



## **Publishing and Education Council (PEC)**

Tuesday, January 31, 2017

Caesars Palace – Las Vegas, NV

### **Voting Members**

Walid	Chakroun	Chair	
Edward	Tsui	Vice Chair	
Mark	Fly	Member/Director	
William	McQuade	Member/Director	
Michael	Schwedler	Member/Director	
Roger	Jones	Member/Director	
Chee Sheng	Ow	Member/Past Certification	
Heather	Platt	Member/Past ECC	
Florentino	Mendez	Member/Past Handbook	absent
John	Nix	Member/Past PDC	
Frank	Mills	Member/Past Publications	
Mohammad	Hosni	Member at Large	absent
Richard	Rooley	Member at Large	

### **Guests**

David Soltis  
Joslyn Ratcliff  
Mark Owen  
Karen Murray  
Tim Kline  
Emily Sigman  
Jay Scott

### **Non-Voting Members**

Richard	Rose	Certification Chair
Cameron	Labunski	Certification Vice Chair
Steven	Faulkner	ECC Chair
Heather	Schopplein	ECC Vice Chair
Forrest	Yount	HB Chair
David	Yuill	HB Vice Chair
Randy	Schrecengost	Historical Chair
Kent	Anderson	Historical Vice Chair
James	Bochat	PDC Chair
Kay	Thrasher	PDC Vice Chair/Planning
Charles	Henck	PDC Vice Chair/Operations
Jin Jin	Huang	Publications Chair
Kimball	Ferguson	Publications Vice Chair
Steve	Comstock	Staff Liaison

### **Additional Distribution:**

Jeff Littleton, Executive Vice President  
Mary Townsend, Assistant to Board of Directors (BOD)  
ASHRAE Staff Directors, Publications & Education Managers

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**Motions**  
**Meeting of January 31, 2017**

<b>No.</b>	<b>Page</b>	<b>Motion</b>
1	9	Approved the draft minutes as distributed for the November 9, 2016 Conference Call Meeting.  (Approved 10-0-0 CNV)
2	12	Referral from Members Council that PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.  <i>(Failed 0-10-0 CNV)</i>
3	16	Approved PEC Budget for 2017-18 as shown on the December 31, 2016 ASHRAE Financial Statements with the awareness adjustments to the budget will continue to be made during the remainder of the fiscal year to reflect business performance.  (Approved 10-0-0 CNV)
4	17	Accepted the following responses as consent agenda items for approval: <ul style="list-style-type: none"><li>• <b>Region X (San Diego Chapter) – Motion 27:</b> That ASHRAE provides for sale on the website basic tools such as a duct sizer, pipe sizer, psychrometric chart and expansion calculator.  Response: Tools such as a duct sizer, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership’s desire to have such tools is noted. Thank you for the feedback.</li><li>• <b>Region XIII (Hong Kong Chapter) – Motion 64:</b> That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals.  Response: Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure. PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. PEC continues to explore improvements of publication delivery service to members outside the US and Canada. For example, a new Journal mailing service is being used which has shown marked improvement in delivery success and delivery times.</li></ul>

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• **Region XII (Chile Chapter) – Motion 40:** That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Response: ASHRAE’s most demanded standards (such as 90.1, 62.1, and 189.1) are available (English language only) in read only format on the ASHRAE website. If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). It should be noted a cost is incurred based on the number of views for read only standards. Also, Spanish language translations of many ASHRAE documents are not available and translations into other languages have even less availability. Many ASHRAE chapters support students in design competitions by purchasing standards for student use. It is recommended this solution be considered.

• **Region XIII (Philippines Chapter) – Motion 67:** That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID’s, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.

Response: A new Journal mailing service for international mailing has been implanted with improved delivery success and time reduction. A new plan for PDF delivery of Handbook has been developed reducing the need for mailing. The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.

(Approved 10-0-0 CNV)

5            19            Approved changes to Handbook Committee’s MOP to match with MOPs for TCs, TGs and TRGs.

(Approved 10-0-0 CNV)

6            20            Approved changes to Publications Committee’s MOP to match the ROB concerning number of committee members, as well as, organization changes and editorial corrections.

(Approved 10-0-0 CNV)

7            20            Approved & recommended to BOD changing the ROB to increase Historical Committee's voting members from 7 to 9.

(Approved 10-0-0 CNV) (Approved by BOD February 1, 2017)

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- 8            22            To recommend CEC consider renaming the research track at ASHRAE conferences to reference Science and Technology for the Built Environment (STBE).

(Approved 10-0-0 CNV)

- 9            23            Approved ECC's response to the following referral from **Tennessee Valley Chapter – Motion 4e (10/14/2016)**: That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A.

ECC's response: A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. After discussion ECC researched estimated cost if Star Chapter was to be provided by Society for use across all chapters and estimates the cost to be \$147,256.20 set up and \$196,560.00 annually. ECC would need to know if this cost would be acceptable to proceed with a recommendation to use.

(Approved 10-0-0 CNV)

- 10           24            Approved ECC's response to the following referral from **Hampton Roads Chapter – Motion 7b (10/14/2016)**: That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members.

ECC's response: After discussion, ECC determined this is not a viable solution for chapter and region use. A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. Although not specifically asked or stated in the survey, it can be inferred that this would hold true for official communications as well. An important item to consider is that an email from a chapter or region is not the same as a mailing from Society. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC can provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

(Approved 10-0-0 CNV)

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- 11            24            Approved ECC’s response to the following referral from **West Virginia Chapter – Motion 7c (10/14/2016)**: That ASHRAE Society’s ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable.

ECC’s response: The websites subcommittee reviewed this motion and will draft guidance on protocols regarding the collection, sharing, and opting out of contact information to be submitted to Members Council prior to the Long Beach Annual conference for consideration for placement in the MCO Manual. Due to complexity of international laws ECC will focus the guidance on US laws (CAN SPAM) only, with the suggestion that international chapters should reference their local legislation.

(Approved 10-0-0 CNV)

- 12            25            Approved ECC’s response to the following referral from **Spacecoast Chapter – Motion 7j (10/14/2016)**: That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017.

ECC’s response: ASHRAE Society cannot take responsibility for chapter and region email communications. A whitepaper from ECC regarding basic email best practices is forthcoming for the Long Beach Annual Conference and will be made available via the ASHRAE website. The use of ASHRAE’s domain for sending emails could blur the line between chapter and Society communications in the eye of Internet Service Providers and could cause Society emails to be blocked, blacklisted, or undelivered depending on what is sent by the chapters and to whom. In addition, Society has a special and specifically-negotiated contract for its email service provider, RealMagnet, to send emails and provide marketing automation technologies at an enterprise level for Society. Since each chapters needs are different not only in terms of email contacts and email volume, but also technical expertise to use such a solution, it becomes quite complex to begin to estimate both cost and time and resources needed for implementation for all chapters. There is also an additional element of staff infrastructure that would be needed to onboard any chapters that would use the solution. Lastly, to assist chapters (and regions) with their emailing needs, ASHRAE’s electronic collaboration tools subcommittee is working on a document based on survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC will provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

(Approved 10-0-0 CNV)

- 13b           29            Approve changing Handbook pdf files from CD format to electronic cloud based means starting with the 2017-18 Society year.

