



MINUTES

EXECUTIVE COMMITTEE MEETING

January 12, 16 and 17, 2019
ASHRAE Winter Conference
Omni Hotel
Atlanta, Georgia

Note: These minutes have been approved and are now the official record of this meeting.

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January 12, 16 and 17, 2019

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Action Items Update
Executive Committee Meeting

<u>No – Pg.</u>	<u>Responsibility</u>	<u>Summary of Action</u>	<u>Status</u>
1 –	Littleton	(Carryover) Reapply as a partner to CCAC, instead of as an actor. (Update: 1/2017 – Ongoing. 3/2017- Ongoing. 6/2017- Ongoing. 11/2017- Ongoing. 1/2018 – Ongoing. 4/2018 – Ongoing, 11/2018 – Ongoing.	<u>Ongoing</u>
2 –	Littleton	(Carryover) Discuss with CAR their interest in working with CCHVC on a Building Performance Award. (Update: 4/2018 – Ongoing, Tsui will continue to follow up with CAR. 6/2018 – Ongoing. 11/2018 – Ongoing.)	<u>Complete</u>
3 –	Littleton	(Carryover) Review the perception and optics of sponsors, regarding the May meetings in Japan and develop some guidelines. (Ongoing: 6/2018.)	<u>Complete</u>
4 –	Boyce	(Carryover) Have Members Council investigate the sponsorship and mentoring programs (including those dealing with Developing Economies). (Ongoing: 6/2018, Ongoing: 11/2018; Ongoing; 1/2019)	_____
5 –	Boyce	(Carryover) Work with Members Council on a policy statement for regions to travel for potential joint CRCs using normal regional flight costs. (Ongoing: 6/2018, Ongoing: 11/2018; Ongoing; 1/2019)	_____
6 –	Boyce	(Carryover) Work with GAC (formerly GGAC) to develop a reporting strategy for motions and recommendations coming from the committee to EXCOM and the Board. (Ongoing; 11/2018; Working on a strategy Ongoing; 1/2019)	_____
8 –	Schwedler	(Carryover) Develop criteria for when it would be appropriate to pay volunteers for the development of standards. (Ongoing: 11/2018; Ongoing; 1/2019)	_____
9 –	Hayter	(Carryover) Determine areas that need to be addressed and responded to if there are multiple nominees for Officer and Director positions. (Ongoing: 11/2018)	<u>Complete</u>
10 –	Boyce	(Carryover) Work with Members Council to evaluate participation in the World Student Competition and develop the program to identify a participant from ASHRAE. (Ongoing: 11/2018; Ongoing 1/2019)	_____
11 –	Boyce	Consider creating a liaison committee with ASPE. Be prepared to discuss at the January ExCom meeting.	<u>Complete</u>
12 –	Boyce/Keen	Discuss with the DRCs from regions II, IV and V about the potential for a joint CRC.	<u>Complete</u>

14 –	Littleton	Draft a diversity policy to apply to staff (Ongoing 1/2019).	_____
15 –	Littleton	Add the VISHRAE/ASHRAE MOU on the Winter Meeting ExCom agenda.	<u>Complete</u>
16 –	Schwedler	Report back to ExCom on the status of increasing the energy efficiency requirement of the LEED rating system with USGBC. (Mr. Schwedler to provide the wording to ExCom- Ongoing; 1/2019)	_____

**Action Items
Executive Committee Meeting**

1 - 2	Littleton/Wright	Add depreciation of the recently purchased HQ building in its current form and the projected budget deficit for 2021-2022 to the budget report.	_____
2 - 3	Boyce	Contact Ms. Calad for to provide guidance about orientation topics for board nominees	_____
3 - 3	Knight	Work with Ms. Calad on the orientation modules	_____
4 - 3	Keen	Work with ECC on editing their MOP and ROB	_____
5 - 4	Mehboob/Gulledge/ Knight	Connect with Colin Goodwin on BSRIA's collaboration opportunities with ASHRAE	_____
6 - 4	Littleton	Defer discussion on how to keep the AEDG Steering Committee going to the March ExCom Agenda	_____
7 - 5	Hayter	Work with Tim Wentz to explore alternatives for the ASHRAE/CIBSE liaison committee structure and relationship with input from ExCom	_____
8 - 5	Boyce	Ask Members Council to make sure that the revisions to the MCO reflected the ability of Sections to affiliate with national associations; ensure that the affiliation of a Section with a national association is in the best interests of the Society.	_____
9 - 6	Littleton	Adjust the verbiage to the proposed guidelines for the Commercialism policy	_____
10 - 6	Littleton	Prepare a thank you letter to Daikin from President Hayter for the Plenary sponsorship.	_____
11 - 6	Hayter	Appoint a work group of Board members to work on adding the sponsorship guidelines to the commercialism policy.	_____
12 - 7	Keen /Knight	Work with Ms. Calad and Mr. Fick on new board member training modules	_____
13 - 7	Gulledge/ Schwedler	Attend the MCAA and ACCA conferences respectively	_____

14 - 7	Boyce	Appoint an ASPE Liaison Committee with Russell Lavitt as chair to explore development of an ASHRAE/ASPE work plan.	_____
15 - 8	Mehboob	Notify ExCom by February 6 about input received from the Historical Committee about the change in their structure.	_____
16 - 8	Keen	Notify Society Rules Committee about changes that are needed to the Historical Committee ROB and MOP	_____
17 - 10	Boyce	Ask SRC to review the background of the motion from the PEAC to approve creation of the application guide	_____
18 - 10	Neme	Check the Rule of the Board Election procedure to ensure that the motion from the Foundation Trustees regarding adding two new Trustees is in compliance with the Rules.	_____
19 - 10	Littleton	Work with JEPC Chair Bill Harrison to engage CEC and ExCom in strategies related to the AHR Expo contract renegotiation.	_____
20 - 11	Littleton	Ask Meetings team to start the AASA meeting earlier to provide more time for discussion.	_____

PRINCIPAL MOTIONS
Executive Committee Meeting
January 12, 16 and 17, 2019

1 - 2	that the minutes of the November 10-11 Executive Committee meeting be approved as presented
2 - 2	that the revised Memorandum of Agreement with JSRAE and ASHRAE be approved as presented.
3 - 3	that the new Memorandum of Agreement with VISRAE and ASHRAE be approved as presented.
4 - 4	that the UNEP work plan be approved as presented
5 - 7	that ASHRAE will collaborate on IFMA's FM Training Framework project as a content provider for technical training, education and certification in the areas of HVAC and Building Energy Controls..
6 - 8	that the Board of Directors approve changes to Section 12 of the Manual of Chapter Operations (MCO) as shown in Attachment E.
7 - 9	that ASHRAE Board of Directors approve the creation of an Application Guide that provides practical advice to design, construction and commissioning professionals on how they can assist and empower the operations professional to operate the building at its full potential.
8 - 10	that the motion to add two voting members to the Foundation Trustees be postponed to the March ExCom meeting.
9 - 10	that Bill Harrison and Jeff Littleton be appointed as the ASHRAE and AHRI Representatives to negotiate the ASHRAE/AHRI contract; approval of the final contract to be made by the Board of Directors
10 - 11	that the Board of Directors approve ASHRAE Government Affairs sharing the list of unifying comments with standards development organizations regarding the benefits of the U.S's private sector-led standards systems and importance of copyright protection for standards



EXECUTIVE COMMITTEE MEETING

January 12, 16 and 17, 2019

MEMBERS PRESENT:

Sheila J. Hayter, President
Darryl K. Boyce, President-Elect
Charles E. Gulledge III, Treasurer
Julia A. Keen, Vice President
M. Dennis Knight, Vice President
Farooq Mehboob, Vice President
Mick C. A. Schwedler, Vice President

STAFF PRESENT:

Jeff H. Littleton, Executive Vice President
Joyce Abrams, Director of Member Services (Sat/Wed)
Steve Comstock, Bus. Development EMEA
Vanita Gupta, Director of Marketing
Kim Mitchell, Chief Development Officer
Claire Neme, Coordinator, SC Nominations and Planning
Mark Owen, Director of Publications and Education
Lilas Pratt, ASHRAE Staff
Stephanie Reiniche, Director of Technology
Craig Wright, Director of Finance and Admin. Services
Alice Yates, Director, Government Affairs (Wed)

GUESTS PRESENT:

Ahmed Abdel-Salam, Leadership U (Sat/Wed)
Raudika Amarasurya, Leadership U (Sat/Wed)
Walid Chakroun, Past vice president (Sat)
Michael Cooper, DRC (VII) (Wed)
Blake Ellis, KC Chapter (Wed/Thur)
Ayman Eltalouny, Partnership Coordinator, UNEP (Sat)
Jeff Gatlin, Chair, Scholarship Trustees (Wed)
Colin Goodwin, BSRIA, UK (Sat)
Ron Jarnagin, Presidential Member (Sat)
Jim Kendzel, American Supply Association (Wed)
Adeeba Mehboob, RAL SR1 Chair (Sat)
Tim McGinn, DAL (Wed)
Kevin Muldoon, Leadership U (Sat/Wed)
Bjarne W. Olesen, Presidential Member (Sat/Wed/Thur)
Tom Phoenix, Presidential Member
Blair Richardson, Leadership U (Sat/Wed)
Ayah Said, ASHRAE GTC Coordinator
Ginger Scoggins, AIA Ad Hoc Chair
Tim Wentz, Presidential Member

CALL TO ORDER/INTRODUCTIONS- January 12, 2019

The meeting was called to order at 8:31 AM.

ASHRAE CODE OF ETHICS

President Hayter reminded the group that ASHRAE operates under its published Code of Ethics in all of its activities.

REVIEW OF THE AGENDA

President Hayter asked for a review of the agenda. Solar Decathlon was added to New Business.

APPROVAL OF MINUTES

Ms. Keen moved and it was seconded:

1. that the minutes of the November 10-11 Executive Committee meeting be approved as presented.

MOTION PASSED (Unanimous, CNV)

REVIEW OF ACTION ITEMS

Action items 1-16 are ongoing and included in the action item list at the beginning of the minutes. Updates are included where possible.

REPORT OF THE TREASURER (Attachment A)

Mr. Gulledge presented the Treasurer's Report. Highlights from the report include:

- During this FY, \$500k of assets were lost in the market downturn.
- Proceeds from sale of the ASHRAE headquarters building have been invested at a 2.6% interest rate of return; 75% in accessible account and 25% in a longer term investment.
- Advertising revenues were down \$307k in print media due to the loss of three accounts.
- Education revenue was \$125k; Miscellaneous revenue of \$282k from work with UNEP and KFAS.

Mr. Littleton added that depreciation of the recently purchased building in its current form and the projected budget deficit for 2021-2022 will be added to the budget report. AI 1

NEW BUSINESSJSRAE/ASHRAE MOU (Attachment B)

President Hayter reported that updates were made to the JSRAE Memorandum of Agreement. After some discussion, Mr. Mehboob moved and it was seconded

2. that the revised Memorandum of Agreement with JSRAE and ASHRAE be approved as presented.

MOTION PASSED (Unanimous, CNV)

VISRAE/ASHRAE MOU (Attachment C)

President Hayter reported that a new Memorandum of Agreement with VISRAE and ASHRAE was developed. Mr. Mehboob moved and it was seconded

3. that the new Memorandum of Agreement with VISRAE and ASHRAE be approved as presented.

MOTION PASSED (Unanimous, CNV)

Next Steps for Board Focus Groups

Board Leadership Skills and Knowledge – Ms. Hayter charged the focus groups with how to think strategically to help build directions for significant issues not being discussed. Written reports will be presented to the Board at the post-conference Board meeting. Ms. Keen pointed out the need for help from President-Elect Boyce on how a member-at-large can become a Society leader. Online tutorials may be developed to provide orientation and mentoring to nominees including FAQs, soft skills development, and opportunities for personal development. Mr. Boyce will finalize a strategy for Board orientation working in partnership with Ms. Calad’s task group on Board leadership development; Mr. Knight will assist with the process.

AI 2

AI 3

ASHRAE Leadership in Refrigerants/Refrigeration – Trent Hunt will report on the Refrigeration focus group and asked for educational help. Ms. Hayter pointed out that Refrigeration Committee needed assistance to improve their processes. Mrs. Gupta pointed out that a new refrigeration page with helpful information was added to the ASHRAE website.

Partnership Development with Non-Buildings Industry Organizations –Urban Land Institute ASABE, and Smart Cities Council VIPs are attending the Winter Conference as a result of outreach efforts.

Partnership Development with Buildings Industry Organizations Mr. Brandt lead the focus group on the opportunities for advancing ASHRAE's mission through partnership with other entities in the buildings industry? Entities may be other associations such as BOMA, ASHE, national association outside of the U.S. and Canada, etc., governmental organizations such as GSA, NRC, EU organizations, etc., or other groups. Mr. Brandt indicated that by the 2019 Annual Conference, the goal is a commitment (e.g., an MOU or other agreement) to jointly address a defined challenge with at least one entity. Preference is to have initiated at least one joint activity by the 2019 Annual Conference.

Evolution of Electronic Communications Committee (ECC) -- Mr. Gullidge reported a self-assessment of ECC was under way. The current thought is to keep ECC but have them report to Members Council. Society Rules is reviewing whether this change would be a major change or editorial change to the rules. Mrs. Keen suggested this move would not be structural and agreed to work with ECC on editing their MOP and ROB to accomplish this change.

AI 4

ASHRAE/UNEP Work Plan (Attachment D)

Mr. Chakroun reported the main goals of last year’s UNEP work plan are 90% complete. The 2019-20 work plan, *Refrigeration Management for Developing Economies*, has been finalized and will be submitted for approval. Mr. Ayman Etalouny reported on UNEP directions for the coming year: Refrigeration literacy as an online training tool will be revised; reaching out to stakeholders to make it more cost efficient; ASHRAE was UNEP’s gateway to the industry; outreach is needed in many different languages and UNEP will compensate costs involved.

Mr. Ayman confirmed that ASHRAE funding will continue and could increase. UNEP feels ASHRAE is their main technical partner. Mr. Chakroun suggested an easy gateway to reach the government is by working with GAC more closely. Ms. Hayter thanked Mr. Chakroun and Mr. Etalouny for UNEP's involvement and participation in the Winter Conference. Mr. Littleton pointed out Mr. Comstock's involvement also was a major factor in supporting UNEP.

