125th Anniversary Celebration



In early 2018, the ASHRAE Historical Committee proposed multiple projects in celebration of ASHRAE's 125th anniversary. Many suggestions were made as to the coverage, format, and possible authors for the work; and, these projects eventually included writing articles for the ASHRAE Journal, creating a historic calendar, and compiling biographical information on men and women who had made substantive contributions to the art and science of the industry that ASHRAE serves. ASHRAE even created a lapel pin for members who wanted to join in the celebration (right). Society President Chuck Gulledge, in the 2020-2021 PAOE categories, create two Presidential Initiatives to celebrate the 125th Year Celebration. This article is one way to achieve these points. I hope you enjoy it.

ASHRAE and Industry History – Continued Part 3

By 1885, refrigeration as an industrial practice was already established in the United States. Recognized as a world leader in refrigeration, the main applications were the production of ice and beer and cold food storage. Where Australia and New Zealand were also industry leaders, their primary uses were mechanical refrigeration for food preservation, for shipping frozen meats to other countries and for producing beer (a common and necessary theme!).

By 1900, manufactured ice in the United States could be made for low cost and was easier to store than natural lake ice as it was not dependent on weather. Another contributing factor was that many lakes and rivers near metropolitan areas were becoming polluted, and ice harvesters had to go further away to obtain their supplies which in turn increased their shipping costs. Ice manufacturers' starting claiming that their product was also more pure. For many years, there continued to be an intense competition for the ice market, but with the invention of electric and gas household refrigerators, the market changed for household ice. The natural ice market virtually disappeared by 1950.

Air conditioning or comfort cooling, as it was known then, was not used in every day practice in 1904, but there were a few installations which were used primarily to keep valuable records and manuscripts. Refrigeration was common in 1904 for use in artificial skating rinks, bakery and candy cooling, fur storage, cooling of drinking water and the use of refrigeration in the making of camera film and ice cream. Other industries that looked to refrigerating engineers to help make their businesses more cost effective were textiles, tobacco, perfume production, chemicals, and mining. Civil engineers sought the expertise of refrigerating engineers in the building of shafts and tunnels.

In 1903, the American Ice Machine Builders Association was formed. This group's members were primarily manufacturers, and they pointed out the advantages of working together, cooperating with other organizations, and of sharing information. With technological advances and new applications being developed, a need for fundamental data on which to base standards within the refrigeration industry was becoming a necessity.

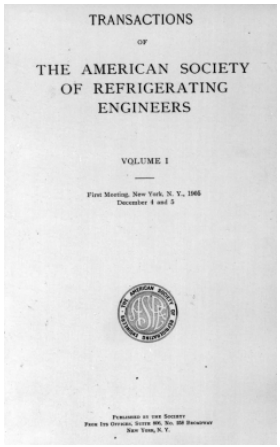
At that time, the only engineering organization in the United States suitable for engineers interested in refrigeration was the American Society of Mechanical Engineers (ASME). There were some outstanding papers and discussions presented at ASME meetings from 1889 to 1892, but by the turn of the century, ASME members interested in refrigeration "found very little on the programs bearing directly on their professional work," recalled Harry Sloan from Vilter Manufacturing Company. Many engineers felt that it was time to form a scientific society to meet this need. So similar to the story of ASHVE, there was to become a Society of Refrigerating Engineers.



A **Mr. William H. Ross (right)**, who was employed by Cold Storage and Ice Trade Journal and was secretary of the Eastern Ice Association, organized a meeting of thirty to forty refrigeration engineers on April 2, 1904 at the ASME headquarters in New York City. They met to discuss forming a new society for refrigerating engineers. A Mr. John E. Starr was a leading consulting engineer, who had engineered many large projects,

such as cold storage warehouses, distribution of refrigeration by pipe lines through city streets, etc., opened the meeting. He presented the needs of such a society, and predicted a rapid growth and secure future for the refrigerating industry.

Following discussions, a committee was appointed to draft a constitution and by-laws. On December 4 and 5, 1904, in New York City, these engineers met again and adopted the Constitution and By-Laws and elected officers, thus forming **The American Society of Refrigerating Engineers (ASRE)** – the only engineering society in the world solely dedicated to promote the arts and sciences connected with refrigerating engineering. (Sound familiar?). There were seventy-four charter members of this new society.


TRANSACTIONS
OF
THE AMERICAN SOCIETY
OF REFRIGERATING
ENGINEERS
VOLUME I

The business affairs of the Society were managed by a committee called the Council. It consisted of the Society's president, two vice presidents, treasurer and nine Members or Associate members (Sound familiar?). During the first meeting of the Council, held on January 14, 1905 in New York City, William H. Ross was appointed as secretary of the Society at a salary of $25.00 per month, out of which all office expenses would be deducted. One year later, the Society convened its First Annual Meeting in the chambers of ASME in New York City on December 4 and 5, 1905. Eight papers were presented and debated on such topics as plate and can systems for manufactured ice, pipe line refrigeration, and carbonic acid and refrigerating machines. The Society immediately began publishing the papers read at its meetings in the Transactions of The American Society of Refrigerating Engineers. The Transactions also included minutes of Society meetings

To comply with the laws in the State of New York, the date of the annual meeting was specified in the Society's Constitution and By-Laws. The founding members specified that the date "shall be on the Monday before the first Tuesday in December" so the Society meeting would be held as close to the ASME meeting as possible, thus allowing out-of-town members of both societies to conveniently attend both meetings.

The new President John Starr eloquently defined the Society's guiding principles at that time, much of which echoed the theme of cooperation and exchange of information that inspired the founding members of the Society. He said, "In carrying out our work...there will be no feeling of jealousy between ourselves and our brother organizations...whose field embraces our own, unless it be that fair and honest emulation to be of use to the world. Again, similar to ASHVE, the financial report given by Treasurer at the time indicated the Society had received $1,495.10 in revenue during its first year and expended $892.93, for a surplus of $602.17 cash on hand.

The Society's Constitution and By-Laws established three levels of membership: Member, Junior and Associate. Each member paid an initiation fee of $5.00, and membership dues were set at $10.00 for Members and Associates and $5.00 for Junior members for the first six years of membership, after which their dues would be the same as Members and Associates. Each member received a membership certificate and could purchase an emblem pin, with a different color defining each level of membership -- dark blue for Members, white for Associates and light blue or turquoise for Junior members. The emblem was the seal of the Society and measured 5/8 inch in diameter. Although the Society was organized as a national institution, by 1906 it already had members from Canada, England, India, the Argentine Republic, Australia and New Zealand. Membership in 1906 totaled 146.

Please note: information excerpted from information available from ASHRAE website through the Historical Committee links - "Proclaiming the Truth" – Chapter 2.

Respectfully Submitted, Randy Schrecengost, Historian