(Approved 9-0-0 CNV)

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14b      30      Approved the following member benefit Handbook delivery options for the 2017-18 Society year: a) Receive a 12 month complimentary subscription to the Handbook Online & PDF files download; or b) Receive a printed Handbook & PDF files download without Handbook Online; or c) Pay extra to receive both (a) & (b) d) Members paying developing economy fee receive Handbook PDF download.

(Approved 9-0-0 CNV)

15b      30      Approved a motion for referral to Members Council that members a pay mailing surcharge (based on the country of delivery) if they choose Handbook print copy, starting with the 2018-19 cycle Handbook volume.

(Approved 9-0-0 CNV)

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**Action Items**  
**Meeting of January 31, 2017**

<b><u>No.</u></b>	<b><u>Page</u></b>	<b><u>Responsibility</u></b>	<b><u>Action</u></b>
1	9	Staff	Post the approved minutes of the November 9, 2016 Conference Call meeting on the PEC page of the ASHRAE website.  <b><i>Complete.</i></b>
2	13	Staff	Send PEC's response to Members Council referral from <b><u>Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015)</u></b> : That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.  <b><i>Complete. (Attachment U of the Las Vegas Draft Minutes)</i></b>
3	19	Staff	Investigate, determine issues and provide chapters with a process for receiving missed packages.
4	21	Staff	Include PEC's recommendation to the BOD changes to the Historical Committee section of the ROB as shown in <i>Attachment B</i> of the Functional Planning Subcommittee Report to PEC from Las Vegas. <i>(Approved by BOD February 1, 2017)</i>  <b><i>Complete. (Attachment V of Las Vegas PEC minutes)</i></b>
5	22	Staff	Send referral memo requesting CEC rename the conference Research Track to reference STBE.  <b><i>Complete. (Attachment X of the Las Vegas Minutes)</i></b>



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1. Call to Order

Mr. Chakroun called the meeting to order 8:01 a.m.

2. Introduction of Members and Visitors

Members of the council, visitors and staff introduced themselves. **(Attachment S)**

3. Review of Agenda

Mr. Chakroun reviewed the agenda with council for any comments or additions.

The following two items have been added to this agenda after it was sent out to the council:

- 12.1 Qatar Oryx Chapter (referred by Tim Wentz)
- 12.2 Develop Energy and/ IEQ design guide for Developing Economies (Referred by Bjarne Olesen)

4. Minutes - Meeting of November 9, 2016 Conference Call

Mr. Nix moved and Mr. Jones seconded:

- (1) That PEC approve the draft minutes as distributed for the November 9, 2016 Conference Call Meeting.**

Some editorial typos were found and corrected.

**MOTION (1) Approved 10-0-0 CNV**

An action was assigned to staff to post the approved minutes on the PEC page of the ASHRAE website and the PEC Basecamp website. **(ACTION ITEM 1) Complete.**

5. Review of Major Motions - Meeting of November 9, 2016 Conference Call

Mr. Comstock reviewed the approved motions from the November 9, 2016 Conference Call meeting with the council.

<u>No.</u>	<u>Page</u>	<u>Motions</u>
2	11	Approved providing all ASHRAE members with online access to new issues of Science & Technology for the Built Environment (STBE) beginning in 2017.

(Approved 10-0-0 CNV)

6. Review of Action Items - Meeting of November 9, 2016 Conference Call

Mr. Comstock reviewed the action items from the November 9, 2016 Conference Call meeting with the council.

<u>No.</u>	<u>Page</u>	<u>Responsibility</u>	<u>Action</u>
1	5	Staff	Post the approved minutes of the June 28, 2016 St Louis meeting on the PEC page of the ASHRAE website.

**Complete. (November 9, 2016)**

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- 2      9            Staff            Send a letter ballot to the Journal Advertising Subcommittee on creation of an electronic newsletter named ASHRAE Journal eNewsletter.
- (Secretary's Note: The Subcommittee Approved the motion 4-0-0 CV.)*
- Complete.** *(November 10, 2016)*
- 3      9            Staff            Post all November 9, 2019 subcommittee reports to Basecamp.
- (Secretary's Note: Included in June 28, 2016 St Louis meeting minutes)*
- Complete.** *(November 9, 2016)*
- 4      12           Staff            Submit Certification Business Plan to the Finance Committee.
- Complete.** *(December 29, 2016)*
- 5      12           Staff            Post on Basecamp the Quasquicentennial Budget.
- Complete.** *(November 9, 2016)*
- 6      14           Staff            Submit the Globalized Training Initiative Plan report to Planning Committee.
- Complete.**
- 7      15           Staff            Post the Globalized Training Initiative Plan on Basecamp.
- Complete.** *(November 9, 2016)*
- 8      15           Staff            Submit the High Performing Buildings Magazine Business Plan to Finance Committee.
- Complete.** *(January 3, 2017)*
- 9      15           Certification Committee      Report at the January 2017 Winter Meeting in Las Vegas to PEC on committee response to clarification received on Members Council referral, Region XII (Colombia Chapter) – Motion 13m (11/5/2015).
- Complete.** *(January 31, 2017)*
- 10     16           Staff            Include following item on Las Vegas, January 2017 PEC meeting agenda: Joint Ad Hoc of Members Council & PEC recommendation: That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.
- Complete.** *(January 31, 2017)*

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### 7. Items Referred by PEC to Other Groups

Mr. Comstock reported on the items referred to PEC.

The following items came from the O&M report included in the Jun 2016, St Louis PEC meetings as pages 54-56 and posted on Basecamp. (*Secretary's note: All referral memos have been sent.*