Mr. Mehboob moved and it was seconded

4. that the UNEP work plan be approved as presented.

MOTION PASSED (Unanimous, CNV)

The work plan will be signed at the AASA meeting on Monday.

BSRIA Market Research Collaboration

Colin Goodwin from BSRIA, a non-profit global HVAC market research organization, is seeking collaboration opportunities with ASHRAE. Some of their service opportunities include:

- BSRIA might provide *ASHRAE Journal* articles on market research studies
- Some BSRIA publications might be suitable for adaptation and distribution within the ASHRAE community. One example is publication BG 6 Engineering Design Framework.

Mr. Goodwin will work with Mr. Mehboob, Mr. Gullede and Mr. Knight on providing more information on collaboration opportunities

AI 5

ASHRAE/AIA Liaison Committee

Ms. Scoggins reported that agreement new MOU between ASHRAE and AIA is being negotiated. AIA has expressed an interest in co-sponsoring Standard 189.1. Other collaboration opportunities existing in research and publications (such as the AEDG series). The ASHRAE/AIA liaison committee will continue to meet and a final MOU draft may be submitted for approval by the June meeting.

AEDG Steering Committee

Mr. Schwedler that a new net-zero energy AEDG on multi-family buildings has just been approved. This is the NZE AEDG in the series following the AEDG on NZE K-12 Schools.

Mr. Phoenix reported that the AEDG Steering Committee is thinking about what comes next once the NZE Guides are published. Ms. Hayter asked how we can keep the work of the steering committee going. Potential future topics include health and wellness. Mr. Phoenix reminded the group that the AEDG Steering Committee is not an ASHRAE committee; there are four partner organizations involved. After a discussion about whether funding for the work of the steering committee will continue, it was agreed that due to limited time for further discussion, to move the discussion to the March ExCom agenda. Mrs. Keen suggested discussions about AEDG should move to a council, not the Executive Committee.

AI 6

ASHRAE/CIBSE Liaison Committee

Mr. Wentz reported on a proposal to form a new subcommittee of the ASHRAE/CIBSE Liaison committee. Suggested ROB changes needed from the new committee are as follows:

2.106.001.6 CIBSE (89-06-25-15/92-06-28-4A/96-02-18-07)

- A. In order to sustain the ASHRAE/CIBSE relationship, a subcommittee of the Executive Committee shall be formed consisting of the President and the Chief Staff Officer.
- B. A coordinating subcommittee reporting to the subcommittee shall be formed as follows:
 1. TITLE: The name of the subcommittee shall be the ASHRAE-CIBSE Coordinating Subcommittee
 2. PURPOSE: To identify, prioritize and implement opportunities for both organizations that elevate their stature and profile, have global impact, expand their technical knowledge, and better serve its members worldwide.
 3. SCOPE: The Coordinating Subcommittee shall explore joint initiatives, opportunities and projects between ASHRAE-CIBSE that creates:
 - a. Clarity
 - b. Competency
 - c. Commitment
 - d. Consistency
 - e. Collaboration
 4. The ASHRAE President shall appoint two ASHRAE members to serve on the coordinating committee and the CIBSE President shall appoint two CIBSE members to serve on the coordinating committee.
 - a. The term of office for the appointees from each organization shall be three years and shall be staggered to avoid a majority of the terms ending simultaneously.
 - b. The chair of the coordinating committee shall be selected by the appointees.
 5. Both ASHRAE and CIBSE will appoint a staff liaison to the coordinating committee to assist in the performance of their work.

Concern was expressed about the need for a second subcommittee, the potential fiscal impact and whether the additional bureaucracy was needed.

After some discussion about what this group would do, Ms. Hayter suggested ExCom attend the CIBSE meeting on Wednesday here in Atlanta. Mr. Olesen agreed they should meet face to face. Mr. Wentz will continue working on the ASHRAE/CIBSE relationship with input received from the Executive Committee.

AI 7

Mr. Boyce agreed to ask Members Council to make sure that the MCO reflected the ability of Sections to affiliate with national associations. Mr. Mehboob said that the Society should make sure that the affiliation of a Section with a national association is in the best interests of the Society.

AI 8

Commercialism Policy Update

Mr. Littleton reported on the need to create a comprehensive document that addresses both commercialism and sponsorship policies.

During interaction with senior volunteers and commercial firms, care must be taken to avoid real or perceived inappropriate influence by commercial entities on ASHRAE leadership. The following guidelines will help avoid those circumstances:

- Transparency regarding discussions during corporate visits is paramount.

- An agenda shall be established for each corporate visit. The agenda and discussion highlights shall be shared with the ASHRAE Executive Committee at the next available meeting and reviewed in open session.
- Employer support for individual employee participation in ASHRAE activities is a recommended agenda item.
- ASHRAE leaders should avoid exclusive annual visits with a single firm, either at the firm's locations or at ASHRAE meetings, or both. While annual visits are acceptable, a minimum of 4-6 different firms should be visited annually with at least 75% of those visits made to new firms that have not been visited in the past couple of years.
- Visited firms should reflect the broad spectrum of organizations engaged in the HVACR industry, including engineering and design firms, architecture firms, manufacturers, contractors, academic institutions, etc.
- Repeated visits to one firm in one year should be avoided.
- Primary transportation to and from the commercial firm visit shall be paid by ASHRAE.
- It is acceptable for commercial firms to host limited transportation (taxi and bus rides) associated with the visit.
- It is acceptable for commercial firms to host meals for ASHRAE representatives, particularly when the meals take place at the visited corporate facility.
- It is acceptable for firms to host limited housing if the meeting is held at corporate facility that provides housing. ASHRAE leaders shall not accept offers to use corporate housing outside of designated meetings. ASHRAE shall offer to compensate the firm for the cost of the housing.
- The visited firm shall not be granted access to meetings, volunteer leaders, or information that is not readily available to other firms upon request. No confidential information shall be shared. No special consideration shall be provided to visited firms related to appointments, contracts or any other ASHRAE business.
- Visiting ASHRAE leadership shall not personally accept personal gifts that exceed an estimated value of \$25. Gifts exceeding that amount should be turned down or turned over to Society headquarters for display or use.
- Visiting ASHRAE leadership shall not accept tours or other travel benefits that are not HVACR centric and do not involve a majority of participants in the meeting

Mr. Schwedler suggested adding as another bullet above that *cash equivalent is never acceptable*. Also it was suggested to consider that 75% of firms visited each time should be new firms. It was questioned whether 75% was too high of a percentage. Mr. Littleton agreed to adjust the verbiage of the above guidelines accordingly and bring it back to ExCom in March.

AI 9

Ms. Hayter asked that Mr. Littleton prepare a letter of thanks to Daikin. Mr. Littleton agreed and added a suggestion to add the sponsorship guidelines to the commercialism policy recommendation for the Presidential Ad Hoc to integrate these. Ms. Hayter will appoint a work group of Board members for this purpose.

AI 10

AI 11

IFMA Collaboration Opportunities

Mr. Gulledge reported that IFMA would like to partner with ASHRAE to co-sponsor a topical conference. Our MOU with IFMA is due to expire soon and will need to be renewed. IFMA wishes to announce the topical conference soon. ASHRAE is asked to serve as technical content provider and trainer for two tracks within the IFMA Facility Management accreditation: 1) HVAC and 2) Energy and Building Control Systems. IFMA would like to attend our meetings and facilitate management of the tracks. Mark Owen is working on a proposal.

After some discussion, Mr. Gulledge moved and it was seconded

5. that ASHRAE will collaborate on IFMA's FM Training Framework project as a content provider for technical training, education and certification in the areas of HVAC and Building Energy Controls.

MOTION PASSED (6-0-0 CNV)

IFMA will announce by the end of January via press release that ASHRAE will be the technical content provider of the conference.

Spring Communications Strategy for Board Nominees

Ms. Hayter indicated there would not be face-to-face Board nominee training in the spring. Marites Calad is working on an alternate training program for nominees and any Board member who would like to attend. Training will be conducted electronically on the essentials needed for Board service. New Board nominees will not be provided with any confidential information. Small modules will be developed on Roberts Rules of Order, mentoring program, ASHRAE structure, etc. Mrs. Keen, Mr. Knight, Mrs. Calad, Mr. Fick will work on the modules.

AI 12

Members Council Referral – AASA Notification of Local Activity

Mr. Boyce reported that no action is needed on the Members Council referral. Members Council dealt with this issue the previous day.

Strategies for Conference Attendance

Mr. Schwedler reported on attendance at the IAPMO conference and asked if the time could be used more effectively. It is important to define our goals before deciding what meetings to attend. Mr. Littleton added that selection of what meetings to attend is always up to the President.

It was suggested that staff post reports about the result of conference visits on ExCom basecamp. Mr. Schwedler will attend the ACCA conference and Mr. Gulledge will attend the MCAA conference as a pilot program.

Exploration of ASHRAE/ASPE Liaison

AI 13

Mr. Boyce will appoint a liaison committee with Russell Lavitt as chair to explore the possibility of liaison with ASPE and may develop a work plan.

AI 14

Historical Committee

Mr. Mehboob provided a brief history of the Historical Committee. In 1997, as a response to PEAC who felt its scope was too focused on national issues, the scope was reviewed. In 2004, Historians became non-voting members. Mr. Mehboob reviewed the Historical Committee's MOP and ROB. If the committee will be moved from Publishing and Education Council, there are several options as to how to deal with Historical Committee as follows:

- Retain the Historical Committee in the PEC restructure
- Reduce it to 5-6 members as a subcommittee of Publications Committee
- Move it to Members Council
- Break up its functions- and transfer regional/chapter functions to Members Council RMCR; move the Society level function to a new subcommittee under Publications Committee
- Disband the committee and establish a historical center with dedicated staff
- Have Historical Committee report to the Board

It was the consensus of ExCom that the Historical Committee membership would be reduced and that it would be moved from PEC to Members Council.

Ms. Keen asked what would be the best way to communicate this change to Historical Committee. Mr. Mehboob will notify Historical Committee by January 26 and ask for their responses to be sent back to him. By February 5, Mr. Mehboob will notify ExCom about the responses.

AI 15

A vote on the recommendation of how to proceed with Historical Committee will be made by ExCom letter ballot by mid-February. After the letter ballot, the change will be presented to the Board via a scheduled Board conference call for final approval. Society Rules Committee will be asked to change the ROB and MOP.

AI 16

Plenary Sponsor Remarks

Ms. Keen noted that the remarks from the plenary sponsor were very appropriate and they were to be commended.

Report from AiCARR Liaison Committee (**Attachment E**)

Mr. Wentz reported the need to revise section 12 of the MCO because it was written solely from the chapter's perspective. Following is a recommended motion for Board approval:

6. that the Board of Directors approve changes to Section 12 of the Manual of Chapter Operations (MCO) as shown in Attachment E.

The AiCARR – ASHRAE Group was only recently formed. Accordingly, it is very important that the Group is launched with a strong and successful foundation. The AiCARR Liaison Committee has been working on several initiatives to ensure the success of the ASHRAE/AiCARR Group. Those initiatives include the following:

- Issued a survey of ASHRAE members in Italy and found 112 members, of which 30 have requested to join the Group. A second survey is planned. Only members of ASHRAE are eligible to join the Group.
- The Liaison committee is working with AiCARR to define and implement support Protocols for the Group from both the ASHRAE and the AiCARR perspective. We

will meet with AiCARR representatives in Atlanta.

- Worked with AiCARR and CIBSE to publish a jointly branded publication, *Commissioning Definitions and Terminology for the Building Industry: A Common Overview*. This is a good example of the benefits that accrue to both Organizations through collaboration.
- Encouraged ASHRAE members to participate in the 51st International Conference on 'Human and Behavioral Aspects in the Energy Performance of Buildings. Two members of the liaison committee will be presenting papers at the conference.
- Possibility of organizing ASHRAE training which, following the ASHRAE Business Model, can extend ASHRAE visibility and influence.

Ms. Abrams pointed out that Members Council has a process in place for this change. Mr. Olesen pointed out that a meeting is scheduled in February and this MCO revision will need to be done by then. Mr. Boyce will refer this to Members Council on Tuesday.

Executive Committee Meeting – Wednesday, January 16, 2019

CALL TO ORDER

Ms. Hayter called the meeting of the January 16, 2019 Executive Committee to order at 7:30 am.

Code of Ethics Commitment

Ms. Hayter reviewed the Code of Ethics, reminding the group that ASHRAE operates under the code at all meetings. She asked that this code be kept in mind during all meetings.

Review of Agenda

The agenda was approved as presented.

EXECUTIVE SESSION

The meeting went into executive session at 9:00 am and separate minutes reflect the discussion.

REPORTS OF BODIES REPORTING TO EXCOM

President-Elect Advisory Committee

Mr. Boyce met with the President-Elect Advisory Committee (PEAC) to discuss his presidential theme and steps to be taken now to begin its development. PEAC recommends beginning the RFP/RFQ process for creation of an Application Guide on how to operate a building at its full potential, with expenses deferred to 2019-20 budget when the publication will be completed. Mr. Boyce moved and it was seconded

7. that ASHRAE Board of Directors approve the creation of an Application Guide that provides practical advice to design, construction and commissioning professionals on how they can assist and empower the operations professional to operate the building at its full potential.

Background

It is well known that the operational performance of a building is greatly impacted by how it is operated. President Elect Boyce's theme will focus on building operations excellence to achieve a safe and productive environment in a sustainable manner. Many ASHRAE members are professionally focused on

the design, construction and commissioning of buildings. Many other organizations look to ASHRAE to provide the best guidance in the creation of built environments. Through surveys on available material and discussions with ASHRAE members and partner associations, it has been found that there is lack of practical information on what design, construction and commissioning professionals can do to assist operations professionals to run the buildings to achieve their full potential. This application Guide will offer practical advice to the design, construction and commissioning professional on what they can do during the design and construction phase and at time of the building handover to assist and empower the operations professional to run the facility at its full potential. The development of the guide will be run as a special project under Tech Council with the author contracted to write the document. It will be sold through the bookstore thus providing a revenue stream to offset the development cost. Other organizations are also interested in this guide and are being approached to be cosponsors and thus help offset the investment cost. The fiscal impact below assumes no assistance so any help will reduce the cost to ASHRAE.

