



MINUTES

Handbook Committee

February 2, 2020

Orlando Hilton

Chicago, Illinois

Note: These DRAFT minutes have not been approved and are not the official record until approved by this committee.

MEMBERS PRESENT:

Suzanne LeViseur, chair
Michael Patton, vice chair, 2020S chair
Steven Sill, 2020S
Carolyn Calloway, 2020S
Prakash Dhamshala, 2020S
Bass Abushakra, 2021F chair
Guy Frankenfield, 2021F
Jason Atkisson, 2021F
Kevin Gallen, 2021F
Stephanie Mages, 2021F
Javier Korenko, 2021F
Scott Fisher, 2022R chair
Brian Fricke, 2022R
Carlos Brignone, 2022R
Fred Betz, 2022R
Harris Sheinman, 2023A chair
Kashif Nawaz, 2023A
Joseph Sanders, 2023A
Brian Krafthefer, 2023A
Eric Adams, 2023A
G.D. Mathur, 2023A
Katherine Hammack, Board of Directors Ex-Officio (BOD ExO)

STAFF PRESENT:

Heather Kennedy, staff liaison, Handbook Editor

VISITORS:

Munis Hameed
Satish Iyengar
Marija Todorovic, TCs 1.10 and 6.7

ADDITIONAL DISTRIBUTION:

Publishing and Education Council
Chapter Technology Transfer Committee

MAJOR PASSED MOTIONS	
No.	Motion
1	Handbook Committee recommends that we investigate further the possibility of applying to UNESCO to include the ASHRAE Handbook in the Memory of the World archive.

ACTION ITEMS		
No.	Responsibility	Action Item
(None.)		

1. Call to Order

Ms. LeViseur called the meeting to order at 10:35 AM and noted that a quorum was present.

2. Introductions

Ms. LeViseur welcomed all attendees. Members and visitors introduced themselves.

3. ASHRAE Code of Ethics Commitment

Ms. LeViseur read the following excerpt from the ASHRAE Code of Ethics:

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: [https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics.](https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics))

4. Approval of Minutes

It was moved and seconded

(1) to approve the minutes of the committee’s June 2019 meeting in Kansas City.

MOTION (1) PASSED, voice vote.

5. Agenda Updates

There were no additions to the agenda.

6. Chair’s Comments

6.1 TAC and Reorganization of TCs

Ms. LeViseur reported that the ongoing reorganization of TCs is likely to result in 5 to 6 TCs merging, but details are not final yet.

Meetings between groups of less than 10 people are likely to be put in a collective collaborative space (e.g., a large working room, similar to the speaker's lounge). This will reduce the overall number of separate rooms required and make space requirements more flexible and thus open new venues as possibilities. It is possible that volume/TC meetings could move to this collaborative space.

7. Board of Directors Ex-Officio (BOD ExO) Member Report

Ms. Hammack thanked the committee for their work, noting that the handbook is a major reason many members join. She also underlined the importance of ethical and respectful behavior, which is required by the ASHRAE ethics policy.

Ms. Hammack also gave a presentation about current ASHRAE activities (**ATT. A**).

Mr. Patton enquired about the member benefit changing from print and PDF copy of the Handbook to a PDF of a standard, the Handbook, or an eLearning course. Ms. Hammack said that Members Council is directing that change, and questions should be directed to them.

8. Coordinating Officer (CO) Report

Mr. Mehboob was not available to speak.

9. Handbook Editor's Report

Ms. Kennedy reported that editing and production of the 2020 volume was on schedule, and that staff anticipated that all final proofs would be distributed by the end of February. This would allow

10. Volume Subcommittee Reports

10.1 2020 HVAC Systems and Equipment

Mr. Patton reported that all chapters for the 2020 volume were in hand, and congratulated the volume subcommittee on a job well done.

10.2 2021 Fundamentals

Mr. Abushakra reported that chapters would be coming in soon from the TCs. Not all TC chairs with chapters in the Fundamentals volume attended the volume meeting, but the ones who did were engaged with the conversations.

10.3 2022 Refrigeration

Mr. Fisher highlighted the need for TCs with chapters in the Refrigeration volume to be ready to vote at the Chicago meeting. He suggested that there was interest in obtaining more thorough reviews of chapters, and a review sheet for TCs beyond the existing chapter review checklist.