#### **Attachment T**

- 7.1 Develop an ASHRAE service (for a fee) to generate an O & M video for a specific project and keep it in the ASHRAE cloud. This project specific video, developed by engineers with ASHRAE software, would cover the basis of design, how the building is supposed to operate, the basic functions and operating parameters of the control system. If the building is remodeled, or it's intended use modified, these control strategies would need to be modified. ASHRAE could provide some system templates to help engineers create the videos. User cost needs to be low, like the YouTube model, to prevent others from offering a competing service. Benefits are ASHRAE Brand exposure and potential advertising. **(TC 7.3, ECC)**
- 7.2 Chapters to invite these operating individuals to our meetings and to join our Society and join our TCs and in so doing make their service to their employers more valuable. This could lead to more formalized training and maybe certification. Approaching BOMA and other related organizations and making them partners in the educational effort would benefit all. **(TC 7.3, Members Council, CTTC)**
- 7.3 ASHRAE DBOSS (Dynamic Building Optimization Systems and Service) uses software that communicates with "every item" in the building to optimize collective performance, reduce building energy and maintenance costs, and enable predictive maintenance/service. An ASHRAE app to help select DBOSS program features and/or predict savings could be of great interest to the O&M community and generate ASHRAE revenue. ASHRAE could also publish more DBOSS case studies like the ones on ASHRAE HQ. **(TC 1.5, Publications Committee, TC 7.5)**
- 7.4. Create practical guides and check lists for effective building operations geared toward operations staff **(TC 7.3)**
  - a. Strategies to utilize fault detection diagnostic tools for building operations, to deal with the large volume of data on alarms and operations monitoring
  - b. Research leading to a publication on best practices in effective building operations, with case studies
  - c. Develop and publish high performance building operations specifications, guidelines for specific building types
- 7.5 We are starting to see ASHRAE standardized sequences in consulting engineers' specifications, but it is more the exception than the rule. One possible solution would be to educate consulting/specifying engineering community on our Handbook resources. **(TC 1.4, 7.3)**
  - a. This addresses the many controls companies that simply cut & paste the specified sequences of operation into their programming without much thought as to whether they work or not.

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7.6 Expand the development and use of O&M Terminology by offering a filterable website database application of all terms and definitions tracked by TC 1.6. The cloud sourced database could be hosted in the ASHRAExCHANGE area with accessible read-only for visitors, but also read-write for commenting based access levels using ASHRAE's existing user database and/or ASHRAE Exchange. **(TC 1.6, 7.3)** This effort would help ASHRAE become visible as a source for O&M Terminology.

### **8. Items Referred from Other Groups to PEC**

Mr. Comstock reported on referrals to PEC.

#### **8.1 Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015):**

That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education. **(Attachment L)**

Mr. Comstock reported Currently, ASHRAE Chapters can purchase ASHRAE educational materials in bulk for resale, retaining profits if they wish, and can schedule ALI instructor led seminars, charging registration fees they wish and retaining revenue. In effect, these incentives already allow chapters to “share ASHRAE provided training and income with ASHRAE chapters.”

Mr. Chakroun commented that this motion will be hard to implement and will affect the business of PEC council. He asked to entertain a motion to be discussed by PEC.

Mr. Jones moved and Ms. Platt seconded:

**(2) That PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.**

Background: The recent MC/PEC working group on ASHRAE Educational Support to Chapters identified a need. Chapters do not know which chapter members take ASHRAE sponsored training, and further, some Chapters see it as a potential loss of chapter training revenue or reduced meeting attendance. Bluntly stated, they are out of the loop and some view ASHRAE training as competition to their local training. To improve this situation and actually make all Chapters/Sections a partner in ASHRAE PEC provided education, ASHRAE should advise the Chapters monthly of who in their chapter has attended an ASHRAE course, seminar, webinar, etc. In addition, ASHRAE will provide the attendees Chapter with 15% of the training educational net income as a marketing inducement to promote and encourage their members to take ASHRAE Society provided training. (They have some skin in the game.)

Fiscal Impact: Provide the attendee lists to each chapter needs to be programmed by ASHRAE IT. Needs a defined project and then the time/cost estimate. On the income sharing for marketing support, need the attendee and net income numbers.

Mr. Comstock reviewed with council the following:

- (a) ASHRAE currently makes Society training available to chapters – with instructors or for materials only. Pricing is for cost only and for smaller chapters is subsidized. These include short courses and professional development seminars.
- (b) ASHRAE makes available ASHRAE publications such as standards to chapters at reduced pricing when chapters organize locally provided training. (Consignment sales offered.)

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- (c) Reduced pricing is already available to chapters for the purchase of Self Directed Learning Courses.
- (d) When ASHRAE organizes HVAC Design Training in a chapter geographic area, the chapter is advised and if the chapter wishes to support the effort through logistics and promotion, income is shared with the chapter after direct expenses are recovered.
- (e) The recommendation is not clear as to what type of training is to be included: instructor led ASHRAE training, SDLs, supplier webinars, online courses, eLearning, etc.
- (f) Not all training registrations are collected through the membership data base.
- (g) The recommendation is unclear regarding whether chapters are to receive funds for chapter members or chapter assigned members; also would this mean for RAL subgroups would receive funding?
- (h) Computer programming to provide reports on attendance of selected training programs by chapter members will divert time from other projects.
- (i) Administration of processing payments will be substantial. It is also likely that payments to some chapters will be very – could be less than \$1.00. Analysis of what constitutes net revenue will be required for each type and instance of training.
- (j) Since ASHRAE holds training often in conjunction with Society meetings, advantage will be given to some chapters/regions over others in terms of payment.
- (k) If this practice is adopted, will similar efforts be employed for bookstore sales for example – if a chapter member purchases a book.
- (l) The budget for PEC will need to be adjusted to show this revenue share, reducing revenue for PEC. (All PEC revenue is returned to Society for development of educational programs which benefits chapters and Society as a whole.)

A potential solution, which might accomplish the intent of the recommendation, is to do a better job of promoting ALI opportunities that are available to chapters. This includes the purchase of SDL and short course and professional development seminars that can be scheduled. Also the HVAC training sharing of revenue can be extended to nearby chapters where training is to be scheduled.

Mr. Bochat commented that chapters just want better training. Mr. Jones, Mr. Schwedler, Mr. Ow, Ms. Huang, Mr. Mills and Mr. McQuade spoke against.

### **MOTION (2) Failed 0-10-0 CNV**

An action item was assigned to staff to send PEC's response to Members Council. **(ACTION ITEM 2) Complete. (Attachment U)**

#### **8.3 Region X (San Diego Chapter) – Motion 27:**

That ASHRAE provides for sale on the website basic tools such as a duct sizer (ductulator), pipe sizer, psychrometric chart and expansion calculator. **(Attachment M)**

Item reported on in the Fiscal Planning Subcommittee report.

#### **8.4 Region XIII (Hong Kong Chapter) – Motion 63:**

That Society maintain the examination fee of ASHRAE Certification at US\$295 (for ASHRAE members) for the promotion of ASHRAE Certification. **(Attachment M)**

Item reported on in the Certification Committee report.

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**8.5 Region XIII (Hong Kong Chapter) – Motion 64:**

That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals. **(Attachment M)**

Item reported on in the Fiscal Planning Subcommittee report.

**8.6 Region XII (Chile Chapter) – Motion 40:**

That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017. **(Attachment M)**

Item reported on in the Fiscal Planning Subcommittee report.

**8.7 Region XIII (Philippines Chapter) – Motion 67:**

That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID’s, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members. **(Attachment M)**

Item reported on in the Fiscal Planning Subcommittee report.

**8.8 West Virginia Chapter – Motion 7c (10/14/2016):**

That ASHRAE Society’s ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable. **(Attachment N)**

Item reported on in the ECC report.

