MINUTES
Handbook Committee
January 18, 2021
Virtual Meeting

MEMBERS PRESENT: Michael Patton, chair
Scott Fisher, 2022R chair
Fred Betz, 2022R
Stephanie Mages, 2021F
Jason Atkisson, 2021F
Harris Sheinman, 2023A chair
Kashif Nawaz, 2023A
Eric Adams, 2023A
G.D. Mathur, 2023A
Brian Krafthefer, 2023A
Joseph Furman, 2024S chair
Chee Sheng Ow, 2024S
Satish Iyengar, 2024S
Derek Crowe, 2024S
Katherine Hammack, Board of Directors Ex-Officio (BOD ExO)
Bill Dean, BoD CO

STAFF PRESENT: Heather Kennedy, staff liaison, Handbook Editor

VISITORS: Anthony York, TC 9.8

ADDITIONAL DISTRIBUTION: Publishing and Education Council
Chapter Technology Transfer Committee
MAJOR PASSED MOTIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Motion</th>
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<tbody>
<tr>
<td>1</td>
<td>To approve the proposed changes to the HBC MOP (passed 14/0/0, CNV).</td>
</tr>
<tr>
<td>2</td>
<td>To approve the proposed changes to the HBC ARG (passed 14/0/0, CNV)</td>
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ACTION ITEMS

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Action Item</th>
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</thead>
<tbody>
<tr>
<td>(None.)</td>
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1. **Call to Order**

Mr. Patton called the meeting to order at 12:04 PM and noted that a quorum was present.

2. **Introductions**

Mr. Patton welcomed all attendees, noted names of attendees, and requested that guests introduce themselves.

3. **ASHRAE Code of Ethics Commitment**

Mr. Patton 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 2020 virtual meeting.

MOTION (1) PASSED, voice vote.

5. **Agenda Updates**

Updates to the agenda included an introduction by Mr. Fisher to the proposed HBC Basecamp site and consideration of a proposal from TC 9.8 for a new chapter on airport terminals.

6. **Chair’s Comments**
Mr. Patton had no comments to add.

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, and working toward greater diversity in ASHRAE membership.

Training to avoid sexual harassment is planned for implementation soon. This training will be mandatory for some standing committee positions; details will be coming soon.

Progress toward moving the ASHRAE member benefit to a selection of electronic products (Handbook PDF, eLearning course, or PDF of a standard) continues, with possible implementation during SY 2020-2021. *(Editor’s note: HBC members inquired whether HBC and HB contributors would continue to receive personalized hard copies of the Handbook after the member benefit moves to PDF. After asking Mr. Mark Owen, Director of Publishing and Education, Mx. Kennedy reports that this has yet to be determined.)*

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

8. **Coordinating Officer (CO) Report**

Mr. Dean thanked the committee for their work and expressed his willingness to be of assistance in any way.

9. **Handbook Editor’s Report**

Mx. Kennedy reported that editing and production of the 2021 volume was on schedule, and that staff anticipated that all final proofs would be distributed by the end of February. Handbook Online subscriptions were down slightly compared to last year, likely because of economic cutbacks during COVID-19, but were still on track for approximating a revenue of $8000 per month.

10. **Volume Subcommittee Reports**

10.1 **2021 Fundamentals**

Mr. Abushakra was not in attendance.

10.2 **2022 Refrigeration**

Mr. Fisher reported that chapter updating was ongoing, although not all liaisons had reported back yet.

10.3 **2023 HVAC Applications**

Mr. Sheinman reported that most 2023 liaisons attended the volume subcommittee meeting with TCs, but that no TC members did. He intended to email the TCs to inquire about their plans and make sure that they know their deadlines.

10.4 **2024 HVAC Systems and Equipment**

Mr. Furman reported that all 2024 liaisons were getting up to speed on their TC assignments.

11. **Subcommittee Reports**

11.1 **Review**
Mr. Furman reported that chapters for review were being assigned to subcommittee members.

11.2 Functional
Mr. Sheinman noted that the Board had approved our changes to the HBC ROB, and that the updated files would be added to the Handbook Committee Basecamp.

11.3 Electronic Media
Mr. Fisher provided a brief overview of the new Handbook Committee Basecamp and its folder structure. When it is fully populated with files, invitations will be sent to all HBC members and an orientation/training session arranged.

11.4 Strategic Planning
Mr. Abushakra was absent.

12. Training Report
Mr. Furman reported good attendance, with approximately 45 TC members attending, with an engaged audience.

13. Information Items
13.1 Year 2019-20 MBOs
Mr. Patton reviewed the status of his MBOs for 2020-21 (ATT. B). All are currently ongoing, except for item 4 (ensure that the ASHRAE Authoring Portal is accessible to more browsers than just Internet Explorer), which has been completed.

14. Action Items
(None.)

15. Old Business
(None.)

16. New Business
Mr. Anthony York of TC 9.8 proposed development of a new chapter on airport terminals, citing the wide variety of specialized applications necessary for these projects (passenger waiting rooms, machine rooms, food courts, etc.). Because airport terminals are unique, complex, and expensive projects, a specialized chapter would be helpful.

The Committee agreed that there was value in the proposal but expressed concerns about some airport terminal applications, particularly cybersecurity. Mr. Atkisson raised the question of how to determine whether a detailed, specific Handbook chapter was appropriate or whether a design guide dedicated to the topic was better; this was acknowledged as an ongoing difficulty. Because attendance of voting committee members was low, the proposal was tabled for future consideration.

17. Adjournment
Committee members were thanked for their efforts during the year. The meeting was adjourned at 2:14 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

<table>
<thead>
<tr>
<th>Objective</th>
<th>Completion Date</th>
<th>Fiscal Impact</th>
<th>Responsible Party</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solicit ideas from volume subcommittee chairs for process improvements.</td>
<td>6/20</td>
<td>None</td>
<td>HBC</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td>2. Improve peer-to-peer training of incoming volume subcommittee chairs.</td>
<td>6/20</td>
<td>None</td>
<td>Vice Chair</td>
<td>Continuous; 1st orientation held 2/1/20</td>
<td>Mentoring of new members</td>
</tr>
<tr>
<td>3. Review the relevance, scope, and objectives of subcommittees.</td>
<td>6/20</td>
<td>None</td>
<td>HBC ExCom</td>
<td>Continuous</td>
<td>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!</td>
</tr>
<tr>
<td>4. Encourage TCs to develop extra features (spreadsheets, sidebar discussions, video, etc.) for Handbook Online. Suggest using YEA members</td>
<td>6/20</td>
<td>None</td>
<td>HBC</td>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>5. Address volume imbalances</td>
<td>6/20</td>
<td>Could reduce mailing costs</td>
<td>HBC ExCom</td>
<td>In progress</td>
<td>Applications and Fundamental volumes are nearly twice the size of Refrigeration volume. Look at the possibility of shifting some material to a different volume.</td>
</tr>
<tr>
<td></td>
<td>Improve international representation/input in the handbook process</td>
<td>6/20</td>
<td>None</td>
<td>HBC ExCom</td>
<td>Ongoing</td>
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SL: hek 3 Jun 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 Radzivill 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:


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...

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