10.4 2023 HVAC Applications

Mr. Sheinman led the first formal orientation for incoming Handbook Committee members (for the 2023 volume) on Saturday, February 1. He also noted that errors in the email alias list need to be remedied quickly, because they inhibit communication between liaisons and their TC Handbook subcommittee chairs.

11. Subcommittee Reports

11.1 Review

Mr. Sheinman reported that chapters for review had been assigned to subcommittee members.

11.2 Functional

Mr. Fisher confirmed that there would be no changes to the MOP or ROB at this time, but that subcommittee members had been assigned to identify needed changes to the MOP, ROB, and ARG, and to develop guidance for the recently formed Review subcommittee. He anticipated that proposed changes would be circulated before the Austin meeting in June 2020.

11.3 Electronic Media

Mr. Abushakra reported the following suggestions from the subcommittee:

- Consulting YEA for opinions and recommendations for electronic presentation of content
- Obtaining wider browser support for the ASHRAE Authoring Portal (currently limited to Internet Explorer)
- Conducting a survey of TC Handbook subcommittee chairs to gather feedback on the Authoring Portal
- Encourage TCs to develop Handbook Online features; possibly a how-to video or screen shots of existing features would be helpful
- Measuring whether online content is growing

11.4 Strategic Planning

Mr. Patton reported the goal of improving involvement across committees and councils. Proposed strategies include increasing visibility with Handbook Committee activities, communicating more frequently, and acting to maintain and improve relevance of Handbook.

12. Training Report

Mr. Sheinman reported good attendance, with an engaged audience. He intends to reevaluate and revise the PowerPoint presentations used for training to better focus on the needs and questions of trainees, and recommends more time be allowed for ad-hoc sharing.

13. Information Items

13.1 Year 2019-20 MBOs

Ms. LeViseur reviewed the status of her MBOs for 2019-20 (**ATT. B**).

Additionally, Farook Mehboob of PEC requested that all committees reporting to PEC suggest dashboard items that can be used to give a quick executive overview of project status.

(Ed. Note: In an email on 1/23/2020 to Mark Owen, director of Publishing and Education, staff suggested the following as potential dashboard items:

- *Total print run*
- *Member selections (currently print/PDF vs PDF/online vs print/PDF/online)*
- *Sales (beyond member benefit), both number and revenue*
- *Handbook Online subscriptions*
- *Handbook Online sales revenue*
- *Handbook Online ad revenue*
- *Revision history percentage for newest volume*

Whether any of these items will be included in the final dashboard is not yet known.)

14. Action Items

The sole action item from the June 2019 meeting was assigned to Ms. Kennedy:

1	Investigate obtaining nametag stickers for Handbook contributors, along the lines of the research promotion (RP) stickers available in Kansas City (Kennedy).
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Ms. Kennedy reported that the current lean financial environment made it difficult to justify new expenditures at the moment, but that she would continue to pursue this as a relatively inexpensive way to reward and recognize contributors to the Handbook.

15. Old Business

(None.)

16. New Business

16.1 UNESCO Memory of the World Project

Ms. Todorovic proposed submitting the ASHRAE Handbook for inclusion in the UNESCO Memory of the World project (<https://en.unesco.org/programme/mow>) (ATT. C). The project's stated purposes are (1) to facilitate preservation of the world's documentary heritage, (2) to assist universal access to documentary heritage, and (3) to increase awareness worldwide of the existence and significance of documentary heritage. Ms. Todorovic suggested that ASHRAE apply to create their own archive containing links to ASHRAE Handbook and other vital ASHRAE resources. She volunteered to handle the paperwork for this process.

Ms. Todorovic anticipated there would be no negative financial impact of creating a UNESCO ASHRAE archive, and that the archive would be a useful resource for developing curricula.

Mr. Sheinman moved, and Ms. Mages seconded, to vote on the following:

1	Handbook Committee recommends that we investigate further the possibility of applying to UNESCO to include the ASHRAE Handbook in the Memory of the World archive.
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Vote 15 Yea/1 Nay/0 Abs CNV. Motion passed.

17. Adjournment

Ms. LeViseur thanked committee members for their efforts during the year. The meeting was adjourned at 12:55 PM.