Fiscal Impact

\$100,000

After a lengthy discussion about councils and committees conducting self-assessments to reduce their budgets as much as possible, Ms. Hayter called for a vote on the motion.

MOTION PASSED: (4–3–0 CV)

It was suggested that Society Rules Committee review the background statement of the PEAC motion and provide their input.

AI - 17

Foundation Trustees

Mr. Littleton presented the report from Foundation Trustees in Bill Harrison's absence. They present a motion that ExCom recommends to the Board of Directors approval for adding two more voting trustees to the Foundation Board. After some discussion about the purpose for this request, a motion was made and seconded

8. that the motion to add two voting members to the Foundation Trustees be postponed to the March ExCom meeting.

MOTION POSTPONED (Unanimous-CNV)

Staff took an action item to check the Rule of the Board to ensure the motion is in compliance with the Election procedure. This item will be added to the March ExCom agenda.

AI 18

Joint Exposition Policy Committee

Mr. Littleton reported this was the 8th year anniversary of the contract signing between ASHRAE and AHRI. On May 3, 2020, the new version is to be concluded and new terms established. Two representatives from ASHRAE and AHRI will negotiate and final approval will come to the Board. ExCom is requested to appoint Bill Harrison and Jeff Littleton as the ASHRAE Representatives to negotiate this contract. Regular input will be provided to ExCom about the start of negotiations. Mr. Mehboob moved and it was seconded

9. that Bill Harrison and Jeff Littleton be appointed as the ASHRAE and AHRI Representatives to negotiate the ASHRAE/AHRI contract; and approval of the final contract will be made by the Board of Directors

MOTION PASSED – (Unanimous – CNV)

Mr. Knight pointed out that the negotiations with JEPC will be done in executive session. Mr. Littleton will schedule a conference call with Conferences and Expositions Committee to engage them in the negotiations.

AI 19

Life Members Club

Kim Mitchell gave the information items report from Life Members Club in Bill Harrison's absence as follows:

- A certificate and check were presented to Bill Bahnfleth, the 2018-19 E.K. Campbell Award recipient at the Life Member's Luncheon.
- The Club passed a motion during their luncheon to support up to \$10,000 for the Historical Committee to create a paper calendar for their 125th anniversary celebration.
- The slate of officers for 2019-21 was selected. Ken Cooper will serve as the next chair.
- The LMC is happy to report annual giving is in great shape! The Club set a new high at the end of the 2017-18 campaign.

Scholarship Trustees

Jeff Gatlin presented three motions from Scholarship Trustees to approve their MOP. After some discussion, this request was referred to Society Rules Committee for review and approval.

Mr. Gatlin reported that 27 engineering and 5 engineering technology scholarships were awarded totaling close to \$150,000.

AASA

Mr. Olesen reported on progress towards exploring the creation of a Global HVAC Alliance. At the AASA meeting on Monday, Mr. Olesen presented the possibility that ASHRAE would serve as the secretariat for the proposed Global HVAC Alliance. Work will continue on the development of an MOU that AASA members would sign to become members of the Global Alliance. Additional time is needed to continue to discuss the global alliance so we can be prepared to sign the MOU in Orlando at the Winter meeting in 2020. Mr. Littleton will work with the Meetings team to revise the time slot, possibly starting the meeting earlier.

AI 20

SDO Unifying Comments (Attachment F)

Alice Yates, Director of ASHRAE Government Affairs presented a draft list of unifying comments to be shared with standards development organizations to educate Congress on the benefits of the U.S.'s private sector-led standards system and importance of copyright protection for standards. A strategy to gain support against partisan legislation approved by the Committee on House Administration that would effectively disallow

lawsuits against anyone who distributes codes and standards incorporated by reference is to agree to support the principals in the draft document. The following motion was moved from ExCom Executive Session to open session:

Mr. Schwedler moved and it was seconded

11. that the Board of Directors approve ASHRAE Government Affairs sharing the list of unifying comments with standards development organizations regarding the benefits of the U.S's private sector-led standards systems and importance of copyright protection for standards.

MOTION APPROVED – (Unanimous-CNV)

Next Meeting

ExAIL Call – Wednesday, February 6, 2019 at 9:00 AM
ExCom Meeting – Friday, March 8-10, 2019 – Chateau Elan

ADJOURNMENT

The meeting was adjourned on Thursday, January 17, 2019 at _____.



Jeff H. Littleton, Secretary

cin/1/28/2019

- Attachments:
- A. Report from the Treasurer
 - B. JSRAE/ASHRAE MOU
 - C. VISRAE/ASHRAE MOU
 - D. ASHRAE/UNEP Work Plan
 - E. Draft Revision of Section 12 of the MCO
 - F. SDO Unifying Comments

ASHRAE
GENERAL, RESEARCH, COF AND LIFE MEMBERS FUNDS
STATEMENT OF FINANCIAL POSITION - COMPARATIVE
Friday, November 30, 2018

Attachment A

ExCom Minutes-1-12-2019

	One Year Ago 11/30/2018	Two Years Ago 11/30/2017	Three Years Ago 11/30/2016	Four Years Ago 11/30/2015	Five Years Ago 11/30/2014	Six Years Ago 11/30/2013	Six Years Ago 11/30/2012
1 Cash	\$1,909.2	\$2,265.9	\$2,461.3	\$1,610.5	\$1,532.6	\$1,494.3	\$1,676.9
2 Marketable Securities at Market Value	30,404.9	20,262.9	18,080.8	18,274.0	18,387.8	17,107.7	14,279.2
3 Accounts Receivable	986.9	1,132.9	1,310.2	1,204.3	907.5	958.6	928.9
4 Less: Allowance for Uncollectable Accounts	(162.1)	(188.7)	(181.5)	(252.8)	(99.4)	(111.9)	(171.8)
5 Miscellaneous Receivables & Deposits	10.3	10.4	11.1	10.7	10.3	10.7	14.6
6 Inventory	546.2	500.5	603.5	532.0	554.6	557.7	480.9
7 Prepaid Expense	804.6	873.9	422.3	435.0	389.5	464.6	332.7
8 Property and Equipment-Remaining Value	1,316.0	5,303.3	5,652.9	6,185.9	6,567.8	7,132.1	7,629.9
9 Due To (From) Other Funds						0.2	
10 TOTAL ASSETS	<u>35,816.0</u>	<u>30,161.1</u>	<u>28,360.6</u>	<u>27,999.6</u>	<u>28,250.7</u>	<u>27,614.0</u>	<u>25,171.3</u>
11 Accounts Payable & Accrued Expenses	6,518.4	4,909.9	4,825.8	5,570.0	5,139.3	5,175.0	5,088.1
12 Refundable Advances	6.9	11.8	10.8	7.7	5.9	1.6	1.6
13 Deferred Income	7,391.7	7,599.6	7,528.6	7,030.2	6,755.4	6,420.9	6,111.8
14 TOTAL LIABILITIES	<u>13,917.0</u>	<u>12,521.3</u>	<u>12,365.2</u>	<u>12,607.9</u>	<u>11,900.6</u>	<u>11,597.5</u>	<u>11,201.5</u>
15 Net Assets Beginning of Year	19,098.1	19,299.9	17,828.2	18,454.9	18,367.6	16,741.8	16,305.0
16 Net Assets -Surplus/(Deficit) for Current Yr	2,800.9	(1,660.1)	(1,832.8)	(3,063.2)	(2,017.5)	(725.3)	(2,335.2)
18 TOTAL LIABILITIES & NET ASSETS	<u>35,816.0</u>	<u>30,161.1</u>	<u>28,360.6</u>	<u>27,999.6</u>	<u>28,250.7</u>	<u>27,614.0</u>	<u>25,171.3</u>
19 NET ASSETS TO DATE	<u>21,899.0</u>	<u>17,639.8</u>	<u>15,995.4</u>	<u>15,391.7</u>	<u>16,350.1</u>	<u>16,016.5</u>	<u>13,969.8</u>

ASHRAE
ASHRAE CONSOLIDATED (excl Foundation)
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT	
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget		
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022	
				REVENUES									
\$3,208.7	\$3,248.3	\$3,220.2	\$3,320.1	31 Membership Dues Earned Income	\$7,634.5	\$7,663.7	\$7,889.0	\$7,772.8	\$7,950.8	\$8,050.8	\$8,151.3	\$8,376.0	\$8,624.0
1,253.7	1,370.4	1,294.7	1,325.2	32 Publication Sales Income	3,626.1	3,504.1	3,700.1	3,664.0	3,660.6	3,715.6	3,857.7	3,952.6	4,124.5
1,293.7	1,313.1	1,121.5	1,430.8	34 Advertising Income - Display	3,779.4	3,577.7	3,658.2	3,294.3	3,432.7	3,740.0	3,625.5	3,676.4	3,796.5
5.2	9.7	3.5	9.5	34 Advertising Income - Classified	19.3	18.0	25.0	14.0	10.0	25.5	25.7	26.3	27.6
373.5	377.4	316.2	377.5	34 Advertising Income - On-line	715.8	821.2	870.0	899.2	925.0	925.0	955.0	985.0	1,015.0
87.5	47.9	211.1	22.2	35.1 Meeting & Seminar Income	1,529.9	2,151.9	1,889.3	1,737.6	1,648.6	1,654.7	1,870.6	1,720.5	1,806.5
81.1	74.1	72.3	83.7	35.2 Certification Registration	187.6	196.8	220.0	213.2	250.0	220.0	257.5	265.2	273.0
547.4	555.1	426.5	667.7	35.3 Education Registration	1,844.8	1,611.1	2,055.0	1,700.6	1,955.0	2,080.0	2,195.0	2,321.5	2,436.8
		15.5	39.8	37 Special Project Income	3.2	14.3	50.0	62.9	95.5	95.5			
336.5	270.8	309.7	318.2	38 Contribution Income	2,215.6	2,223.6	2,440.8	2,312.7	2,525.9	2,525.9	2,577.2	2,639.0	2,797.0
				41.1 AHR Exposition Income	5,168.0	5,623.7	5,802.5	6,085.7	5,700.0	5,750.0	5,700.0	6,150.0	5,950.0
10.0	10.0	10.0	10.0	41.2 Contributions and Matching Gifts	57.0	100.0	99.5	74.5	245.9	211.7	111.3	111.5	116.6
		234.0	200.0	41.3 Exposition Income - Other Countries	34.0	162.3			234.0	200.0		150.0	157.5
737.0	785.5	737.0	863.1	44 Reserve Transfers	655.3	1,089.7	1,885.2	1,199.3	2,071.0	2,071.0	1,140.4	1,070.5	1,124.0
109.9	166.7	214.4	224.1	46 Miscellaneous Income	322.7	330.6	508.4	364.7	1,010.6	728.8	360.5	393.3	424.2
8,044.2	8,229.0	8,186.6	8,891.9	TOTAL REVENUES	27,793.2	29,088.7	31,093.0	29,395.5	31,715.6	31,994.5	30,827.7	31,837.8	32,673.2
				EXPENSES:									
3,738.1	3,559.2	3,909.9	3,875.1	51 Salary Expense	8,410.0	8,801.9	8,981.9	9,342.7	9,542.0	9,541.9	9,951.6	10,254.2	10,561.9
1,131.1	1,113.4	1,160.7	1,231.6	52 Payroll Taxes, Benefits, Personnel Exp	2,635.1	2,549.5	2,717.1	2,766.8	2,824.0	2,903.1	3,054.2	3,180.1	3,275.7
1,169.9	1,315.8	1,074.3	1,173.6	61 Publishing and Promotion Expense	3,823.1	3,605.3	3,658.5	3,410.2	3,477.5	3,613.5	3,682.6	3,699.8	3,871.8
397.3	423.4	410.9	583.9	64 Meetings & Conferences Expense	2,347.3	2,630.7	2,662.7	2,888.8	2,678.0	2,716.1	2,894.6	2,583.1	2,714.3
802.3	918.2	858.3	924.0	66 Travel Expense	1,822.8	2,256.9	2,575.8	2,228.6	2,465.1	2,547.1	2,485.3	2,523.6	2,651.9
59.8	58.4	107.5	66.7	68 Awards, Certif, Logo Cost of Goods Sold	158.5	212.2	164.8	175.2	168.0	168.0	172.9	176.3	185.2
577.9	1,429.9	712.0	1,154.3	71 Research Projects & Grants Expense	2,321.1	2,725.3	3,691.2	2,941.5	3,710.1	3,687.4	2,698.9	2,881.2	2,945.5
34.6	36.5		63.0	73 Special Projects Expense	101.3	157.4	306.1	107.7	236.2	236.2			
23.4	60.2	19.6	29.9	76 Public Relations Expense	79.4	66.7	90.2	58.1	90.9	90.9	91.9	93.8	98.5
253.3	266.8	296.0	300.4	78 Occupancy & Insurance	588.6	553.9	644.5	639.3	787.5	753.5	742.0	749.9	775.7
620.6	727.5	628.8	693.9	82 Office Expense and Organizational Dues	1,851.7	1,768.5	1,965.3	1,623.3	1,808.7	1,842.0	1,877.7	1,916.2	2,035.0
656.7	708.7	737.8	811.7	84 Outside Services Expense	1,699.3	1,959.2	2,392.5	1,904.8	2,421.8	2,246.7	2,134.7	2,075.6	2,176.4
258.6	239.1	221.9	264.2	88 Other Expense	673.6	720.1	679.3	786.7	833.8	841.5	686.5	714.0	749.7
140.0	181.7	100.0	120.8	89 Opportunity Fund		140.0	240.0	140.0	150.0	150.0	250.0	250.0	250.0
222.2	245.6	199.6	252.7	90 Depreciation Expense	579.3	529.5	624.4	556.9	445.0	670.0	400.0	784.5	925.1
	12.5		(15.5)	91 Allocation of Overhead & BOD	0.0	0.3	0.0		(0.2)	0.0	0.1	0.2	(0.1)
10,085.8	11,296.9	10,437.3	11,530.3	TOTAL EXPENSES	27,091.1	28,677.4	31,394.3	29,570.6	31,638.4	32,007.9	31,123.0	31,882.5	33,216.6
(2,041.6)	(3,067.9)	(2,250.7)	(2,638.4)	SURPLUS (DEFICIT) before reserve income	702.1	411.3	(301.3)	(175.1)	77.2	(13.4)	(295.3)	(44.7)	(543.4)
		6,209.0		91.2 Gain on Sale of HQ					(6,520.0)				
89.5	162.6	29.3		92 Non-recurring Expenses	477.9	69.5	210.0	163.4					
				Reserve Investment Income:									
1,208.0	317.6	(310.2)	1,031.2	95 Investmt Income - Reserves (net of exp)	(186.1)	2,219.6	847.8	1,402.9	869.5	869.5	895.6	913.5	959.2
(737.0)	(577.8)	(817.9)	(527.4)	96 Transfer Reserves Portion Used Currentl	(655.3)	(1,089.7)	(1,885.2)	(1,244.3)	(1,308.4)	(1,308.4)	(1,140.4)	(1,070.5)	(1,124.0)
471.0	(260.2)	(1,128.1)	503.8	Remaining Reserve Investment Income	(841.4)	1,129.9	(1,037.4)	158.6	(438.9)	(438.9)	(244.8)	(157.0)	(164.8)
(1,660.1)	(3,490.7)	2,800.9	(2,134.6)	OVERALL SURPLUS (DEFICIT) after reser	(617.2)	1,471.7	(1,548.7)	(179.9)	(6,881.7)	(452.3)	(540.1)	(201.7)	(708.2)

