <http://www.aes.org/aeshc/docs/jaesobit.html> .