Respectfully submitted,



Heather E. Kennedy
Staff liaison
Editor, ASHRAE Handbook

Board Ex-O presentation (sent separately)

Handbook Committee
MBOs for Society Year 2019-2020
Chair: Suzanne LeViseur Date: 2 Feb 2020

	Objective	Completion Date	Fiscal Impact	Responsible Party	Status	Comment
1	Solicit ideas from volume subcommittee chairs for process improvements.	6/20	None	HBC	Continuous	
2	Improve peer-to-peer training of incoming volume subcommittee chairs.	6/20	None	Vice Chair	Continuous; 1st orientation held 2/1/20	Mentoring of new members
3	Review the relevance, scope, and objectives of subcommittees.	6/20	None	HBC ExCom	Continuous	Reshape HBC to best function under the new TC structure (when implemented) in a way that serves both HBC's and TCs' needs. Please be sure to attend your subcommittee meetings!
4	Encourage TCs to develop extra features (spreadsheets, sidebar discussions, video, etc.) for Handbook Online. Suggest using YEA members	6/20	None	HBC	In progress	
5	Address volume imbalances	6/20	Could reduce mailing costs	HBC ExCom	In progress	Applications and Fundamental volumes are nearly twice the size of Refrigeration volume. Look at the possibility of shifting some material to a different volume.

6	Improve international representation/input in the handbook process	6/20	None	HBC ExCom	Ongoing	Continue with the effort started by Don Fenton
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SL: hek 2 Feb 2020

Marija S. Todorović. TAC Special Activities

With the reference to the ASHRAE Anniversary, for two ideas, in Atlanta, under New Business just mentioned, here follow relevant information (ASHRAE History given in Annex I and the Example of Nikola Tesla Registration document preparation in Annex II).

1. PROPOSAL ASHRAE Handbooks to be recognized as SCIENTIFIC – TECHNOLOGICAL HERITAGE

Some relevant historical details about the ASHRAE Handbooks

The lineage of the Handbook begins in 1922, (do 2018 je 96) when the American Society of Heating and Ventilating Engineers (ASH&VE) published its *Heating and Ventilating Guide*. ASH&VE (later became the American Society of Heating and Air-Conditioning Engineers - ASHAE), published *The Guide* until 1961, when merged with the American Society of Refrigerating Engineers' (ASRE) *Refrigerating Data Book*, published since 1932, following the merger of the two societies in 1959 (60 god 2018 – 1959) The combined publication was called the *ASHRAE Guide and Data Book*. Separate volumes were issued for *Fundamentals* and *Equipment*, and *Applications*. In 1967, the information in the *Guide and Data Book* was regrouped into a *Handbook of Fundamentals*, with separate *Systems*, *Applications*, and *Equipment* volumes. In 1973 (45 god 2018 – 1973), the *Guide and Data Book* was renamed the *ASHRAE Handbook* and in 1986, a separate Refrigeration volume was established. Although volume groupings have shifted over the years, the name and the essential method by which the *ASHRAE Handbook* is compiled has continued to the

Philosophy

The ASHRAE Handbook is the recognized repository of current comprehensive engineering knowledge, procedures and practices in the fields of heating, ventilation, air-conditioning, and refrigeration (HVAC&R). The Society publishes the Handbook primarily to provide practical technical information and data for the design engineer. The information is directed at those who understand engineering principles and use the information as a checklist of procedures, for design data, and to review recent industry practices. Typical users include consulting engineers, equipment and system designers, plant engineers, contractors, government officials, technicians, academia people, university teachers, researchers, engineering and other students,...

Although ASHRAE Handbooks state that they do not list all possible calculation methods, all possible equipment choices, or all possible design solutions, in many chapters current research and development topics are also more and more covered. Specific designs must always result from the experience and expertise of the engineer after considering economics, owner preferences, local practice, climatic conditions, maintenance and operating costs, and other applicable factors. Even in that sense material contained in the Handbook, not too seldom goes beyond simple, but serve as superb high-level most knowledgeable consultancy source.

For many University programs and students of many different profiles worldwide ASHRAE Handbooks present unique Bible level - knowledge source (example Sorbonne Belgrade for the Preventive Conservation Master – *Museums* and several other chapters covered all their needs). With the reference related to the ASHRAE Anniversary including Handbooks publications – could be attractive to be organized special UNESCO-ASHRAE Curricula Program as E-Learning. relevance and potential role and recognition within UNESCO as kind of a heritage of Knowledge – plus ASHRAE Curricula and alive also.

To conclude proposal is ASHRAE Handbooks to be recognized as SCIENTIFIC – TECHNOLOGICAL HERITAGE of US and of the World.