**ASHRAE
GENERAL (Fund 2)
For the Five Months Ending Friday, November 30, 2018**

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT			
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget				
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022			
REVENUES				REVENUES											
\$3,144.4	\$3,183.6	\$3,155.9	\$3,253.2	31 Membership Dues Earned Income	\$7,481.7	\$7,510.4	\$7,732.0	\$7,617.1	\$7,788.8	\$7,888.8	\$7,986.3	\$8,207.7	\$8,447.3		
1,253.7	1,370.4	1,294.7	1,325.2	32 Publication Sales Income	3,626.1	3,504.1	3,700.1	3,664.0	3,660.6	3,715.6	3,857.7	3,952.6	4,124.5		
1,293.7	1,313.1	1,121.5	1,430.8	34 Advertising Income - Display	3,779.4	3,577.7	3,658.2	3,294.3	3,432.7	3,740.0	3,625.5	3,676.4	3,796.5		
5.2	9.7	3.5	9.5	34 Advertising Income - Classified	19.3	18.0	25.0	14.0	10.0	25.5	25.7	26.3	27.6		
373.5	377.4	316.2	377.5	34 Advertising Income - On-line	715.8	821.2	870.0	899.2	925.0	925.0	955.0	985.0	1,015.0		
87.5	47.9	211.1	22.2	35.1 Meeting & Seminar Income	1,529.9	2,151.9	1,889.3	1,737.6	1,648.6	1,654.7	1,870.6	1,720.5	1,806.5		
81.1	74.1	72.3	83.7	35.2 Certification Registration	187.6	196.8	220.0	213.2	250.0	220.0	257.5	265.2	273.0		
547.4	555.1	426.5	667.7	35.3 Education Registration	1,844.8	1,611.1	2,055.0	1,700.6	1,955.0	2,080.0	2,195.0	2,321.5	2,436.8		
		15.5	39.8	37 Special Project Income	3.2	14.3	50.0	62.9	95.5	95.5					
7.7	10.0	9.5	10.4	38 Contribution Income	104.2	49.2	42.3	35.1	42.9	42.9	43.8	54.7	82.0		
				41.1 AHR Exposition Income	5,168.0	5,623.7	5,802.5	6,085.7	5,700.0	5,750.0	5,700.0	6,150.0	5,950.0		
10.0	10.0	10.0	10.0	41.2 Contributions and Matching Gifts	(1,841.4)	(1,900.0)	(1,900.5)	(1,488.5)	(1,654.1)	(1,688.2)	(1,688.7)	(1,888.5)	(1,883.4)		
		234.0	200.0	41.3 Exposition Income - Other Countries	34.0	162.3			234.0	200.0		150.0	157.5		
299.6	299.6	299.6	384.5	44 Reserve Transfers	398.4	521.4	719.0	719.0	923.0	923.0	865.4	770.5	809.0		
110.0	165.3	214.4	222.5	46 Miscellaneous Income	322.8	330.7	504.9	364.6	1,007.0	725.2	356.8	389.5	420.2		
7,213.8	7,416.2	7,384.7	8,037.0	TOTAL REVENUES	23,373.8	24,192.8	25,367.8	24,918.8	26,019.0	26,298.0	26,050.6	26,781.4	27,462.5		
EXPENSES:				EXPENSES:											
3,553.7	3,312.5	3,717.1	3,627.2	51 Salary Expense	7,834.9	8,222.0	8,387.0	8,880.2	8,924.1	8,919.1	9,289.3	9,578.6	9,866.0		
1,078.3	1,043.2	1,106.0	1,157.0	52 Payroll Taxes, Benefits, Personnel Exp	2,477.8	2,390.8	2,552.2	2,594.0	2,641.5	2,720.7	2,856.1	2,976.6	3,066.1		
1,160.4	1,268.4	1,062.0	1,156.7	61 Publishing and Promotion Expense	3,781.7	3,566.1	3,553.2	3,396.7	3,446.5	3,582.5	3,650.7	3,667.3	3,837.6		
373.5	411.6	391.0	574.4	64 Meetings & Conferences Expense	2,320.2	2,600.9	2,644.6	2,857.7	2,659.5	2,702.6	2,875.6	2,563.7	2,694.0		
734.4	840.4	787.6	836.8	66 Travel Expense	1,735.0	2,146.6	2,438.6	2,115.4	2,325.9	2,407.2	2,341.1	2,376.6	2,497.5		
21.7	24.0	38.4	36.8	68 Awards, Certif, Logo Cost of Goods Sold	90.9	123.3	129.8	119.4	132.3	132.3	136.1	138.8	145.8		
118.1	124.9	108.9	163.0	71 Research Projects & Grants Expense	121.7	121.2	136.6	126.9	173.6	173.6	173.8	174.0	182.7		
34.6	36.5		63.0	73 Special Projects Expense	101.3	157.4	306.1	107.7	236.2	236.2					
23.3	60.1	19.6	29.8	76 Public Relations Expense	79.4	66.7	89.9	57.9	90.6	90.6	91.7	93.5	98.2		
253.3	266.8	293.6	300.4	78 Occupancy & Insurance	588.6	553.9	644.5	639.3	787.5	753.5	742.0	749.9	775.7		
593.5	702.1	613.1	667.6	82 Office Expense and Organizational Dues	1,804.0	1,725.2	1,905.0	1,576.0	1,747.2	1,780.5	1,814.3	1,851.5	1,966.9		
655.9	708.7	737.6	811.7	84 Outside Services Expense	1,703.9	1,959.2	2,392.5	1,904.2	2,421.7	2,246.7	2,134.7	2,075.6	2,176.4		
248.0	226.4	209.7	248.4	88 Other Expense	623.2	668.6	610.5	738.3	763.6	771.3	614.2	640.3	672.3		
140.0	181.7	100.0	120.8	89 Opportunity Fund	0.0	140.0	240.0	140.0	150.0	150.0	250.0	250.0	250.0		
222.2	245.6	199.6	252.7	90 Depreciation Expense	579.3	529.5	624.4	556.9	445.0	670.0	400.0	784.5	925.1		
(267.8)	(397.4)	(284.2)	(425.6)	91 Allocation of Overhead & BOD	(750.3)	(807.6)	(985.9)	(669.2)	(1,003.5)	(1,025.4)	(1,023.7)	(1,094.8)	(1,148.3)		
8,943.1	9,055.5	9,100.0	9,620.7	TOTAL EXPENSES	23,091.6	24,163.8	25,669.0	25,141.4	25,941.7	26,311.4	26,345.9	26,826.1	28,006.0		
(1,729.3)	(1,639.3)	(1,715.3)	(1,583.7)	SURPLUS (DEFICIT) before reserve income	282.2	29.0	(301.2)	(222.6)	77.3	(13.4)	(295.3)	(44.7)	(543.5)		
		6,209.0		91.2 Gain on Sale of HQ					(6,520.0)						
89.5	162.6	29.3		92 Non-recurring Expenses	477.9	69.5	210.0	163.4							
				Reserve Investment Income:											
837.7	220.6	(204.7)	691.5	95 Investmt Income - Reserves (net of exp)	(115.9)	1,533.4	614.7	970.9	634.0	634.0	653.1	666.1	699.4		
(299.6)	(441.8)	(380.5)	(366.9)	96 Transfer Reserves Portion Used Currentl	(398.4)	(521.4)	(719.0)	(764.0)	(923.4)	(923.4)	(865.4)	(770.5)	(809.0)		
538.1	(221.2)	(585.2)	324.6	Remaining Reserve Investment Income	(514.3)	1,012.0	(104.3)	206.9	(289.4)	(289.4)	(212.3)	(104.4)	(109.6)		
(1,280.7)	(2,023.1)	3,879.2	(1,259.1)	OVERALL SURPLUS (DEFICIT) after reser	(710.0)	971.5	(615.5)	(179.1)	(6,732.1)	(302.8)	(507.6)	(149.1)	(653.1)		

ASHRAE
BOARD OF DIRECTORS 2-5nn
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT		
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget			
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022		
				acct / Description										
	\$3.5	\$0.1	\$3.5	REVENUES										
						\$8.3		\$8.5	\$8.5	\$8.7	\$18.8	\$44.3		
				0.0	80.0	0.0	0.0	0.0	0.0					
			79.2					190.0	190.0	110.0				
	17.9	0.0						10.0	10.0	30.0	60.0	74.1		
	21.4	0.1	82.7	0.3	80.0	51.3	0.8	208.5	208.5	148.7	78.8	118.4		
				EXPENSES:										
444.0	403.5	458.0	428.7	811.0	909.4	1,002.7	1,116.7	1,065.5	1,065.5	1,138.2	1,194.2	1,230.0		
125.2	111.8	133.3	125.7	245.1	270.2	270.0	322.7	308.7	308.7	355.2	368.4	379.4		
6.7	61.8	37.1	26.2	26.9	32.0	124.6	60.2	170.6	170.6	155.2	126.2	132.5		
48.5	25.1	22.1	18.1	83.8	147.1	99.6	145.6	80.3	80.3	107.0	74.6	78.3		
330.0	355.5	316.9	335.4	782.6	897.4	1,014.1	948.4	977.5	991.6	957.9	967.8	1,020.9		
0.2	0.8	6.0	1.4	9.9	15.7	3.9	13.5	4.0	4.0	4.1	4.2	4.4		
				7.3	7.4	8.4	7.4	8.6	8.6	8.8	9.0	9.4		
15.2	23.8	13.3	34.0	16.5	12.5	49.9	23.8	46.3	53.2	43.8	44.7	46.7		
37.0	39.2	34.3	110.2	73.2	186.4	227.8	87.0	322.4	322.4	158.6	139.8	148.0		
	1.2	0.0	5.2	7.0		2.8	0.0	12.4	12.4	15.5	3.0	3.2		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
	41.7		20.8			100.0		50.0	50.0	100.0	100.0	100.0		
	10.8	16.7		0.2		48.8	15.0	65.0	65.0	65.0	32.5	34.1		
(1,006.9)	(1,196.7)	(1,037.7)	(1,071.8)	(2,064.0)	(2,478.3)	(3,052.0)	(2,740.3)	(3,111.3)	(3,132.3)	(3,109.4)	(3,074.4)	(3,240.9)		
(0.1)	(121.5)		33.9	(0.5)		(99.4)		0.0	0.0	(0.1)	(10.0)	(54.0)		
0.1	142.9	0.1	48.8	TOTAL EXPENSES										
				0.8	80.0	150.7	0.8	208.5	208.5	148.8	88.8	172.4		
				SURPLUS (DEFICIT) before reserve income										

**ASHRAE
OVERHEAD 2-9nn
For the Five Months Ending Friday, November 30, 2018**

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT		
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget			
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022		
				REVENUES										
				41.1 AHR Exposition Income	\$5,168.0	\$5,623.7	\$5,802.5	\$6,085.7	\$5,700.0	\$5,750.0	\$5,700.0	\$6,150.0	\$5,950.0	
				41.2 Contributions and Matching Gifts	(1,898.4)	(2,000.0)	(2,000.0)	(1,563.0)	(1,740.0)	(1,740.0)	(1,800.0)	(2,000.0)	(2,000.0)	
		234.0	200.0	41.3 Exposition Income - Other Countries	34.0	162.3			234.0	200.0		150.0	157.5	
299.6	299.6	299.6	305.4	44 Reserve Transfers	398.4	521.4	719.0	719.0	733.0	733.0	755.4	770.5	809.0	
34.1	29.6	114.0	145.3	46 Miscellaneous Income	5.0	22.4	144.7	10.3	382.6	382.6	34.9	35.6	37.4	
333.7	329.2	647.6	650.7	TOTAL REVENUES	3,707.0	4,329.8	4,666.2	5,252.0	5,309.6	5,325.6	4,690.3	5,106.1	4,953.9	
				EXPENSES:										
971.3	919.4	1,062.6	1,027.4	51 Salary Expense	2,155.0	2,264.5	2,306.6	2,335.7	2,531.5	2,521.5	2,691.3	2,809.6	2,893.8	
313.7	331.0	329.4	376.5	52 Payroll Taxes, Benefits, Personnel Exp	724.4	705.2	816.9	680.5	767.7	817.7	831.8	892.0	918.9	
47.2	6.5	23.9	40.8	61 Publishing and Promotion Expense	24.8	67.7	111.4	111.0	101.7	101.7	103.8	105.9	111.2	
6.8	5.5	3.4	7.8	64 Meetings & Conferences Expense	13.5	12.3	14.2	12.7	14.5	14.5	15.0	15.3	16.0	
61.1	44.7	67.6	59.6	66 Travel Expense	96.4	155.0	110.3	155.7	139.0	146.9	124.8	126.7	133.0	
7.8	1.3	13.6	8.6	68 Awards, Certif, Logo Cost of Goods Sold		31.6	27.1	24.9	27.6	27.6	28.4	29.0	30.4	
23.3	59.0	19.6	28.7	76 Public Relations Expense	79.4	66.2	87.3	57.9	88.0	88.0	89.0	90.7	95.3	
235.9	249.0	271.6	282.0	78 Occupancy & Insurance	548.0	514.0	601.6	595.8	743.7	709.7	696.9	703.9	727.4	
158.9	169.4	173.6	189.8	82 Office Expense and Organizational Dues	342.1	368.1	411.7	343.7	400.1	400.1	412.1	420.4	441.4	
218.3	251.2	291.3	262.7	84 Outside Services Expense	457.5	475.5	554.3	635.7	579.5	579.5	583.6	595.3	625.0	
55.3	37.6	57.0	52.9	88 Other Expense	102.4	137.4	116.3	131.2	122.1	129.9	125.8	128.3	134.7	
222.2	234.8	175.6	231.9	90 Depreciation Expense	559.9	529.4	575.6	541.9	330.0	555.0	285.0	710.0	846.9	
(2,321.8)	(2,309.5)	(2,489.3)	(2,556.4)	91 Allocation of Overhead & BOD	(5,037.2)	(5,327.0)	(5,707.3)	(5,626.5)	(5,845.4)	(6,092.1)	(5,987.4)	(6,653.8)	(6,962.8)	
	(0.1)		12.3	TOTAL EXPENSES	66.2	26.0	26.0	0.0	0.0	0.0	0.1	(26.7)	11.2	
333.7	329.3	647.6	638.4	SURPLUS (DEFICIT) before reserve income	3,640.8	4,329.8	4,640.2	5,252.0	5,309.6	5,325.6	4,690.2	5,132.8	4,942.7	