**8.9 Tennessee Valley Chapter – Motion 4e (10/14/2016):**

That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A. **(Attachment O)**

Item reported on in the ECC report.

**8.10 Hampton Roads Chapter – Motion 7b (10/14/2016):**

That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members. **(Attachment O)**

Item reported on in the ECC report.

**8.11 Spacecoast Chapter – Motion 7j (10/14/2016):**

That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017. **(Attachment O)**

Item reported on in the ECC report.

9. Subcommittee Reports

9.1 Journal Advertising Sales

Mr. Chakroun gave the subcommittee report. (**Attachment A**)

Mr. Chakroun reported ASHRAE Journal's print advertising market share is at 59% in a three-publication competitive market. This is a 1% increase compared to the same time period during 2015. Advertising pages in the past 12 months have gone down for ASHRAE as well as its competitors but Journal advertising sales is on track for reaching the 2016-17 forecast. And online advertising is on track to exceed FY16-17 budget.

Mr. Chakroun reported ASHRAE Media is increasing opportunities with sponsorships, online advertising, Online Handbook links, Journal, newsletter and supplier webinars. Programs are sold in packages as part of an integrated marketing strategy to maximize available audience channels. Staff will add a new metric for the subcommittee's review, beginning with the Annual Conference in Long Beach for additional tracking of advertising rates per page of advertising sold within ASHRAE Journal.

Mr. Chakroun reported that the High Performing Buildings (HPB) magazine business plan (**Attachment P**) was provided to the Finance Committee as requested by Finance to review opportunities for fiscal performance improvement. The business plan describes steps already taken to improve performance including addition of webinar opportunities, redesigned HPB newsletter, increased advertising rates and reduction in expenses. It was noted that five competing magazines in the sustainable buildings marketplace have ceased publication due to declining advertising revenues. The business plan explains how HPB magazine's circulation reaches beyond ASHRAE Members to architects and building owners, helping to fulfill ASHRAE's mission of leadership in the sustainability movement. It was noted that HPB magazine now has increased ASHRAE branding for the Society's promotion of sustainable technologies. Depending on feedback from the Finance Committee, the subcommittee suggested that ASHRAE limit print circulation to owners and architect demographics only.

9.2 eLearning

Mr. Chakroun gave the subcommittee report. (**Attachment B**)

Mr. Chakroun reported eLearning subscriptions have resumed after the HTML 5 course infrastructure development. In December 2016, a marketing campaign began to promote the new and improved platform and courses and has kick-started sales. Subscriptions are beginning to go up. A positive subscription revenue trend is anticipated to continue for the rest of the budget year. The year to date revenue is \$42,000 on a budget of \$405,900.

Ms. Njeru reported eLearning marketing efforts will continue using various marketing and promotional methods, as well as, suggested ideas from members. This will include training, video promotion on the ASHRAE home page, and reviewing other successful platforms for marketing ideas, such as edx.org.

Ms. Njeru gave a live demonstration of the ASHRAE eLearning portal features which included user friendly search and navigation, accrediting body information, responsive design, recording capabilities for individual training, and self-reported learning. eLearning continues to work with ASHRAE Members to develop new courses. Below are some recently launched and upcoming courses.

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<b>Course Name/Title</b>	<b>Status</b>	<b>Anticipated/Completion Date</b>
Standard 62.1-2013: Natural Ventilation Procedure	Launched	3/2016
School of Hard Knocks Controlling Moisture & Humidity in Buildings	Launched	1/20/2017
UNEP: Refrigerant Literacy –Course A	Soft Launch	1-31-2017
UNEP: Refrigerant Practices – Course B	Preliminary Phase	6/1/2017
Ethics for the Built Environment Professional Engineer	Content Review	2/28/2017
BIM Process, Practice and Workflow	Preliminary Phase	Unknown
Building Energy Modeling (BEM)	Preliminary Phase	Unknown
Building Energy Quotient as Designed (BEQ)	Preliminary Phase	Unknown
Building Energy Quotient in Operations (BEQ)	Preliminary Phase	Unknown
The Last Word on Energy Audits	Preliminary Phase	Unknown

Mr. McQuade asked if a chapter could upload all attendees of an event. Mr. Comstock responded that was not possible as there would be privacy concerns with the personal informational of the attendees. Mr. Schwedler asked if the ASHRAE conference PDHs could also be included and Mr. Comstock reported that they could be included with the platforms self-reporting capabilities.

Ms. Njeru reported that Phase 2 of the Learning Portal infrastructure development will include elimination of the current time consuming registration process for Instructor-Led courses and an automated search, registration, access to digital course materials, and recording of earned PDHs or CEU under “My Training Record”. There will also be a “proposed Learning Path “for specialist fields within HVAC&R industry.

9.3 Fiscal Planning

Mr. Fly gave the subcommittee report. **(Attachment C)**

Mr. Fly reported the subcommittee reviewed and accepted modifications to the PEC budget for implementation of 125<sup>th</sup> anniversary activities pending Historical Committee program approval by PEC. These costs will be budgeted as \$10,000 for 2017-18; \$60,000 for 2018-19; and \$168,000 for 2019-20.

The subcommittee reviewed and accepted the fiscal impact of changing the PDF delivery format for the ASHRAE Handbook and will modify the PEC budget for 2017-18 pending PEC approval of a new PDF distribution plan.

The subcommittee reviewed and accepted a \$20,000 increase to the PEC budget for 2017-18 for development costs to allow for four new PDC courses to be produced annually rather than the previously budgeted two courses annually.

Mr. Fly moved and Mr. Schwedler seconded:

- (3) That PEC approve the PEC Budget for 2017-18 as shown on the December 31, 2016 ASHRAE Financial Statements with the awareness adjustments to the budget will continue to be made during the remainder of the fiscal year to reflect business performance.**



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Background: Fiscal Planning Subcommittee reviewed the financial statements and voted to approve the PEC 2017-2018 budget 5-0-0 CNV.

Fiscal Impact: As shown.

### **MOTION (3) Approved 10-0-0 CNV**

Mr. Fly reported the subcommittee had reviewed the Members Council referrals assigned to them and approved the responses listed in their report. Mr. Chakroun stated that the response to the referrals should come from PEC and so the council should vote to approve the responses.

Mr. Fly moved and Mr. Jones seconded:

#### **(4) That PEC accept the following responses as consent agenda items for approval:**

- **Region X (San Diego Chapter) – Motion 27:**

**That ASHRAE provides for sale on the website basic tools such as a duct sizer, pipe sizer, psychrometric chart and expansion calculator.**

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

Response: [Tools such as a duct sizer, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership's desire to have such tools is noted. Thank you for the feedback.](#)

- **Region XIII (Hong Kong Chapter) – Motion 64:**

**That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals.**

Background: Few members complain that they didn't receive ASHRAE handbooks and journals regularly. Those undelivered publications would then be returned back to the ASHRAE HQ that cost huge amount of postage charges as well as a lot of administrative works to handle the delivery problems. Moreover, this problem would let members be disappointed and reduced their intentions to renew their membership. Local chapters may also be suffered by receiving the complaints from members and sometimes difficult to promote ASHRAE. “ASHRAE Publication Care Program” is proposed in order to handle undelivered ASHRAE handbooks and journals. If the local chapter joins this scheme, the agent of postal service will send those undelivered items to local chapters for follow up. Local chapter will then report to the HQ and contact those members to clarify postal address. Local chapters will distribute those items to members directly after receiving confirmation of reimbursement of related postage charges by HQ.