2. ASHRAE TO ENTER the UNESCO Memory of the World (MOW)

Heating, refrigerating and air-conditioning are necessary for life and their importance will continue to expand worldwide, as interwoven climate change, weather extremes and global warming appear as global climate chaos, will continue to rise. Consequently importance of ASHRAE and whole multi interdisciplinary activities, research and results opening new frontiers will continue to rise also. Beside enormous volumes of publications there are huge amounts of non published documentation deserving protection – ASHRAE needs to enter UNESCO MOW.

Starting at first with Willis Carrier and his invention of the first air conditioner (*Time Magazine Listed him as of 100 Most Influential People of the 20th Century*). An opportunity arose for him in 1902, when Buffalo Forge hand him an unusual project in lithographic printing company to figure out a system that could reduce the humidity in their printing rooms.



The system that Carrier delivered was the first air conditioner and Carrier introduced the term air conditioning.

For crucial jump from mechanical device used to get air streaming to modern air-conditioning was necessary appearance of Nikola Tesla electricity.

Whole history behind and beyond are with and in ASHRAE home.

The system that Carrier delivered was the first air conditioner and Carrier introduced the term air conditioning. For crucial jump from mechanical device used to get air streaming to modern air-conditioning was necessary appearance of Nikola Tesla electricity. Whole history behind and beyond are with and in ASHRAE home. ASHRAE, as global society is advancing human well-being through sustainable technology for the built environment. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today conducting its Mission of Sustainability.

HVAC EXTREME GROW OF WORLD & HUMANITY SUSTAINABILITY – Question TEWI (Total Equivalent Warming Impact)

Memory of the World (MOW) Program - Highlights

At the link <https://en.unesco.org/programme/mow> can be found details about the highlights on the Memory of the World UNESCO Program.

UNESCO established the *Memory of the World* Programme in 1992. Impetus came originally from a growing awareness of the parlous state of preservation of, and access to, documentary heritage in various parts of the world. War and social upheaval, as well as severe lack of resources, have worsened problems which have existed for centuries. Significant collections worldwide have suffered a variety of fates. Looting and dispersal, illegal trading, destruction, inadequate housing and funding have all played a part. Much as vanished forever; much is endangered. Happily, missing documentary heritage is sometimes rediscovered.

Among MOW Program themes are: Education, Natural Sciences, Social & human Sciences, Building Knowledge Societies, One Planet, One Ocean, Science for a Sustainable Future,..(an example - in MOW is Nikola Tesla's Archive).

Background

An International Advisory Committee (IAC) first met in Pultusk, Poland, in 1993. It produced an action plan which affirmed UNESCO's role as coordinator and catalyst to sensitize governments, international organizations and foundations, and foster partnerships for the implementation of projects. Technical and Marketing Sub-Committees were established. The preparation of General Guidelines for the Programme was

initiated through a contract with IFLA (International Federation of Library Associations), together with the compilation, by IFLA and ICA (International Council on Archives), of lists of irreparably damaged library collections and archive holdings. Through its National Commissions, UNESCO prepared a list of endangered library and archive holdings and a world list of national cinematic heritage.

Meanwhile, a range of pilot projects employing contemporary technology to reproduce original documentary heritage on other media was commenced. (These included, for example, a CD-ROM of the 13th Century Radzivil Chronicle, tracing the origins of the peoples of Europe, and Memoria de Iberoamerica, a joint newspaper microfilming project involving seven Latin American countries). These projects enhanced access to this documentary heritage and contributed to its preservation.

IAC meetings have since been held every two years. Several National Memory of the World National Committees have been established around the world.

The Memory of the World Register - in some ways the most publicly visible aspect of the Programme - was founded on the 1995 General Guidelines and has grown through accessions approved by successive IAC meetings.

Programme Objectives

The vision of the Memory of the World Programme is that the world's documentary heritage belongs to all, should be fully preserved and protected for all and, with due recognition of cultural mores and practicalities, should be permanently accessible to all without hindrance.

The mission of the Memory of the World Programme is:

To facilitate preservation, by the most appropriate techniques, of the world's documentary heritage.

This may be done by direct practical assistance, by the dissemination of advice and information and the encouragement of training, or by linking sponsors with timely and appropriate projects.

To assist universal access to documentary heritage.

This will include encouragement to make digitized copies and catalogues available on the Internet, as well as the publication and distribution of books, CDs, DVDs, and other products, as widely and equitably as possible. Where access has implication for custodians, these are respected. Legislative and other limitations on the accessibility of archives are recognised. Cultural sensitivities, including indigenous communities' custodianship of their materials, and their guardianship of access will be honoured. Private property rights are guaranteed in law.