ASHRAE
MEMBERS COUNCIL (2-2nn & 2-8nn)
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov			
Actual	<i>Budget</i>	Actual	<i>Budget</i>
FY 2018	<i>FY 2018</i>	FY 2019	<i>FY 2019</i>
\$3,144.4	\$3,183.6	\$3,155.9	\$3,253.2
87.5	47.9	211.1	22.2
5.6	3.6	6.3	3.9
10.0	10.0	10.0	10.0
25.9	35.0	31.3	20.4
3,273.4	3,280.1	3,414.6	3,309.7
569.1	599.1	575.9	603.3
164.1	172.9	163.2	183.2
119.8	119.7	117.8	136.1
219.8	130.2	372.8	165.6
275.5	364.2	324.7	354.9
13.6	20.3	18.6	25.6
118.1	124.9	108.9	163.0
167.0	144.3	172.2	171.8
23.5	57.5	54.6	38.2
120.3	122.0	122.4	117.0
(118.6)		(175.9)	133.1
140.0	140.0	100.0	100.0
813.9	796.4	846.9	800.3
2,626.1	2,791.5	2,802.1	2,992.1
647.3	488.6	612.5	317.6

acct / Description	TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT
	Actual	Actual	<i>Budget</i>	Actual	Forecast	<i>Budget</i>	Budget	Budget	Budget
	FY 2016	FY 2017	<i>FY 2018</i>	FY 2018	FY 2019	<i>FY 2019</i>	FY 2020	FY 2021	FY 2022
REVENUES									
31 Membership Dues Earned Income	\$7,481.7	\$7,510.4	\$7,732.0	\$7,617.1	\$7,788.8	\$7,888.8	\$7,986.3	\$8,207.7	\$8,447.3
35.1 Meeting & Seminar Income	1,529.9	2,151.9	1,889.3	1,737.6	1,648.6	1,654.7	1,870.6	1,720.5	1,806.5
35.3 Education Registration				1.6					
38 Contribution Income	92.1	36.5	19.0	22.4	19.2	19.2	19.6	20.0	21.0
41.2 Contributions and Matching Gifts	20.0	20.0	20.7	34.5	20.9	20.9	21.3	21.5	22.1
46 Miscellaneous Income	117.9	121.0	112.6	129.9	86.1	77.3	79.9	77.8	81.7
TOTAL REVENUES	9,241.6	9,839.8	9,773.6	9,543.1	9,563.6	9,660.9	9,977.7	10,047.5	10,378.6
EXPENSES:									
51 Salary Expense	1,330.7	1,369.4	1,455.7	1,404.6	1,427.9	1,487.9	1,519.2	1,550.3	1,596.8
52 Payroll Taxes, Benefits, Personnel Exp	404.7	357.5	406.7	384.5	432.8	447.8	461.8	474.4	488.6
61 Publishing and Promotion Expense	398.0	409.4	384.1	350.0	353.2	353.2	355.3	359.5	377.5
64 Meetings & Conferences Expense	1,658.4	1,866.4	1,927.1	1,964.9	1,958.6	1,978.6	2,073.4	1,770.3	1,858.8
66 Travel Expense	625.0	764.0	888.7	731.2	839.4	854.4	880.1	897.4	940.4
68 Awards, Certif, Logo Cost of Goods Sold	80.0	75.0	94.4	79.5	96.2	96.2	99.0	101.0	106.0
71 Research Projects & Grants Expense	114.4	113.8	128.2	119.5	165.0	165.0	165.0	165.0	173.3
82 Office Expense and Organizational Dues	319.9	366.7	359.6	380.0	381.5	381.5	391.6	399.0	418.9
84 Outside Services Expense	195.6	211.5	248.0	164.0	251.5	251.5	256.8	203.8	214.0
88 Other Expense	285.9	348.0	319.5	334.7	337.0	337.0	307.9	340.6	357.7
88.1 Prepaid Expense (contra acct)	(8.8)	(25.5)		19.5	(25.0)	(25.0)			
89 Opportunity Fund		140.0	140.0	140.0	100.0	100.0	150.0	150.0	150.0
91 Allocation of Overhead & BOD	1,736.4	1,904.0	1,915.3	2,027.6	1,949.8	1,992.4	1,989.1	2,127.2	2,231.2
TOTAL EXPENSES	7,140.2	7,900.2	8,267.3	8,100.0	8,267.9	8,420.5	8,649.2	8,538.5	8,913.2
SURPLUS (DEFICIT) before reserve income	2,101.4	1,939.6	1,506.3	1,443.1	1,295.7	1,240.4	1,328.5	1,509.0	1,465.4

ASHRAE
PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget	
FY 2018	FY 2018	FY 2019	FY 2019	acct / Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022
\$1,253.7	\$1,370.4	\$1,294.7	\$1,325.2	REVENUES								
1,293.7	1,313.1	1,121.5	1,430.8	32 Publication Sales Income	\$3,626.1	\$3,504.1	\$3,700.1	\$3,664.0	\$3,660.6	\$3,715.6	\$3,857.7	\$4,124.5
5.2	9.7	3.5	9.5	34 Advertising Income - Display	3,779.4	3,577.7	3,658.2	3,294.3	3,432.7	3,740.0	3,625.5	3,796.5
373.5	377.4	316.2	377.5	34 Advertising Income - Classified	19.3	18.0	25.0	14.0	10.0	25.5	25.7	27.6
81.1	74.1	72.3	83.7	34 Advertising Income - On-line	715.8	821.2	870.0	899.2	925.0	925.0	955.0	1,015.0
547.4	555.1	426.5	667.7	35.2 Certification Registration	187.6	196.8	220.0	213.2	250.0	220.0	257.5	273.0
2.1	2.8	3.2	2.9	35.3 Education Registration	1,844.8	1,611.1	2,055.0	1,699.0	1,955.0	2,080.0	2,195.0	2,436.8
				38 Contribution Income	12.1	12.7	14.9	12.8	15.2	15.2	15.5	16.6
				41.2 Contributions and Matching Gifts	95.0	50.0	136.8	90.0	90.0	90.0	90.0	94.5
49.5	70.3	16.7	44.0	46 Miscellaneous Income	184.4	164.0	177.5	222.5	346.8	227.8	183.6	196.6
3,606.2	3,772.9	3,254.6	3,941.3	TOTAL REVENUES	10,464.5	9,955.6	10,857.5	10,109.0	10,685.3	11,039.1	11,205.5	11,981.1
				EXPENSES:								
1,088.8	950.6	1,102.5	1,099.2	51 Salary Expense	2,411.7	2,458.1	2,484.7	2,822.8	2,725.6	2,680.6	2,743.1	2,881.9
339.1	298.5	333.3	333.0	52 Payroll Taxes, Benefits, Personnel Exp	780.7	732.1	742.1	851.2	788.7	802.9	849.3	898.5
986.6	1,080.7	883.4	952.8	61 Publishing and Promotion Expense	3,331.8	3,056.2	2,930.7	2,875.1	2,818.6	2,954.6	3,033.8	3,213.7
214.7	237.0	164.9	239.3	64 Meetings & Conferences Expense	564.6	584.2	582.2	710.7	617.5	627.5	657.8	716.8
41.7	37.7	36.1	40.8	66 Travel Expense	137.8	167.9	224.0	178.1	172.2	188.6	191.1	203.7
0.1	1.1	0.2	1.1	68 Awards, Certif, Logo Cost of Goods Sold	0.8	0.9	2.7	1.0	2.7	2.7	2.8	3.0
				76 Public Relations Expense		0.5						
17.4	17.8	24.4	18.4	78 Occupancy & Insurance	40.6	39.9	42.9	43.5	43.8	43.8	45.1	48.3
252.3	355.1	251.5	261.9	82 Office Expense and Organizational Dues	1,036.6	884.2	957.2	726.2	808.6	817.9	835.1	918.8
332.6	353.0	355.0	387.9	84 Outside Services Expense	938.3	1,061.1	1,341.4	1,007.7	1,154.4	1,089.4	1,131.7	1,185.0
72.5	65.6	30.2	73.2	88 Other Expense	227.7	183.2	171.7	272.4	291.9	291.9	164.9	176.5
1,556.3	1,570.4	1,634.4	1,658.2	91 Allocation of Overhead & BOD	3,147.3	3,414.3	4,057.5	3,931.4	4,130.5	4,220.7	4,213.9	4,726.7
4,902.1	4,967.5	4,815.9	5,065.8	TOTAL EXPENSES	12,617.9	12,582.6	13,537.1	13,420.1	13,554.5	13,720.6	13,868.6	14,972.9
(1,295.9)	(1,194.6)	(1,561.3)	(1,124.5)	SURPLUS (DEFICIT) before reserve income	(2,153.4)	(2,627.0)	(2,679.6)	(3,311.1)	(2,869.2)	(2,681.5)	(2,663.1)	(2,991.8)

**ASHRAE
TECHNOLOGY COUNCIL
For the Five Months Ending Friday, November 30, 2018**

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT		
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget			
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022		
		\$15.5	\$39.8											
0.6	12.5	52.4	12.7											
0.6	12.5	67.9	52.5											
				REVENUES										
				37 Special Project Income	\$3.2	\$14.3	\$50.0	\$62.9	\$95.5	\$95.5				
				46 Miscellaneous Income	15.0	23.3	27.1	1.2	181.6	27.6	28.4	29.0	30.4	
				TOTAL REVENUES	18.2	37.6	77.1	64.1	277.1	123.1	28.4	29.0	30.4	
				EXPENSES:										
480.5	448.6	518.0	465.1	51 Salary Expense	1,125.8	1,220.4	1,154.5	1,201.3	1,173.6	1,163.6	1,197.4	1,226.6	1,263.4	
136.2	128.8	146.8	139.0	52 Payroll Taxes, Benefits, Personnel Exp	322.8	325.8	316.5	355.1	343.6	343.6	358.1	369.5	380.6	
0.1	(0.4)	(0.2)	0.8	61 Publishing and Promotion Expense	0.3	0.8	2.4	0.4	2.4	2.4	2.5	2.6	2.7	
2.2	13.9	3.6	10.5	64 Meetings & Conferences Expense	8.8	16.3	21.5	4.4	13.6	21.8	22.4	22.9	24.0	
25.9	38.4	42.4	46.0	66 Travel Expense	93.2	162.2	201.6	102.1	197.8	225.7	187.3	190.7	199.5	
	0.6			68 Awards, Certif, Logo Cost of Goods Sold	0.3	0.1	1.7	0.4	1.7	1.7	1.8	1.8	1.9	
34.6	36.5		63.0	73 Special Projects Expense	101.3	157.4	306.1	107.7	236.2	236.2				
	1.1		1.1	76 Public Relations Expense			2.6		2.6	2.6	2.7	2.8	2.9	
0.1	9.6	0.1	10.2	82 Office Expense and Organizational Dues	88.9	93.7	126.5	101.5	110.7	127.9	131.7	134.3	141.1	
44.5	7.7	2.2	12.8	84 Outside Services Expense	39.3	24.7	20.9	9.9	113.9	3.9	4.1	4.1	4.3	
	0.1		0.1	88 Other Expense	0.0		0.1		0.1	0.1	0.1	0.2	0.2	
		7.4	20.8	90 Depreciation Expense	19.2	0.0			50.0	50.0	50.0	42.0	44.1	
690.8	741.9	761.6	744.1	91 Allocation of Overhead & BOD	1,467.2	1,679.4	1,800.6	1,738.6	1,833.0	1,873.0	1,870.0	1,999.8	2,097.6	
1,414.9	1,426.8	1,481.9	1,513.5	TOTAL EXPENSES	3,267.1	3,680.8	3,955.0	3,621.4	4,079.2	4,052.5	3,828.1	3,997.3	4,162.3	
(1,414.3)	(1,414.3)	(1,414.0)	(1,461.0)	SURPLUS (DEFICIT) before reserve income	(3,248.9)	(3,643.2)	(3,877.9)	(3,557.3)	(3,802.1)	(3,929.4)	(3,799.7)	(3,968.3)	(4,131.9)	

