"Dedicated to Improving Communication among ASHRAE's standing Historical Committee, Regional and Chapter Historians"

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As we approach the 125<sup>th</sup>. Anniversary of ASHRAE many of you will be working on projects involving industry and Society history. One of the first concerns will be "How do I find historical information?"

I've been looking into our heritage for more than 40 years and learned a lot about locating historical information. What follows is a summary of some of that knowledge in hopes that this will make it easier for any of you to do the same. Most of what follows applies to US sources, which I am most familiar with. But the general approach applies also to world-wide sources.

#### **Researching Industry History**

Accuracy is the most important component.

The most accurate record is to be found in the trade press, that is, the various magazines, journals or newspapers featuring or exclusively devoted to our industry. This includes technical society journals and conference proceedings. (see a partial list at the end of this article). These sources provide a continuous record of industry practice and new products where you can not only find and date innovations but also see industry trends, lasting as well as temporary. Trade publications typically have sections on new products and many older issues have sections on new patents and most have product advertisements. You will be surprised at the information you can find in the trade press and industry/society journals. If you are looking for information on individuals or portraits look in these sources and don't forget obituaries. These publications are found in libraries or some can be accessed digitally online from sources such as Google or Hathitrust. Also keep in mind that earlier trade publications separated all the advertising in a separate, continuous section, often with independent page numbers. Unfortunately many libraries stripped the advertising sections when binding the publications. However some libraries retained the advertisements and these would be most useful for research. Trade publications do not exist prior to about 1865. Before that time industry information is found in more general publications covering science, industry and industrial arts, etc.

Another good source of information is engineering textbooks. These are usually a good way to view the best engineering practice in use at the date of publishing. Also the *ASHVE Guide* and the *Refrigerating Data Book*.

Next in accuracy are company catalogs and other literature. However, often these sources are undated. Old company literature can sometimes be accessed from the company itself if still in business. It can also be found in libraries, particularly those with trade catalog collections such as the Smithsonian Institution, Canadian Centre for Architecture or Hagley Library. Some of this

material is being digitized for on line availability. Company catalogs can also be found in bound groupings published for builders and architects such as Sweets. If you want to purchase original company literature look in bookstores and online sources such as Ebay.

In many cases the least accurate source is the personal recollections of industry participants. Accurate memory naturally fades with time. Although an "old timer" may have a good general recollection of projects and milestones they participated in, actual dates may or may not be accurate, so cross check the information if you can.

When using general histories in articles or books it is a good idea to go to the original information sources that the author used if they are given. Authors do make mistakes in repeating or interpreting original sources. Also, by going to the original sources you may find a lot of additional information the author didn't use as well as visual material and also other trails of information you can follow.

# **Researching Society history**

Many ASHRAE chapters have their own newsletters and some go back a long time. If your chapter has an archive of them, that is a source for local history. But where do you find older Chapter history, or Regional or Society history? The only way is to access Society official publications. We are all familiar with the *ASHRAE Journal* and *ASHRAE Insights*. These are recent publications that can be used for chapter, regional or Society history. The *ASHRAE Journal* dates back to 1959. Looking for history before 1959? You have to access the official publications of ASHRAE's prior Societies: American Society of Refrigerating Engineers and American Society of Heating and Air Conditioning Engineers/American Society of Heating and Ventilating Engineers.

American Society of Refrigerating Engineers

Society and chapter information is found in: *Transactions of the American Society of Refrigerating Engineers* 1905 -1913; *ASRE Journal* 1914-1921 and *Refrigerating Engineering* 1922-1958. American Society of Heating and Air Conditioning Engineers / American Society of Heating and Ventilating Engineers

Society and chapter information is found in: *Transactions of the American Society of Heating and Ventilating* Engineers 1895-1958; *ASHVE Journal* 1915-1929 and the "Journal Section" of *Heating, Piping and Air Conditioning* 1929-1958. The trade publication *Heating and Ventilating Magazine* between 1905 and 1929 also reported on ASHVE meetings, etc.

**Pre-Society History** 

If you want to look at the history that led to the formation of ASHVE and ASRE you would have to access the trade publications that carried articles about the organizing meetings. For ASHVE look at issues of *Heating and Ventilation* for 1893-1895. For ASRE look at issues of *Cold Storage and Ice Trade Journal* as well as *Ice and Refrigeration* for 1904 and 1905.

## **Finding source material**

How do you locate material such as trade publications, textbooks or catalogs? The obvious is to do an internet search. A specific search can be done on WorldCat (<u>www.worldcat.org</u>) to locate

libraries having what you are looking for in their collections. You can search using general subjects or specific authors or titles. Search starting from the specific to the general, but search over the entire spectrum to be sure you don't miss something. Many trade publications and journals provided yearly indexes that are usually found at the beginning of bound volumes of the publications. Indexes to ASHRAE publications are posted on the ASHRAE website at <a href="https://www.ashrae.org/resources--publications/ashrae-indexes">https://www.ashrae.org/resources--publications/ashrae-indexes</a> or search for "ASHRAE Indexes." When you find useful information you may be able to directly access it digitally, but in many cases you will either have to arrange and pay for a copy of the information or go the source to look at it and take notes or make your own copies. Many libraries will do interlibrary loans of books to your local library. Most libraries will not loan out journals and magazines.