To increase awareness worldwide of the existence and significance of documentary heritage.

Means include, but are not limited to, developing the Memory of the World registers, the media, and promotional and information publications. Preservation and access, of themselves, not only complement each other - but also raise awareness, as access demand stimulates preservation work. The making of access copies, to relieve pressure on the use of preservation materials, is encouraged.

Annex I

ASHRAE History

ASHRAE was formed as the American Society of Heating, Refrigerating and Air-Conditioning Engineers by the merger in 1959 of American Society of Heating and Air-Conditioning Engineers (ASHAE) founded in 1894 and The American Society of Refrigerating Engineers (ASRE) founded in 1904. The lineage of the Handbook begins in 1922, when the American Society of Heating and Ventilating Engineers (ASH&VE) published its *Heating and Ventilating Guide*. Its purpose was stated as follows in its preface:

'The purpose of this new addition to the Society's publications is to provide the engineer, the architect and contractor alike, with a useful and reliable reference data book relating to the art of heating and ventilating.

A wide range of data within the scope of the field is presented and every effort has been made to present the material in a practical and useful manner.'

Society Technical Committees, Task Groups, and individuals obtained data and prepared chapters using information from any authoritative source. Society-sponsored research provided much information.

ASH&VE, which later became the American Society of Heating and Air-Conditioning Engineers (ASHAE), published *The Guide* until 1961, when it was merged with the American Society of Refrigerating Engineers' (ASRE) *Refrigerating Data Book*, published since 1932, following the merger of the two societies in 1959. The combined publication was called the *ASHRAE Guide and Data Book*. Separate volumes were issued for *Fundamentals* and *Equipment*, and *Applications*.

In 1967, the information in the *Guide and Data Book* was regrouped into a *Handbook of Fundamentals*, with separate *Systems*, *Applications*, and *Equipment* volumes. In 1973, the *Guide and Data Book* was renamed the *ASHRAE Handbook*. In 1985, separate I-P and SI unit volumes were issued, and in 1986, a separate Refrigeration volume was established. Although volume groupings have shifted over the years, the name and the essential method by which the *ASHRAE Handbook* is compiled has continued to the present.

Sources:

Flink, Carl H. 1969. History of ASHRAE Guide and Data Book. ASHRAE Journal (Dec. 1969).

Cansdale, James H., and MacPhee, Carl W. 1972. Technology Pacesetter: 1922---ASHRAE Guide and Data Book---1972. ASHRAE Journal (May).

Annex II

Search **nikola tesla in unesco memory of the world**

You will get as follows

Nikola Tesla's Archive | United Nations Educational ... – Unesco

www.unesco.org/.../memory-of-the-world/.../nikola-teslas-arch...



Memory of the World

Nikola Tesla's Archive

Documentary heritage submitted by Serbia and recommended for inclusion in the Memory of the World Register in 2003.

Nikola Tesla's Archive consists of a unique collection of manuscripts, photographs, scientific and patent documentation which is indispensable in studying the history of electrification of the whole Globe.

Nikola Tesla, (1856 - 1943) Serbian-born, American inventor and scientist, a pioneer in electrification, significantly influenced the technological development of our civilization by his polyphase system inventions. This system is the cornerstone of modern electro-energetic system of production, long distance transmission and usage of electrical currents, electricity and communication.

Since the beginning of its exploitation towards the end of last century up to now, the polyphase system, together with the asynchronous motor, has been perfected and improved to a remarkable and hitherto unconceivable dimensions.

He is credited as being a very imaginative scientist whose ideas were paths to many important discoveries without which our civilization would lack many of its technological comforts (radio, radar, television, motors of all kinds, high frequency fields, coils, computers). Some of his ideas are still to be realized.

Way ahead of his time, he was one of the first to become aware of the emerging energy problem (1900) as a

conclusion of his famous experiments in Colorado Springs (1899-1900).

In his honour, the magnetic induction unit (tesla) of the SI system is named after him.

Simply speaking, the collection documents the most important era of the history of development of the modern world, which, thanks to the Tesla system, made easy energy production and distribution possible.

- Year of submission: 2003
- Year of inscription: [2003](#)
- Country: [Serbia](#)

Please find attached

1. MOW Nomination Form
2. Nikola Tesla Archive Filled Nomination Form
3. Offices for UNESCO US Old & New
4. Whole mail – Proposal document

UNESCO-ASHRAE E/Learning