**ASHRAE
RESEARCH (funds 3 & 4)
For the Five Months Ending Friday, November 30, 2018**

Fiscal YTD Through Month of Nov				TWELVE MONTHS ENDING JUNE 30						DRAFT	DRAFT	DRAFT		
Actual	Budget	Actual	Budget	Actual	Actual	Budget	Actual	Forecast	Budget	Budget	Budget			
FY 2018	FY 2018	FY 2019	FY 2019	FY 2016	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2021	FY 2022		
				REVENUES										
\$64.3	\$64.7	\$64.3	\$66.9	31 Membership Dues Earned Income	\$152.7	\$153.3	\$157.0	\$155.7	\$162.0	\$162.0	\$165.0	\$168.3	\$176.7	
280.8	260.8	254.3	307.8	38 Contribution Income	2,046.7	2,108.1	2,398.5	2,212.1	2,482.9	2,482.9	2,533.4	2,584.3	2,715.0	
				41.2 Contributions and Matching Gifts	1,898.4	2,000.0	2,000.0	1,563.0	1,900.0	1,900.0	1,800.0	2,000.0	2,000.0	
437.4	485.9	437.4	478.6	44 Reserve Transfers	256.9	568.3	1,166.2	480.3	1,148.0	1,148.0	275.0	300.0	315.0	
	1.5		1.5	46 Miscellaneous Income	0.0		3.5		3.6	3.6	3.7	3.8	4.0	
782.5	812.9	756.0	854.8	TOTAL REVENUES	4,354.7	4,829.7	5,725.2	4,411.1	5,696.5	5,696.5	4,777.1	5,056.4	5,210.7	
				EXPENSES:										
185.4	246.7	193.1	248.0	51 Salary Expense	575.2	578.2	594.6	461.7	617.9	617.9	662.3	675.6	695.9	
52.8	70.2	54.7	74.3	52 Payroll Taxes, Benefits, Personnel Exp	157.3	158.7	164.9	172.8	182.5	182.5	198.1	203.5	209.6	
9.4	47.5	12.3	16.9	61 Publishing and Promotion Expense	41.3	39.2	105.4	13.4	31.0	31.0	31.9	32.5	34.2	
23.8	11.8	20.0	9.5	64 Meetings & Conferences Expense	27.0	31.4	18.1	30.3	18.4	18.4	19.0	19.4	20.3	
67.8	77.8	70.7	87.2	66 Travel Expense	84.0	106.1	137.2	111.1	139.2	139.9	144.1	147.0	154.4	
37.0	34.5	35.1	29.9	68 Awards, Certif, Logo Cost of Goods Sold	37.4	47.0	35.0	44.1	35.7	35.7	36.8	37.5	39.4	
459.8	1,305.0	603.1	991.3	71 Research Projects & Grants Expense	2,199.4	2,604.1	3,554.7	2,814.6	3,536.5	3,513.8	2,525.1	2,707.2	2,762.8	
0.1	0.1		0.1	76 Public Relations Expense			0.3	0.2	0.3	0.3	0.3	0.3	0.3	
24.9	25.3	17.3	26.3	82 Office Expense and Organizational Dues	45.7	43.3	60.4	45.6	61.5	61.5	63.4	64.7	68.0	
				84 Outside Services Expense	(4.8)									
10.6	12.7	12.2	15.8	88 Other Expense	50.4	51.5	68.9	48.1	70.2	70.2	72.3	73.8	77.5	
267.8	409.9	284.2	410.1	91 Allocation of Overhead & BOD	750.3	807.9	985.9	669.2	1,003.3	1,025.4	1,023.8	1,094.8	1,148.3	
1,139.4	2,241.5	1,302.7	1,909.4	TOTAL EXPENSES	3,963.2	4,467.4	5,725.4	4,411.1	5,696.5	5,696.6	4,777.1	5,056.3	5,210.7	
(356.9)	(1,428.6)	(546.7)	(1,054.6)	SURPLUS (DEFICIT) before reserve income	391.5	362.3	(0.2)	0.0	0.0	(0.1)	0.0	0.1	0.0	

ASHRAE
GENERAL FUND - MAJOR VARIATIONS
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov						Variance		Explanation
Actual	Budget	Actual	Budget	Forecast	Budget	FCST vs.		
FY 2018	FY 2018	FY 2019	FY 2019	FY 2019	FY 2019	Budget		
				acct / Description				
				REVENUES				
\$3,144.4	\$3,183.6	\$3,155.9	\$3,253.2	31 Membership Dues Earned Income	\$7,788.8	\$7,888.8	\$ (100.0)	Actual dues are trailing the budget YTD
1,253.7	1,370.4	1,294.7	1,325.2	32 Publication Sales Income	3,660.6	3,715.6	(55.0)	
1,293.7	1,313.1	1,121.5	1,430.8	34 Advertising Income - Display	3,432.7	3,740.0	(307.3)	One sales rep firm (accounts for almost 50% of loss) lost 3 accounts; Print ads industry wide declining; January Journal ads (associated with AHR Expo) on target
5.2	9.7	3.5	9.5	34 Advertising Income - Classified	10.0	25.5	(15.5)	
373.5	377.4	316.2	377.5	34 Advertising Income - On-line	925.0	925.0	-	
87.5	47.9	211.1	22.2	35.1 Meeting & Seminar Income	1,648.6	1,654.7	(6.1)	
81.1	74.1	72.3	83.7	35.2 Certification Registration	250.0	220.0	30.0	
547.4	555.1	426.5	667.7	35.3 Education Registration	1,955.0	2,080.0	(125.0)	Slow first quarter but schedule is accelerating (registrations ahead of last year); New cooperative events with APPA later in year
		15.5	39.8	37 Special Project Income	95.5	95.5	-	
7.7	10.0	9.5	10.4	38 Contribution Income	42.9	42.9	-	
				41.1 AHR Exposition Income	5,700.0	5,750.0	(50.0)	
10.0	10.0	10.0	10.0	41.2 Contributions and Matching Gifts	(1,654.1)	(1,688.2)	34.1	
		234.0	200.0	41.3 Exposition Income - Other Countries	234.0	200.0	34.0	
299.6	299.6	299.6	384.5	44 Reserve Transfers	923.0	923.0	-	
110.0	165.3	214.4	222.5	46 Miscellaneous Income	1,007.0	725.2	281.8	Revenue from work with UNEP greater than budgeted; KFAS Project - Associated expenses below
7,213.8	7,416.2	7,384.7	8,037.0	TOTAL REVENUES	26,019.0	26,298.0		
				EXPENSES:				
3,553.7	3,312.5	3,717.1	3,627.2	51 Salary Expense	8,924.1	8,919.1	5.0	
1,078.3	1,043.2	1,106.0	1,157.0	52 Payroll Taxes, Benefits, Personnel Exp	2,641.5	2,720.7	(79.2)	Benefit costs trending lower than YTD budget
1,160.4	1,268.4	1,062.0	1,156.7	61 Publishing and Promotion Expense	3,446.5	3,582.5	(136.0)	Primarily related to lowering of commissions to sales reps for ad sales
373.5	411.6	391.0	574.4	64 Meetings & Conferences Expense	2,659.5	2,702.6	(43.1)	
734.4	840.4	787.6	836.8	66 Travel Expense	2,325.9	2,407.2	(81.3)	Staff Travel was lowered based on Winter Meeting being in Atlanta
21.7	24.0	38.4	36.8	68 Awards, Certif, Logo Cost of Goods Sold	132.3	132.3	-	
118.1	124.9	108.9	163.0	71 Research Projects & Grants Expense	173.6	173.6	-	
34.6	36.5		63.0	73 Special Projects Expense	236.2	236.2	-	
23.3	60.1	19.6	29.8	76 Public Relations Expense	90.6	90.6	-	
253.3	266.8	293.6	300.4	78 Occupancy & Insurance	787.5	753.5	34.0	
593.5	702.1	613.1	667.6	82 Office Expense and Organizational Dues	1,747.2	1,780.5	(33.3)	
655.9	708.7	737.6	811.7	84 Outside Services Expense	2,421.7	2,246.7	175.0	Associated expenses to UNEP and KFAS work above.
248.0	226.4	209.7	248.4	88 Other Expense	763.6	771.3	(7.7)	
140.0	181.7	100.0	120.8	89 Opportunity Fund	150.0	150.0	-	
222.2	245.6	199.6	252.7	90 Depreciation Expense	445.0	670.0	(225.0)	HQ Building Sale; removed associated depreciation for 9 months of the year
(267.8)	(397.4)	(284.2)	(425.6)	91 Allocation of Overhead & BOD	(1,003.5)	(1,025.4)		
8,943.1	9,055.5	9,100.0	9,620.7	TOTAL EXPENSES	25,941.7	26,311.4		
(1,729.3)	(1,639.3)	(1,715.3)	(1,583.7)	SURPLUS (DEFICIT) before reserve income	77.3	(13.4)	90.7	

**ASHRAE
BOARD OF DIRECTORS 2-5nn
For the Five Months Ending Friday, November 30, 2018**

Fiscal YTD Through Month of Nov						Variance	
Actual	Budget	Actual	Budget	Forecast	Budget	FCST vs.	Explanation
FY 2018	FY 2018	FY 2019	FY 2019	FY 2019	FY 2019	Budget	
				acct / Description			
	\$3.5	\$0.1	\$3.5	REVENUES			
				38 Contribution Income	\$8.5	\$8.5	\$0.0
				41.2 Contributions and Matching Gifts	0.0	0.0	\$0.0
			79.2	44 Reserve Transfers	190.0	190.0	\$0.0
	17.9	0.0		46 Miscellaneous Income	10.0	10.0	\$0.0
	21.4	0.1	82.7	TOTAL REVENUES	208.5	208.5	
				EXPENSES:			
444.0	403.5	458.0	428.7	51 Salary Expense	1,065.5	1,065.5	\$0.0
125.2	111.8	133.3	125.7	52 Payroll Taxes, Benefits, Personnel Exp	308.7	308.7	\$0.0
6.7	61.8	37.1	26.2	61 Publishing and Promotion Expense	170.6	170.6	\$0.0
48.5	25.1	22.1	18.1	64 Meetings & Conferences Expense	80.3	80.3	\$0.0
330.0	355.5	316.9	335.4	66 Travel Expense	977.5	991.6	(\$14.1)
0.2	0.8	6.0	1.4	68 Awards, Certif, Logo Cost of Goods Sold	4.0	4.0	\$0.0
				71 Research Projects & Grants Expense	8.6	8.6	\$0.0
15.2	23.8	13.3	34.0	82 Office Expense and Organizational Dues	46.3	53.2	(\$6.9)
37.0	39.2	34.3	110.2	84 Outside Services Expense	322.4	322.4	\$0.0
	1.2	0.0	5.2	88 Other Expense	12.4	12.4	\$0.0
0.0	0.0	0.0	0.0	88.1 Prepaid Expense (contra acct)	0.0	0.0	\$0.0
	41.7		20.8	89 Opportunity Fund	50.0	50.0	\$0.0
	10.8	16.7		90 Depreciation Expense	65.0	65.0	\$0.0
(1,006.9)	(1,196.7)	(1,037.7)	(1,071.8)	91 Allocation of Overhead & BOD	(3,111.3)	(3,132.3)	
(0.1)	(121.5)		33.9	TOTAL EXPENSES	0.0	0.0	
0.1	142.9	0.1	48.8	SURPLUS (DEFICIT) before reserve income	208.5	208.5	

ASHRAE
MEMBERS COUNCIL (2-2nn & 2-8nn)
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov						Variance	
Actual	Budget	Actual	Budget	Forecast	Budget	FCST vs.	Explanation
FY 2018	FY 2018	FY 2019	FY 2019	FY 2019	FY 2019	Budget	
				acct / Description			
				REVENUES			
\$3,144.4	\$3,183.6	\$3,155.9	\$3,253.2	31 Membership Dues Earned Income	\$7,788.8	\$7,888.8	(\$100.0) Actual dues are trailing the budget YTD
87.5	47.9	211.1	22.2	35.1 Meeting & Seminar Income	1,648.6	1,654.7	(\$6.1)
				35.3 Education Registration			\$0.0
5.6	3.6	6.3	3.9	38 Contribution Income	19.2	19.2	\$0.0
10.0	10.0	10.0	10.0	41.2 Contributions and Matching Gifts	20.9	20.9	\$0.0
25.9	35.0	31.3	20.4	46 Miscellaneous Income	86.1	77.3	\$8.8
3,273.4	3,280.1	3,414.6	3,309.7	TOTAL REVENUES	9,563.6	9,660.9	
				EXPENSES:			
569.1	599.1	575.9	603.3	51 Salary Expense	1,427.9	1,487.9	(\$60.0)
164.1	172.9	163.2	183.2	52 Payroll Taxes, Benefits, Personnel Exp	432.8	447.8	(\$15.0)
119.8	119.7	117.8	136.1	61 Publishing and Promotion Expense	353.2	353.2	\$0.0
219.8	130.2	372.8	165.6	64 Meetings & Conferences Expense	1,958.6	1,978.6	(\$20.0)
275.5	364.2	324.7	354.9	66 Travel Expense	839.4	854.4	(\$15.0)
13.6	20.3	18.6	25.6	68 Awards, Certif, Logo Cost of Goods Sold	96.2	96.2	\$0.0
118.1	124.9	108.9	163.0	71 Research Projects & Grants Expense	165.0	165.0	\$0.0
167.0	144.3	172.2	171.8	82 Office Expense and Organizational Dues	381.5	381.5	\$0.0
23.5	57.5	54.6	38.2	84 Outside Services Expense	251.5	251.5	\$0.0
120.3	122.0	122.4	117.0	88 Other Expense	337.0	337.0	\$0.0
(118.6)		(175.9)	133.1	88.1 Prepaid Expense (contra acct)	(25.0)	(25.0)	\$0.0
140.0	140.0	100.0	100.0	89 Opportunity Fund	100.0	100.0	\$0.0
813.9	796.4	846.9	800.3	91 Allocation of Overhead & BOD	1,949.8	1,992.4	
2,626.1	2,791.5	2,802.1	2,992.1	TOTAL EXPENSES	8,267.9	8,420.5	
647.3	488.6	612.5	317.6	SURPLUS (DEFICIT) before reserve income	1,295.7	1,240.4	