Don't forget ASHRAE which has a very good collection of industry and society information that you can access through the Society's Librarian Emily Sigman. A list is on the "ASHRAE and Industry History" page on the ASHRAE website

Information pertaining to specific out of business manufacturers and their products can sometimes be found in collections of company records donated to libraries and institutions. An internet search using the manufacturer name can turn these up.

Use out of the box thinking about where information may be located. For example, if you are researching early heating industry history, look beyond heating. Heating involves boilers with pipes and furnaces with ducts and before that, stoves. So you look at plumbing and sheet metal trade publications where you will find a lot on early heating technology, engineering and products. Don't forget about end users of what you are researching. For example if you are looking at early air conditioning history additional information can be found in the trade publications covering the textile, candy manufacturing hotel or motion picture industry and so on. Early refrigeration industry information is in the publications of its end users such as brewing, ice and cold storage. Also keep in mind changing terminology over time. You won't find the term "air conditioning" anywhere before it was first used in 1905, but both industrial process and comfort air conditioning did exist before then – they just called it refrigeration or cooling. HVAC&R engineering wasn't recognized as a separate discipline before the 1880's. Instead it was considered mechanical engineering and earlier still, civil engineering. And so you find HVAC&R information in mechanical and civil engineering society publications in the 1800's and before.

#### **Visual Material**

Locating visual material can be one of the most difficult parts of historical research. Using the research ideas above you may find information, but it may or may not have visuals embedded in it and you won't know unless you look at it. Reproduction of the original visuals is possible with varied technology. Access the original if you can and reproduce it in the fewest steps possible. Original photographs or negatives, especially black and white, yield good copies. Earlier printed publications used very high quality black and white line art and engraved plates and these yield very sharp copies. Later publications used screened illustrations which, if scanned, should be done using a de-screen setting. You can get good reproductions using a simple digital camera and most libraries will allow you to take photos of their material. Copy machines of today usually provide

good copies. Keep in mind that every time a visual is duplicated there is a loss of quality. Images of machinery and people should be scanned or photographed at 600 dpi resolution or greater. 200 dpi is sufficient for drawings or other line art.

### **Credits and copyrights**

Be sure to record your sources of your research. When writing articles or research papers credit the source of your information. Information crediting is not only honesty, but it helps future researchers who access your research and want to look further into your sources. I have been frustrated many times reading a very good history that I want to research further but find no references to the source material. Also, some providers of information or visuals require a credit for using their information.

Be aware that some information you use may be copy written and if you quote or reproduce a visual from it you may need permission to use the quote or visual. Generally, older material and visuals either were not copy written or the copy right is expired or the publication has ceased. In those cases you can use the material freely, but remember to credit the source. Advertising material and catalogs are usually not copy written.

### How much time and effort can you put into it?

We are all busy with our business and personal lives and good historical research can take a lot of time. When you get into it you will find that one trail leads to another. You will have to decide how much time and effort you can afford to give to the project.

I hope that this information will streamline the process for you. Have questions about any of this? Perhaps I can help. Email me at <u>berannag@hotmail.com</u>

#### See list of publications on the next page

**Consider** attending the Historical Committee meeting on Sunday morning, at the St. Louis annual meeting. Regional Historians are non-voting members of the committee. Chapter Historians are welcome and anyone else interested in the History of our Industry and ASHRAE. Hope to see you there!

Bernard Nagengast Newsletter Editor

# Partial list of trade press and journal source material

Here is a list of publications devoted to our industry, starting with the earliest in the 1860's. This list is not comprehensive and is of American publications. Some publications are repeated in the list with later name changes. Many other countries have similar publications also, available at universities and libraries. Use WorldCat to find them.

American Artisan The Metal Worker Ice Trade Journal Domestic Engineering Heating and Ventilation The Metal Worker, Plumber and Steamfitter ASHVE Transactions Cold Cold Storage ASRE Transactions Ice Cold Storage and Ice Trade Journal The Heating and Ventilating Magazine ASRE Journal Engineering Review Refrigerating World Refrigerating Engineering ASHVE Journal Heating and Ventilating

Sheet Metal Worker Refrigeration The Aerologist *Electric Refrigeration News* Heating, Piping and Air Conditioning Automatic Heat and Air Conditioning *Heating and Air Conditioning Contractor Refrigeration Service Engineer* Air Conditioning and Refrigeration News Air Conditioning, Heating and Ventilating Industrial Refrigeration Refrigeration Industry Refrigeration Service and Contracting **Refrigeration Abstracts** Commercial Refrigeration and Air Conditioning ASHRAE Journal Air Conditioning, Heating and **Refrigerating News**