Fiscal Impact: Positive.

Response: Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure. PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. PEC continues to explore improvements of publication delivery service to members outside the US and Canada. For example, a new Journal mailing service is being used which has shown marked improvement in delivery success and delivery times.

- **Region XII (Chile Chapter) – Motion 40:**

**That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.**

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

Response: ASHRAE’s most demanded standards (such as 90.1, 62.1, and 189.1) are available (English language only) in read only format on the ASHRAE website. If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). It should be noted a cost is incurred based on the number of views for read only standards. Also, Spanish language translations of many ASHRAE documents are not available and translations into other languages have even less availability. Many ASHRAE chapters support students in design competitions by purchasing standards for student use. It is recommended this solution be considered.

- **Region XIII (Philippines Chapter) – Motion 67:**

**That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID’s, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.**

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Background: There were recurring complaints coming from our members the non-receipt of their packages which results to disappointments and thus delayed and even non-renewal of their annual membership. By giving chapters advice from society on return to sender package problems, we can trace the origin of the problem and help members be aware that society and the chapter are concern of their membership and welfare.

Fiscal Impact: No fiscal impact, only time spent for info dissemination.

Response: A new Journal mailing service for international mailing has been implanted with improved delivery success and time reduction. A new plan for PDF delivery of Handbook has been developed reducing the need for mailing. The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.

Council members reviewed the responses provided by the subcommittee.

### **MOTION (4) Approved 10-0-0 CNV**

An action item was assigned to staff to investigate and determine the issues and provide chapters with a process of receiving missed packages. **(ACTION ITEM 3)**

#### 9.4 Functional Planning

Mr. Schwedler gave the subcommittee report. **(Attachment D)**

### **(5) That PEC approve the following changes to Handbook Committee's Manual of Procedures (MOP) as shown:**

*[begin excerpt]*

2.1.2 The Manual of Procedures (MOP) for Technical Committees, Task Groups, and Technical Resource Groups states:

~~“Each TC/TG/TRG is charged with the responsibility of reviewing Handbook chapters within its field of interest and making appropriate recommendations to the Handbook Committee. The TC/TG/TRG is responsible for the technical content of these chapters, but review and revision must be coordinated with the publication schedule established by the Handbook Committee.” (Para. 3.2.1)”~~

Each TC/TG/TRG is charged with the responsibility of reviewing Handbook chapters within its field of interest and with making appropriate recommendations to the Handbook Committee and the responsible TC, TG, or TRG for a specific chapter(s).

The TC/TG/TRGs are responsible for the technical content of these chapters, but review and revision must be coordinated with the publication schedule established by the Handbook Committee. The most authoritative reference for TC/TG/TRG handbook responsibilities and procedures is the Handbook Authors and Reviser's Guide.

MTGs review Handbook chapters within its field of interest and make appropriate recommendations if this responsibility is part of its scope.”

*[end excerpt]*

Background: Changes made corrects a reference used in the Handbook MOP to match with the Manual of Procedures for Technical Committees, Task Groups, and Technical Resource Groups.

Fiscal Impact: None.

*(Functional Subcommittee Approved 3-0-0 CNV)*

**MOTION (5) Approved 10-0-0 CNV**

- (6) That PEC approve the following changes to Publications Committee’s Manual of Procedures (MOP) as shown in Attachment A of the Functional Planning Subcommittee Report to PEC.**

Background: Changes reflect previously approved changes to the Publications Committee section of the Rules of Board (ROB) concerning number of committee members, as well as, organization changes and editorial corrections.

Fiscal Impact: None.

*(Functional Subcommittee Approved 3-0-0 CNV)*

**MOTION (6) Approved 10-0-0 CNV**

- (7) That PEC approve and recommend to the Board of Directors (BOD) the following changes to the Historical Committee section of the Rules of the Board (ROB) as shown in Attachment B of the Functional Planning Subcommittee Report to PEC**

Background: The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non-Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone. Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM’s to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective.

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Fiscal Impact: The estimated fiscal impact of adding two voting members to the committee is \$2,500/year, maximum, for transportation, if requested.

*(Functional Subcommittee Approved 3-0-0 CNV)*

### **MOTION (7) Approved 10-0-0 CNV**

An action item was assigned to staff to include this motion on the Report to BOD for their approval. **(ACTION ITEM 4) Complete. (Attachment V)** *(Approved by BOD February 1, 2017)*

*(Secretary's Note: The PEC Information Items Report to BOD after the Winter Meeting is shown as Attachment W of these minutes)*

Mr. Schwedler reported on activities for PEC MBOs assigned to the subcommittee:

MBO #1 - Prepare study & recommendations on product alignment (format, delivery mechanism, content, and context) with younger members for future media dissemination.

*Update: Ideas were generated from young members in a large chapter. The YEA Committee was contacted. They will develop and distribute the survey, then share it with the subcommittee. (Attachment C of the Functional Planning Report to PEC)*

MBO #2 - Identify product needs & prepare implementation roadmap for O&M market focus.

*Update: Functional Planning working group has developed a plan. (Attachment D of the Functional Planning Report to PEC)*

MBO #5 - Refine User Manual Development Plan in collaboration with Tech Council.

*Update: Tech Council has contracted for 90.1 User's Manual, updated their User's Manual Development manual. SSPC 90.1 Chair, Drake Erbe, is working with Steve Comstock on a web-based User's Manual for the future. (Attachment E of the Functional Planning Report to PEC)*

MBO #6 - Develop and implement strategies to deliver products and services globally.

*Update: Functional Planning working group has developed a plan. (Attachment F of the Functional Planning Report to PEC)*

MBO #9 - Develop educational and publishing programs to align with 2016-2017 Society theme.

*Update: Functional Subcommittee is following the lead and supporting PDC, Publications Committee and bEQ Committee. The Consulting Engineering Essentials course outline has been approved by PDC and is scheduled to be made available in June. PDC is waiting for the bEQ Training package which is expected in the fall to then begin developing supporting courses for bEQ.*

MBO #10 - Create 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.

*Update: Is still currently under development with Publications Committee and the Functional Subcommittee working group*

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### 9.5 Research Journal

Mr. Tsui passed out the Taylor & Francis Report to the council. **(Attachment Q)**

Mr. Tsui reported that effective January 1, 2017, ASHRAE has launched free member online access to all articles published in Science and Technology for the Built Environment (STBE), ASHRAE's archival research Journal. There is strategic value in this action because it supports ASHRAE's presence in the academic and research communities with a positive impact on the ability of ASHRAE to reach out to undergraduate and graduate students in engineering.