ASHRAE
PUBLISHING & EDUCATION COUNCIL (2-4nn & 5-5nn)
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov						Variance		Explanation
Actual	Budget	Actual	Budget	Forecast	Budget	FCST vs.	Budget	
FY 2018	FY 2018	FY 2019	FY 2019	FY 2019	FY 2019			
				acct / Description				
REVENUES								
\$1,253.7	\$1,370.4	\$1,294.7	\$1,325.2	32 Publication Sales Income	\$3,660.6	\$3,715.6	(\$55.0)	
								One sales rep firm (accounts for almost 50% of loss) lost 3 accounts; Print ads industry wide declining; January Journal (associated with AHR Expo) on target
1,293.7	1,313.1	1,121.5	1,430.8	34 Advertising Income - Display	3,432.7	3,740.0	(\$307.3)	
5.2	9.7	3.5	9.5	34 Advertising Income - Classified	10.0	25.5	(\$15.5)	
373.5	377.4	316.2	377.5	34 Advertising Income - On-line	925.0	925.0	\$0.0	
81.1	74.1	72.3	83.7	35.2 Certification Registration	250.0	220.0	\$30.0	
								Slow first quarter but schedule is accelerating (registrations "now" ahead of last year); New cooperative events with APPA later in year
547.4	555.1	426.5	667.7	35.3 Education Registration	1,955.0	2,080.0	(\$125.0)	
2.1	2.8	3.2	2.9	38 Contribution Income	15.2	15.2	\$0.0	
				41.2 Contributions and Matching Gifts	90.0	90.0	\$0.0	
								Revenue from work with UNEP greater than budgeted
49.5	70.3	16.7	44.0	46 Miscellaneous Income	346.8	227.8	\$119.0	
3,606.2	3,772.9	3,254.6	3,941.3	TOTAL REVENUES	10,685.3	11,039.1		
EXPENSES:								
1,088.8	950.6	1,102.5	1,099.2	51 Salary Expense	2,725.6	2,680.6	\$45.0	
339.1	298.5	333.3	333.0	52 Payroll Taxes, Benefits, Personnel Exp	788.7	802.9	(\$14.2)	
								Primarily related to lowering of commissions to sales reps for ad sales
986.6	1,080.7	883.4	952.8	61 Publishing and Promotion Expense	2,818.6	2,954.6	(\$136.0)	
214.7	237.0	164.9	239.3	64 Meetings & Conferences Expense	617.5	627.5	(\$10.0)	
41.7	37.7	36.1	40.8	66 Travel Expense	172.2	188.6	(\$16.4)	
0.1	1.1	0.2	1.1	68 Awards, Certif, Logo Cost of Goods Sold	2.7	2.7	\$0.0	
				76 Public Relations Expense			\$0.0	
17.4	17.8	24.4	18.4	78 Occupancy & Insurance	43.8	43.8	\$0.0	
252.3	355.1	251.5	261.9	82 Office Expense and Organizational Dues	808.6	817.9	(\$9.3)	
332.6	353.0	355.0	387.9	84 Outside Services Expense	1,154.4	1,089.4	\$65.0	Associated expenses to UNEP
72.5	65.6	30.2	73.2	88 Other Expense	291.9	291.9	\$0.0	
1,556.3	1,570.4	1,634.4	1,658.2	91 Allocation of Overhead & BOD	4,130.5	4,220.7		
4,902.1	4,967.5	4,815.9	5,065.8	TOTAL EXPENSES	13,554.5	13,720.6		
(1,295.9)	(1,194.6)	(1,561.3)	(1,124.5)	SURPLUS (DEFICIT) before reserve income	(2,869.2)	(2,681.5)		

**ASHRAE
TECHNOLOGY COUNCIL**
For the Five Months Ending Friday, November 30, 2018

Fiscal YTD Through Month of Nov				acct / Description	Forecast		Variance	
Actual	Budget	Actual	Budget		FY 2019	Budget	FCST vs.	Explanation
FY 2018	FY 2018	FY 2019	FY 2019		FY 2019	FY 2019	Budget	
		\$15.5	\$39.8					
				37 Special Project Income	\$95.5	\$95.5	\$0.0	
0.6	12.5	52.4	12.7	46 Miscellaneous Income	181.6	27.6	\$154.0	KFAS Project - Associated expenses below
0.6	12.5	67.9	52.5	TOTAL REVENUES	277.1	123.1		
				EXPENSES:				
480.5	448.6	518.0	465.1	51 Salary Expense	1,173.6	1,163.6	\$10.0	
136.2	128.8	146.8	139.0	52 Payroll Taxes, Benefits, Personnel Exp	343.6	343.6	\$0.0	
0.1	(0.4)	(0.2)	0.8	61 Publishing and Promotion Expense	2.4	2.4	\$0.0	
2.2	13.9	3.6	10.5	64 Meetings & Conferences Expense	13.6	21.8	(\$8.2)	
25.9	38.4	42.4	46.0	66 Travel Expense	197.8	225.7	(\$27.9)	
	0.6			68 Awards, Certif, Logo Cost of Goods Sold	1.7	1.7	\$0.0	
34.6	36.5		63.0	73 Special Projects Expense	236.2	236.2	\$0.0	
	1.1		1.1	76 Public Relations Expense	2.6	2.6	\$0.0	
0.1	9.6	0.1	10.2	82 Office Expense and Organizational Dues	110.7	127.9	(\$17.2)	
44.5	7.7	2.2	12.8	84 Outside Services Expense	113.9	3.9	\$110.0	KFAS Project
	0.1		0.1	88 Other Expense	0.1	0.1	\$0.0	
		7.4	20.8	90 Depreciation Expense	50.0	50.0	\$0.0	
690.8	741.9	761.6	744.1	91 Allocation of Overhead & BOD	1,833.0	1,873.0		
1,414.9	1,426.8	1,481.9	1,513.5	TOTAL EXPENSES	4,079.2	4,052.5		
(1,414.3)	(1,414.3)	(1,414.0)	(1,461.0)	SURPLUS (DEFICIT) before reserve income	(3,802.1)	(3,929.4)		



Memorandum of Understanding ASHRAE and JSRAE

Founded in 1894, ASHRAE, Atlanta, Georgia advances the arts and sciences of heating ventilating, air-conditioning and refrigeration to serve humanity and promote a sustainable world.

The Japan Society of Refrigerating and Air Conditioning Engineers, JSRAE, was founded as the Japanese Association of Refrigeration, JAR, in 1925 in order to develop and disseminate refrigerating and freezing technology and related scientific technologies. Since then it has served nearly 80-90 years as a non-profit academic organization in a field of refrigeration, air conditioning, food refrigeration and related science and technology in Japan.

ASHRAE and JSRAE agree to support the Memorandum of Understanding to advance and promote the mutual interests of their respective members. We are committed to working together toward on the following activities and goals:

CONSISTENT LEADERSHIP COMMUNICATION

Recognizing the importance of communication in organizational collaboration, both organizations commit to hold a liaison meeting annually (either in person or via conference call) of designated ASHRAE/JSRAE senior representatives to:

- Ensure ongoing advancement of collaborative projects.
- Keep each respective organization informed of major initiatives.
- Discuss new opportunities for collaboration.

ASHRAE/JSRAE shall take responsibility for initiating the first annual liaison meeting. Action items with assigned responsibilities shall be recorded at each meeting. The parties responsible for ensuring this MOU is actively pursued through the term of the agreement are:

For ASHRAE:

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Executive Vice President _____
ASHRAE _____
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For JSRAE:

[Kenji Matsuda](#)
[Secretary General](#)
[JSRAE](#)
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[Cyuo-ku, Tokyo, 103-001](#)
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[Email: Matsuda.Kenji.ab@jsrae.or.jp](mailto:Matsuda.Kenji.ab@jsrae.or.jp)

CONFERENCES AND MEETINGS

Each organization agrees to provide the other with a meeting invitation and ~~oneto~~ complimentary VIP registrations to the primary annual meeting.

ASHRAE and JSRAE agree to explore opportunities to provide speakers at the other organization's meetings to help provide updates and perspectives on technologies and trends of mutual interest.

Where mutually beneficial, each organization shall help publicize the other organization's meetings and promote attendance.

~~CHAPTER~~ INTERSOCIETY COLLABORATION

ASHRAE and JSRAE agree to coordinate promotion of joint ~~grassroots~~ meetings of respective members. Exchange of ~~Chapter/Section leader~~ contact information will be considered as one way to accomplish this objective.

ADVOCACY

Where mutually beneficial and to the extent allowed by laws and corporate policies, ASHRAE and JSRAE agree to work together on common public affairs goals and ideologies. During annual liaison meetings, public affairs strategies will be discussed and common goals identified. Collaborative opportunities to be considered include:

- Joint promotion of codes and standards at the local, state ~~and~~, federal and international levels.
- Promoting mutually beneficial positions during the development and passage of state, ~~and~~ federal and international legislation.
- Education of legislators on issues important to the members of each organization.

PUBLICATIONS

Recognizing that electronic and print publications are a primary means of disseminating new technologies, trends and practices, ASHRAE and JSRAE agree to:

- Provide at least one complimentary subscription the primary membership periodical to be received at the headquarters location of the other organization.
- Explore opportunities to jointly produce publications of mutual benefit.
- Cross-market each organization's publications where appropriate and with industry standard distributor discounts.
- Use periodicals to promote the other organization's events, publications and other activities.
- Explore mutually beneficial ways to translate publications for member benefit.

EDUCATION

As leading providers of conventional and online educational services and in recognition of the vital role professional development has for our respective members, ASHRAE and JSRAE agree to:

- Cross-market educational offerings and the regional, national and international levels.

- Explore opportunities to co-develop new courses or other training programs that take advantage of overlapping and complimentary expertise between ASHRAE and JSRAE.
- Discuss ways that certifications programs can be jointly developed or promoted.

TECHNICAL ACTIVITIES COORDINATION

ASHRAE and JSRAE agree to foster technical cooperation in areas of common interest by:

- Encourage members in each organization to participate on technical committees and task forces.
- Provide opportunities to participate in and comment on proposed standards, guidelines, policies, and position statements developed on technical subjects as they relate to buildings and community developments.
- Establish liaison representatives to key technical committees where mutually beneficial to do so.

RESEARCH

Recognizing the importance research plays in accelerating the transformation to a more sustainable built environment, ASHRAE and JSRAE agree to:

- Collaborate to promote research in areas where research results will add to the body of knowledge in sustainability, refrigeration and wellness in buildings.
- Disseminate research results quickly, focusing on high-impact findings.
- Identify opportunities for research funding from other sources.

TERMINATION

Either party may terminate this MOU, with or without stated cause, upon providing the other party with thirty (30) days written notice of intent to terminate.

TERM

The term of this Memorandum of Understanding shall begin when signed by both parties and shall terminate at the end of three (3) years unless extended at that time by written agreement.

LEGAL STANDING

This MOU reflects a commitment by ASHRAE and JSRAE to continue and enhance their working relationship and individual efforts toward achieving mutual objectives described above. It does not create a binding obligation or agreement between the two organizations, and neither organization has an obligation to negotiate toward or enter into a binding written agreement. In addition, this MOU does not create a partnership, joint venture, fiduciary relationship or similar relationship between ASHRAE and JSRAE. Furthermore, it is understood that this Memorandum of Understanding is conceived as a dynamic document, meant to change as circumstances and priorities warrant. It may be modified or amended by written agreement between both organizations.

FOR ASHRAE

Printed Name/Title

Signature

Date

Printed Name/Title

Signature

Date

FOR JSRAE

Printed Name/Title

Signature

Date

Printed Name/Title

Signature

Date

DRAFT



Memorandum of Understanding ASHRAE and VISRAE

Founded in 1894, ASHRAE, Atlanta, Georgia advances the arts and sciences of heating ventilating, air-conditioning and refrigeration to serve humanity and promote a sustainable world.

Founded in 1998, VISRAE, Hanoi, Vietnam, is a socio-professional institution of Vietnamese citizens working in the sectors of Refrigeration, Air-Conditioning, and Air Technology (e.g., clean rooms, thermal pressurize rooms, gas liquefaction and separation, etc.).

ASHRAE and VISRAE agree to support the Memorandum of Understanding to advance and promote the mutual interests of their respective members. We are committed to working together on the following activities and goals:

CONSISTENT LEADERSHIP COMMUNICATION

Recognizing the importance of communication in organizational collaboration, both organizations commit to hold a liaison meeting annually (either in person or via conference call) of designated ASHRAE/VISRAE senior representatives to:

- Ensure ongoing advancement of collaborative projects.
- Keep each respective organization informed of major initiatives.
- Discuss new opportunities for collaboration.

ASHRAE/VISRAE shall take responsibility for initiating the first annual liaison meeting. Action items with assigned responsibilities shall be recorded at each meeting. The parties responsible for ensuring this MOU is actively pursued through the term of the agreement are:

For ASHRAE:

Jeff Littleton
Executive Vice President
ASHRAE
1791 Tullie Circle, NE
Atlanta, GA 30329
Phone: 404-636-8400
Email: jlittleton@ashrae.org

For VISRAE:

CONFERENCES AND MEETINGS

Each organization agrees to provide the other with a meeting invitation and two complimentary VIP registrations to the primary annual meeting.

ASHRAE and VISRAE agree to explore opportunities to provide speakers at the other organization's meetings to help provide updates and perspectives on technologies and trends of mutual interest.

Where mutually beneficial, each organization shall help publicize the other organization's meetings and promote attendance.

CHAPTER COLLABORATION

ASHRAE and VISRAE agree to coordinate promotion of joint grassroots meetings of respective members. Exchange of Chapter/Section leader contact information will be considered as one way to accomplish this objective.

ADVOCACY

Where mutually beneficial and to the extent allowed by laws and corporate policies, ASHRAE and VISRAE agree to work together on common public affairs goals and ideologies. During annual liaison meetings, public affairs strategies will be discussed and common goals identified. Collaborative opportunities to be considered include:

- Joint promotion of codes and standards at the local, state and federal levels.
- Promoting mutually beneficial positions during the development and passage of state and federal legislation.
- Education of legislators on issues important to the members of each organization.

PUBLICATIONS

Recognizing that electronic and print publications are a primary means of disseminating new technologies, trends and practices, ASHRAE and VISRAE agree to:

- Provide at least one complimentary subscription the primary membership periodical to be received at the headquarters location of the other organization.
- Explore opportunities to jointly produce publications of mutual benefit.
- Cross-market each organization's publications where appropriate and with industry standard distributor discounts.
- Use periodicals to promote the other organization's events, publications and other activities.
- Explore mutually beneficial ways to translate publications for member benefit.

EDUCATION

As leading providers of conventional and online educational services and in recognition of the vital role professional development has for our respective members, ASHRAE and VISRAE agree to:

- Cross-market educational offerings and the regional, national and international levels.
- Explore opportunities to co-develop new courses or other training programs that take advantage of overlapping and complimentary expertise between ASHRAE and VISRAE.
- Discuss ways that certifications programs can be jointly developed or promoted.

TECHNICAL ACTIVITIES COORDINATION

ASHRAE and VISRAE agree to foster technical cooperation in areas of common interest by:

- Encourage members in each organization to participate on technical committees and task forces.
- Provide opportunities to participate in and comment on proposed standards, guidelines, policies, and position statements developed on technical subjects as they relate to buildings and community developments.
- Provide opportunities to review, translate, and possibly adapt and adopt existing and emerging standards, guidelines, policies, and position statements developed on technical subjects as they relate to buildings and community developments.
- Establish liaison representatives to key technical committees where mutually beneficial to do so.