The link to the site is here: [www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment](http://www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment).

Mr. Comstock reported on marketing efforts implemented to assist in increasing the impact factor of the journal. The last available rating for STBE's Impact Factor was from 2015, 0.871, which is an increase over the 2014 Impact Factor. Mr. Comstock reported the subcommittee is hopeful that Open Access for articles will increase the Impact Factor as well.

Mr. Fly commented that he went to TC meeting and learned that research projects generally require a technical paper be developed and suggested STBE would be a place for them to publish these papers. Mr. Comstock explained if the research project contract allows this and they could be published there.

Mr. Comstock reported Taylor & Francis may give a workshop on Sunday at the 2017 June Annual Conference in Long Beach.

The council discussed encouraging more research paper authors to consider STBE to publish their papers. Mr. Rooley suggested that CEC might rename the research track for the journal to bring more awareness. Mr. Chakroun commented that a motion from the council could be sent to them. Mr. Fly commented that renaming the entire track might imply all research presented at the meeting was or would be included in STBE.

Mr. Rooley moved and Mr. McQuade seconded:

**(8) That CEC consider renaming the research track at ASHRAE conferences to reference Science and Technology for the Built Environment (STBE), ASHRAE's archival research Journal.**

**MOTION (8) Approved 10-0-0 CNV**

An action item was assigned to staff to send CEC the motion above as a referral.

**(ACTION ITEM 5) Complete. (Attachment X)**

Dr. Radermacher, the editor of STBE, gave a report to the subcommittee. **(Attachment Y)**

## 10. Committee Reports

### 10.1 Certification

Mr. Rose gave the committee report. **(Attachment E)**

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Mr. Rose reported Certification Committee conducted its annual review, an ANSI requirement, of the certification program management system, including the following evaluations: 2016 Certification Body Internal Audit; 2016 2015 2014 Annual Comparison ASHRAE Facility Questionnaire Report; Third-party Contractor Assessment-AMP/PSI; Impartiality Threat Analysis. The committee identified several opportunities for the improvement of certification services.

Mr. Rose reported Certification Committee is determining how to apply the “Guidelines for Suspending, Withdrawing or Reducing the Scope of Certification,” as outlined in the *Reference Orientation Manual* for the case of recertification applicants who did not fulfill the requirements of an audit conducted in 2016. Mr. Rose reported PEC approved pursuing alignment of the BEAP with Better Buildings Workforce Guidelines (BBWG) Building Energy Auditor scheme requirements. Certification Committee adopted an exam development and transition timeline with the goal of achieving DOE approval of the BEAP in July 2017.

Mr. Rose reported the first administration of the Building Commissioning Professional (BCxP) certification and BCxP recertification exams for recertifying CPMPs were given in Las Vegas. The goal is to have enough exam exposures by mid-March to produce the reports needed to gain ANSI accreditation in June and DOE approval by July 2017.

Mr. Rose reported the following exam development activities:

- BCxP - New exam form created. Next step: gather exposure data and finalize exam passing score.
- BEAP - Crosswalk completed. Next step: reclassify items in bank against tasks in BBWG Energy Auditor exam blueprint
- BEMP - Updated exam Detailed Content Outline approved. Next step: limited exam development
- HBDP - Next step: Survey on importance of tasks on updated exam Detailed Content Outline to be conducted, followed by exam development.
- HFDP - Survey on continued importance of tasks on exam Detailed Content Outline completed. Next step: Subcommittee to analyze survey data and recommend any updates.
- OPMP - Updated exam Detailed Content Outline approved. Next step: limited exam development

Mr. Rose reported the committee tabled a motion to support of a new HVAC Designer certification until 2018.

The committee's 2016-17 MBOs are shown in *Attachment A of the Certification Committee's Report to PEC*.

### 10.2 Electronic Communications

Mr. Faulkner gave the committee report. **(Attachment F)**

Ms. Platt moved and Mr. Jones seconded:

#### **(9) That PEC approve ECC's response to the following referral:**

##### **Tennessee Valley Chapter – Motion 4e (10/14/2016):**

That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A.

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**ECC's response:** A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. After discussion ECC researched estimated cost if Star Chapter was to be provided by Society for use across all chapters and estimates the cost to be \$147,256.20 set up and \$196,560.00 annually. ECC would need to know if this cost would be acceptable to proceed with a recommendation to use.

### **MOTION (9) Approved 10-0-0 CNV**

Mr. McQuade moved and Mr. Jones seconded:

#### **(10) That PEC approve ECC's response to the following referral:**

##### **Hampton Roads Chapter – Motion 7b (10/14/2016):**

That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members.

**ECC's response:** After discussion, ECC determined this is not a viable solution for chapter and region use. A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. Although not specifically asked or stated in the survey, it can be inferred that this would hold true for official communications as well. An important item to consider is that an email from a chapter or region is not the same as a mailing from Society. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC can provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

### **MOTION (10) Approved 10-0-0 CNV**

Mr. Jones moved and Mr. Fly seconded:

#### **(11) That PEC approve ECC's response to the following referral:**

##### **West Virginia Chapter – Motion 7c (10/14/2016):**

*That ASHRAE Society's ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable.*

**ECC's response:** The websites subcommittee reviewed this motion and will draft guidance on protocols regarding the collection, sharing, and opting out of contact information to be submitted to Members Council prior to the Long Beach Annual conference for consideration for placement in the MCO Manual. Due to complexity of international laws ECC will focus the guidance on US laws (CAN SPAM) only, with the suggestion that international chapters should reference their local legislation.



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### MOTION (11) Approved 10-0-0 CNV

Ms. Platt moved and Mr. Fly seconded:

#### (12) That PEC approve ECC's response to the following referral:

##### Spacecoast Chapter – Motion 7j (10/14/2016):

That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017.

*ECC's response:* ASHRAE Society cannot take responsibility for chapter and region email communications. A whitepaper from ECC regarding basic email best practices is forthcoming for the Long Beach Annual Conference and will be made available via the ASHRAE website. The use of ASHRAE's domain for sending emails could blur the line between chapter and Society communications in the eye of Internet Service Providers and could cause Society emails to be blocked, blacklisted, or undelivered depending on what is sent by the chapters and to whom. In addition, Society has a special and specifically-negotiated contract for its email service provider, RealMagnet, to send emails and provide marketing automation technologies at an enterprise level for Society.

Since each chapters needs are different not only in terms of email contacts and email volume, but also technical expertise to use such a solution, it becomes quite complex to begin to estimate both cost and time and resources needed for implementation for all chapters. There is also an additional element of staff infrastructure that would be needed to onboard any chapters that would use the solution.

Lastly, to assist chapters (and regions) with their emailing needs, ASHRAE's electronic collaboration tools subcommittee is working on a document based on survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC will provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

### MOTION (12) Approved 10-0-0 CNV

Mr. Faulkner reported ECC continues to assign new Basecamp 3 sites to groups that ask for them and will continue to roll Basecamp 3 out with a goal of completing the rollout by the end of the 2016-2017 year. Most Basecamp 2 sites have been transitioned to Basecamp 3 and all new Basecamp sites are created only in Basecamp 3.

Mr. Faulkner reported, in an effort to improve communication among Society, Regions and Chapters with electronic communications support, ECC sent an update to RECC, DRC, Chapter President, and Chapter ECC positions advising of activities ECC is working on with an invitation to attend the Winter Meeting in Las Vegas.

Mr. Faulkner reported Cindy Callaway, along with Handbook Editor Mark Owen, presented *Seminar 30 Electronic Project and Document Management: an Introduction and ASHRAE's System* as part of a Seminar co-sponsored by TC 7.1.

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Mr. Faulkner reported survey results on what Chapters and Regions are using for planning, website, email and payment were posted to ECC's Basecamp Fall 2016. ECC is working on a white paper based on those results to be posted on the ASHRAE.org website. Overall findings indicate that chapters have varied solutions in place for electronic communications and that chapters are generally satisfied with, and would recommend, the solutions they are using.

Mr. Faulkner reported ECC's social media subcommittee has prepared guidance for submitting material to ASHRAE for posting on Society's YouTube channel, and for ASHRAE group YouTube content. The guidance will be posted to the Electronic Communications Committee page of the ASHRAE.org website.

Mr. Faulkner reported ECC discussed app creation by chapters and will continue to monitor and review. At this time the committee believes it most expeditious to consider adding mention in the existing ASHRAE Policy and Procedure for Format, Activity, and Content of Internet Sites for ASHRAE Groups regarding app development by ASHRAE groups (including chapters). The committee will continue to look into this before Long Beach.

Mr. Faulkner reported ECC reviewed their recommendations that were put forth for consideration by the PAOE subcommittee in order to provide feedback prior to their meeting Monday.

The committee's 2016-17 MBOs are shown in *Attachment A of the ECC's Report to PEC*.

### 10.3 Handbook

Mr. Yount gave the committee report. (**Attachment G**)

Mr. Yount reported the committee continued training and promotion of the new ASHRAE Authoring Portal (authoring.ashrae.org), a collaborative authoring site, to TC Handbook Chairs in the Sunday training session. The Portal allows TCs or other authoring groups to store and revise copyrighted intellectual property in a secure, ASHRAE-approved location, with multiple authors able to work on a document simultaneously. Google Analytics data shows 160 users and 2590 pageviews since launch last June. The portal is also in use by ASHRAE Learning Institute (ALI), and requests to use the portal have been received by authoring groups from Standards and several special publications.

Mr. Yount reported the 2017 ASHRAE Handbook Fundamentals is on schedule for publication June 2017.

The committee's 2016-17 MBOs are shown in *Attachment A of the Handbook Committee's Report to PEC*.

### 10.4 Historical

Mr. Schrecengost gave the committee report. (**Attachment H**)

Mr. Schrecengost reported the committee continued discussion to increase voting members. The committee voted to increase membership from 7 to 9 voting members.

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Mr. Schrecengost reported Historical Committee discussed how, where, and how many years to retain historical documents. The committee discussed establishing a process to review historical documents before they were destroyed. The committee discussed the need to provide assistance to chapters for electronic storage of historical and other important documents. Committee recommended establishing a connection with ECC for electronic storage recommendations – a digital file cabinet – to assist chapters.

Mr. Schrecengost reported Historical Committee discussed the value of holding interim meetings via teleconference or Go to Meeting between Winter and Annual Conferences.

Mr. Schrecengost reported Historical Committee discussed the Leadership Recall process and named Tom Phoenix to be interviewed in June 2017 at the Annual Conference. A second candidate may be named via email with committee.

Mr. Schrecengost reported Historical Committee discussed the progress made by the Committee on projects being developed for the 125<sup>th</sup> Anniversary. The committee also discussed ways to recognize ASHRAE's connection with international associate societies for the 125<sup>th</sup> Anniversary. (*Attachment B of the Historical Committee's Report to PEC*)

Mr. Schrecengost reported Historical Committee discussed PAOE point changes made by the PAOE subcommittee.

The committee's 2016-17 MBOs are shown in *Attachment A of the Historical Committee's Report to PEC*.

### 10.5 Professional Development

Mr. Bochat gave the committee report. (**Attachment I**)

Mr. Bochat reported PDC reorganized the subcommittee meeting schedule to have separate Planning subcommittee and Operations subcommittee meetings to improve training course output.

Mr. Bochat reported seven (7) new courses will be presented at the 2017 Winter Conference and five (5) additional courses are in the development process. PDC plans for a minimum of four (4) per year in varying stages of development or revision. An increase in the budget of development costs for next Society Year was approved by the PEC Fiscal Subcommittee.

Mr. Bochat reported PDC approved development of the Consulting Engineering Essentials course, with completion by June 2017.

Mr. Bochat reported PDC reviewed existing course offerings and approved to sunset nine (9) older courses. An action item was established to contact the authors and TCs of an additional ten (10) courses to determine if they are candidates for revision or should be sunset.

Mr. Bochat reported PDC will seek input from active TC representatives for development of courses for their discipline. PDC will monitor the development and revisions of ASHRAE standards and guidelines to ensure course offerings exist to cover those products.

The committee's 2016-17 MBOs are shown in *Attachment A of the PDC's Report to PEC*.

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### 10.6 Publications

Ms. Huang gave the committee report. (**Attachment J**)

Ms. Huang reported the committee awarded two winners from submissions to its inaugural Apps Contest and is preparing to announce the 2017 contest, with some adjustments to criteria and schedule based on lessons learned from the first contest.

Ms. Huang reported the new web app for modeling compliance with Standard 90.1-2010 using the Energy Cost Budget (ECB) Method described in the standard now has 727 users and 473 projects registered.

Ms. Huang reported the committee referred to ECC an app from the Qatar/Oryx Chapter (for local chapter management), with the request that ECC review the app as a possible model for chapter apps. The app was recommended to the committee by ASHRAE President Tim Wentz.

Ms. Huang reported the committee selected an article for the 2016 *ASHRAE Journal* Paper of the Year. This result was submitted to the Honors and Awards Committee for approval, with announcement slated for later this year.

Ms. Huang reported the liaisons from the committee contacted authoring groups regarding the need for revision or replacement of ASHRAE publications four or more years old (and especially those 10 or more years old).

Ms. Huang reported special publications completed from June 2016 through January 2017 are listed in *Attachment A of the PDC's Report to PEC*.

A status summary of upcoming publications is shown in *Attachment B of the PDC's Report to PEC*.

The committee's 2016-17 MBOs are shown in *Attachment C of the PDC's Report to PEC*.