RESEARCH

Recognizing the importance research plays in accelerating the transformation to a more sustainable built environment, ASHRAE and VISRAE agree to:

- Promote research in areas where research results will contribute to the body of knowledge in sustainability and human health and comfort in the built environment.
- Disseminate research results quickly, focusing on high-impact findings.
- Identify opportunities for research funding from other sources.

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FOR ASHRAE

Printed Name/Title

Signature

Date

Printed Name/Title

Signature

Date

FOR VISRAE

Printed Name/Title

Signature

Date

Printed Name/Title

Signature

Date

DRAFT



ASHRAE
&
United Nations Environment Programme



2019-2020 Work Plan of ASHRAE-UNEP Cooperation Agreement

1. ASHRAE and UNEP, through its OzonAction Programme, signed a cooperation agreement in 2007 aiming to achieve several global environmental and technical goals within the mandate of both organizations including, but not limited to, the goals of reducing refrigerants emissions; maximizing climate benefits in selecting alternative refrigerants, building the capacities of different HVAC&R stakeholders and facilitate the transfer and adoption of suitable technologies in developing countries.
2. The agreement calls for establishing a biennial work plan to address the specific technical priorities and emerging issues. This work plan is the fifth biennial joint work plan, under ASHRAE-UNEP Cooperation Agreement, and is developed through the joint Liaison Working Group established by both sides to manage the implementation of the cooperation between both parties.
3. **The 2019-2020 Work Plan** is thematically designed under the theme of “**Refrigerant Management for Developing Economies**” where the joint program will emphasize on deploying all the developed tools and programs for sound management of refrigerants and make them available and accessible to different stakeholders in developing countries.
4. Four main goals will be the focus of the 2019-2020 workplan which are:
 1. Refrigerant Literacy
 2. Sound Management of Refrigerant
 3. Sustainable Operation and Management of RAC Installations
 4. Capacity Building Programs
5. The above goals will be implemented through multi-track programs that offers different types of activities and allow extended engagement amongst relevant stakeholders in developing countries. The five transversal types of activities:

A. Events & Functions	B. Online Tools	C. Focused Guides	D. Support Services	E. Award and Certification
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6. Below matrix shows the outline of the 2019-2020 joint workplan and specific planned products for each goal against each type of activities:

GOAL	Events & Functions	Online Tools	Focused Guides	Support Services	Award and Certification
Refrigerants Literacy	Development of Instructor Led version of Refrigerant Literacy course	Dedicated Web Site for Access all tools	Series of Fact Sheets and quizzes using Refrigerants Literacy course	Master Trainers for F2F Literacy Sessions	Recognition and Certification Program
	Train-the-trainers Sessions for F2F Training	Online promotional campaign			
	Special F2F Sessions for use in A5 countries	Spanish Version + French Version			
Sound Management of Refrigerants	Development of Instructor Led version of Sound Management Refrigerant course	Dedicated Web Site for Access all tools (Same as above)	Series of Fact Sheets and quizzes using Sound Management Course	Master Trainers for F2F Sound Management Course Sessions	Recognition and Certification Products
	Train-the-trainers Sessions for F2F Training	Online promotional campaign			
	Special F2F Sessions, at ASHRAE Conferences, for ASHRAE Chapters in A5 countries	Latin American Spanish + African French Translation			
Sustainable Operation & Management of RAC Installations	Special sessions at ASHRAE Conferences/Events	Online version with step-by-step guide on how to implement the guide	International Guide for Sustainable O&M of RAC Installations	Master Trainers Program	Certified Individuals completed the program
	Special events at MOP/OEWG		Development of quick guides extracted from the Guide		Low-GWP Innovation Award Program.
	Promotional events at local level in A5 countries (NOUs and ASHRAE Chapters)		Certificate program for facilities and operators		
Capacity Building	International High Ambient Symposium	Special Mobile App on Refrigerants designation, classification and selection against applications	Update regularly the "Refrigerants Classification and Designation" factsheet for policy makers.	Promotion Campaign on the University Course and feedback tool	Promotion of women in AC&R program by identifying ASHRAE members as role models.
	Local events in A5 countries to be led by ASHRAE Chapters in cooperation with National Ozone Units	Special Mobile App on Refrigerants and Safety Standards	Information Notes and Factsheets on flammability research and relevant standards		

7. The above detailed matrix of suggested products and services shall have implemented within the existing programs and workplan of both partners i.e. ASHRAE and UNEP-OzonAction program without entailing unplanned fiscal impact to any partner unless mutually agreed and contracted through specific legal instrument.
8. The ASHRAE-UNEP Liaison Working Group will work in developing the operational and detailed implantation plan for each goal under this work-plan including stipulating the following elements for each goal/product:
 - a) Scope of work and ultimate outputs
 - b) Target groups and stakeholders
 - c) Final format and accessibility
 - d) Specific deliverables
 - e) Fiscal impact and source of funding
 - f) Time line of implementation and expected date of launch
 - g) Role of ASHRAE (committees/staff) vs. UNEP (team/experts)
 - h) Other partners and supporting entities
9. The official channels of communications between ASHRAE and UNEP shall be maintained through the instated ASHRAE-UNEP Liaison Working Group which shall coordinate and liaise relevant communications, collect feedback and send updates to different ASHRAE or UNEP regional teams in relation to all type of activities within this workplan
10. This workplan can be modified or amended by written agreement between both parties and as needed during the implementation period of 2019-2020 notwithstanding any internal clearance or review process of each partner.

For UNEP

Shamila Nair-Bedouelle
Head of UNEP OzonAction

For ASHRAE

Sheila Hayter
ASHRAE President

**REPORT TO THE EXECUTIVE COMMITTEE
From the AiCARR Liaison Committee
As of December 30, 2018**

Recommendations for Board Approval:

1. MOTION: Revision of Section 12 of the Manual of Chapter Operations (MCO) attached.

BACKGROUND: Section 12 of the Manual of Chapter Operations was originally written from the perspective of chapters sponsoring sections. It is clear that regions will be sponsoring sections more frequently, particularly in Region XIV where a number of national associations already exist. The Board has allowed pre-existing Groups to be sponsored and the ASHRAE-AiCARR Group falls within that condition and will be allowed to continue. The recommended rewriting of Section 12 of the MCO clarifies the process for sponsoring a section by either a chapter or region and also defines that situation where a Group is administered by a national association.

FISCAL IMPACT - None

Information Items:

The AiCARR – ASHRAE Group was only recently formed. Accordingly, it is very important that the Group is launched with a strong and successful foundation. The AiCARR Liaison Committee has been working on several initiatives to ensure the success of the ASHRAE/AiCARR Group. Those initiatives include the following:

- Issued a survey of ASHRAE members in Italy and found 112 members, of which 30 have requested to join the Group. A second survey is planned. Only members of ASHRAE are eligible to join the Group.
- The Liaison committee is working with AiCARR to define and implement support protocols for the Group from both the ASHRAE and the AiCARR perspective. We will meet with AiCARR representatives in Atlanta.
- Worked with AiCARR and CIBSE to publish a jointly branded publication, *Commissioning Definitions and Terminology for the Building Industry: A Common Overview*. This is a good example of the benefits that accrue to both organizations through collaboration.
- Encouraged ASHRAE members to participate in the 51st International Conference on 'Human and Behavioral Aspects in the Energy Performance of Buildings. Two members of the liaison committee will be presenting papers at the conference.
- Possibility of organizing ASHRAE training which, following the ASHRAE Business Model, can extend ASHRAE visibility and influence.

December 30, 2018
Date


Liaison Committee Member

SECTION 12 CHAPTER OR REGION SECTIONS

- 12.1 Creating a Chapter or Region Section
- 12.2 Qualifications of Section Membership
- 12.3 Section Operations
- 12.4 Charter Meeting
- 12.5 Duties of the Section Representative
- 12.6 Chapter or Region Support of Sections
- 12.7 Dissolution of a Section

SECTION 12 CHAPTER OR REGION SECTIONS

Regional Chair (DRC) shall appoint a Section Committee to start and maintain the ~~chapter~~.

12.1 Creating a Chapter or Region Section

Many Society members reside in areas that are not geographically close to a primary chapter location. One way for members in these areas to be active in ASHRAE at the local level is to create a section.

A section must be sponsored by either an existing chapter or a region. A section may be sponsored by a region and administered by a national association operating under a Memorandum of Understanding with Society. The support of a section is vital to Society's ability to provide services to geographical areas that are inhabited by groups of members whose numbers may not be large enough to support a chapter and who cannot attend regular meetings because of their remote locations.

12.1.1 Review Chapter or Region Areas

Determine if groups of members within a chapter area or region are not able to be served adequately by an existing chapter functions and if a sufficient number of these members want to form a section.

12.1.2 Form Section Committee

When an area is defined that is not being provided chapter services and in which a sufficient number of members wish to form a section, the chapter president or Director and

section. This committee represents all sections formed within the region or chapter area. If the section is to be administered by a national association, the section committee members must hold membership in both ASHRAE and the national association. (if applicable)

12.1.3 Section Organization

The chapter President, if the section is sponsored by a chapter, or the Director and Regional Chair, if the section is sponsored by a region, shall name a section representative from each section to be formed who shall serve on the Chapter Section Committee and maintain liaison with the chapter or the region.

The section will operate within the chapter bylaws, if sponsored by a chapter, a copy of which shall be provided to the section representative by the chapter President. The section will operate within the region bylaws, if sponsored by a region, a copy of which shall be provided to the section representative by the Director and Regional Chair.

The section will operate according to the Manual for Chapter Operations, a copy of which shall be provided to the section representative by the DRC and/or the Society Director of Member Services.

The section will not function as a chapter. All activities must be approved by the chapter Board of Governors (BOG) or DRC, as appropriate. If the section is administered by a national association, all activities must also be approved by the section/national association committee comprised of members from both organizations.

12.1.4 Section Approval

The Petition for Establishing a Section, which is provided in **Appendix 12A**, shall be signed by:

- Minimum of ten chapter members who work or reside within the section's defined area
- Section representative
- President of the sponsoring chapter

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- Director and Regional Chair (DRC)

The completed and signed petition shall be forwarded to the Member Services staff at Society Headquarters. The signed petition must be on file at Headquarters before the chapter section can be officially approved.

Chapter sections are officially approved by Members Council at its Winter, Annual and Fall meetings each year.

Following the Winter, Annual or Fall meetings, Member Services staff will notify the President of the sponsoring chapter (if applicable) and the DRC of the approval of the section in writing, with copy to the appropriate Regional Vice Chair (RVC) of Membership Promotion.

Member Services staff shall maintain a list of active sections within Society.

Member Services staff shall annually submit a list of active sections to Members Council.

12.2 Qualifications of Section Membership

Section members must be members in good standing of the Society and must live or work in the geographic area covered by the new section.

12.3 Section Operations

A. The new section must be ASHRAE-related and technical by nature.

B. The new section must have at least two formally-organized meetings during the Society Year, each of which shall be a minimum of one-hour duration.

C. Where applicable, a meeting attendance roster and minutes must be submitted to the DRC and the RVC of Chapter Technology Transfer, along with the chapter submittals by the chapter secretary.

D. The amount of section dues is determined by the sponsoring chapter's BOG or the DRC if the section is sponsored by a region. Meal costs that are subsidized by the sponsoring chapter should

be taken into account when determining the amount of section dues.

E. The name of a section shall take the following form:

The _____ Section of the _____ Chapter or
The _____ Section of Region _____.

12.3.1 Assignment of Section Members

A section member can be assigned only to the sponsoring chapter or region; however, the section member can *elect* to belong to any chapter he or she desires.

12.3.2 Section Petition, Minutes, Banner and Charter

The section petition, minutes, banner and charter will be the same as for a chapter because they serve as a tangible presentation of the existence of the section, chapter, region and Society.

12.4 Charter Meeting

After a newly-established section has been approved by Members Council, Member Services staff will order a section banner and charter at no expense to the section or the sponsoring chapter or region. The banner and charter will be sent to the sponsoring chapter's President or to the region's DRC.

The first meeting of the section shall include the presentation of the section banner by the DRC (if applicable) or the chapter President.

Appendix 12B provides a model script for the installation of section officers.

12.5 Duties of the Section Representative

The section representative shall preside over all section meetings.

The section representative may appoint a co-representative and may form subcommittees to serve the section membership and the Section Committee, maintain a liaison to the chapter, region or national association, as appropriate, and provide service to section members.

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The section representative shall provide the sponsoring chapter's President or the region's DRC with an annual report. The CRC Chapter Summary Report in **Appendix 7D** can be adapted for this use.

12.6 Chapter or Region Support of a Section

The sponsoring chapter or region can provide support to a section by:

- Maintaining a section committee to act as liaison between the section and the sponsoring chapter or region. A section representative may be the Section Committee chair.
- Providing operating funds to the section from the chapter or region's annual budget.
- Including section news in the chapter meeting notice and eNewsletter.
- Encouraging support from all chapter committees for section activities.
- Providing the section with speakers for programs and assisting in the promotion of Society-sponsored programs, special projects and special programs.

12.7 National Association Support of a Section

A national association can provide support to a section by:

- Publicity on the National Association website.
- News of the section's activities in national association newsletters, journals and other regularly produced publications as appropriate.
- Support for organization of section events as either standalone events or events held in cooperation with ASHRAE.
- Administrative support, including banking in national currency, web hosting, and logistical arrangements for section events, under level of support mutually

agreed by ASHRAE and the National Association.

~~12.7~~ 12.8 _Dissolution of a Section

If a section's sponsoring chapter or region determines that the section no longer operates sufficiently even after the chapter or region has exercised all responsibilities in maintaining the section to keep it active, then the sponsoring chapter or region shall determine if the section shall be dissolved. The process for dissolving a section shall be:

- A. The sponsoring chapter or region shall notify the section that it no longer meets the minimum requirements as shown in Section 12 of the Manual for Chapter Operations.
- B. The sponsoring chapter or region shall send a letter to all known members of

MANUAL FOR CHAPTER OPERATIONS

the section not less than 90 days prior to the CRC informing them of dissolving the section.

- C. The sponsoring chapter or region shall bring a formal motion to their respective CRC for dissolution of the section after which the motion shall be forwarded to Members Council for consideration.