### 11. Old Business

#### 11.1 Handbook Delivery Ad Hoc

Mr. Tsui gave the Handbook Ad Hoc Committee report. (**Attachment K**)

Mr. Tsui moved and Mr. McQuade seconded:

**(13a) That PEC approve changing Handbook PDF files from CD format to electronic cloud based means starting with the 2018-19 Society year.**

Background: Disadvantage of CD include complaints regarding non-delivery of printed Handbooks and/or CD, mailing costs, new technologies to transfer files and the disappearance of CD drives with new mobile devices, ASHRDAE CDs do not work in Mac environments so files are sent on request to MACusers involving extra staff hours.

The proposed alternative to the Handbook CD would be to transfer Handbook PDF files with a link and user download.

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Fiscal Impact: A savings of \$80,374 in the first year and \$90,374 in the second year.

Mr. Tsui reviewed the Handbook Delivery Ad Hoc Committee report with the council.

Mr. Comstock noted that the Society year listed in the motion should be **2017-18** instead of 2018-19.

Mr. Jones moved and Mr. McQuade seconded to amend **Motion (13a)**.

**MOTION (13a) Approved Amendment 9-0-0 CNV**

**(13b) That PEC approve changing Handbook pdf files from CD format to electronic cloud based means starting with the 2017-18 Society year.**

Background: Disadvantage of CD include complaints regarding non-delivery of printed Handbooks and/or CD, mailing costs, new technologies to transfer files and the disappearance of CD drives with new mobile devices, ASHRDAE CDs do not work in Mac environments so files are sent on request to MAC users involving extra staff hours.

The proposed alternative to the Handbook CD would be to transfer Handbook PDF files with a link and user download.

Fiscal Impact: A savings of \$80,374 in the first year and \$90,374 in the second year.

**MOTION (13b) Approved 9-0-0 CNV**

Mr. Tsui moved and Mr. Mills seconded:

- (14a) That PEC approve the following member benefit Handbook delivery options for the 2018-19 Society year:**
- a) Receive a 12 month complimentary subscription to the Handbook Online, with PDF files download; or**
  - b) Receive a printed Handbook and PDF files download without Handbook Online; or**
  - c) Pay extra to receive both (a) & (b)**
  - d) Members paying developing economy fee receive Handbook PDF download.**

Background: Disadvantage of CD include complaints regarding non-delivery of printed Handbooks and/or CD, mailing costs, new technologies to transfer files and the disappearance of CD drives with new mobile devices, ASHRDAE CDs do not work in Mac environments so files are sent on request to MAC users involving extra staff hours.

Fiscal Impact: A savings of \$80,374 in the first year and \$90,374 in the second year.

Mr. Tsui reviewed with the council the details of the formats the membership is currently choosing as shown in his report.

Mr. Comstock noted that the Society year listed in the motion should be **2017-18** instead of 2018-19.

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Mr. Schwedler moved and Mr. McQuade seconded to amend **Motion (14a)**.

**MOTION (14a) Approved Amendment 9-0-0 CNV**

- (14b) That PEC approve the following member benefit Handbook delivery options for the 2017-18 Society year:**
- a) Receive a 12 month complimentary subscription to the Handbook Online, with PDF files download; or**
  - b) Receive a printed Handbook and PDF files download without Handbook Online; or**
  - c) Pay extra to receive both (a) & (b)**
  - d) Members paying developing economy fee receive Handbook PDF download.**

Background: Disadvantage of CD include complaints regarding non-delivery of printed Handbooks and/or CD, mailing costs, new technologies to transfer files and the disappearance of CD drives with new mobile devices, ASHRDAE CDs do not work in Mac environments so files are sent on request to MAC users involving extra staff hours.

The proposed alternative to the Handbook CD would be to transfer Handbook PDF files with a link and user download with a stamp identifying the member when printed. Developing economies members to receive Handbook PDF cloud based files with a member-identifying stamp.

Fiscal Impact: A savings of \$80,374 in the first year and \$90,374 in the second year.

**MOTION (14b) Approved 9-0-0 CNV**

- (15a) That PEC approve a motion for referral to Members Council that members pay a mailing surcharge (based on the country of delivery) if they choose Handbook print copy, starting with the 2019-20 cycle Handbook volume.**

Background: Complaints regarding non-delivery of handbooks, which creates member unhappiness. Most complaints come from countries outside US, Canada and Europe. This situation has been solved in the past for countries with historically high complaints (Argentina, Mexico, India, Pakistan, and Sri Lanka) by using FedEx to deliver printed Handbook, which is costly in staff time and higher mailing costs. This proposes change would be a benefit to both the members and ASHRAE costs.

Fiscal Impact: \$60,000 per year based on current number of global members.

Mr. Tsui reviewed with the council the details of the Cost and saving analysis as shown in his report.

Mr. Comstock noted that the Society year listed in the motion should be **2018-19** instead of 2019-20.

Mr. Tsui moved and Ms. Platt seconded to amend **Motion (15a)**.

**MOTION (15a) Approved Amendment 9-0-0 CNV**

- (15b) That PEC approve a motion for referral to Members Council that members a pay mailing surcharge (based on the country of delivery) if they choose Handbook print copy, starting with the 2018-19 cycle Handbook volume.**

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Background: Complaints regarding non-delivery of handbooks, which creates member unhappiness. Most complaints come from countries outside US, Canada and Europe. This situation has been solved in the past for countries with historically high complaints (Argentina, Mexico, India, Pakistan, and Sri Lanka) by using FedEx to deliver printed Handbook, which is costly in staff time and higher mailing costs. This proposes change would be a benefit to both the members and ASHRAE costs.

Fiscal Impact: \$60,000 per year based on current number of global members.

### **MOTION (15b) Approved Amendment 8-1-0 CNV**

#### 11.2 Presidential and Strategic Plan Initiatives

##### 11.2.1 **Application Guides** - Society Directive 3 Initiative 2 (Assigned to Publications Committee)

Mr. Comstock reported that potential application guides have been identified.

##### 11.2.2 **App Development** - Society Directive 3 Initiative 3 (Assigned to Publications Committee and staff)

Mr. Owen reported the SuperheatCalc app was released. ASHRAE Weather Database app will be available as part of Handbook Online by February 1. Duct Fitting Data Base is being updated. Publications Committee is continuing solicitations of app ideas through it ASHRAE App Contest and through TC websites submissions. Staff is currently consulting with a vendor for development and/or co-branding additional apps.

##### 11.2.3 **Residential Focused Courses** - RFP for two residential courses posted Sep 15. (Assigned to PDC)

Mr. Bochat reported PDC is negotiating development costs and has received one proposal from posted RFP. This proposal is in review.

##### 11.2.3 **Engineering Essentials Course** - Society Directive 2 Initiative 2 (Assigned to PDC)

Mr. Bochat reported PDC approved development of the Consulting Engineering Essentials course, with completion by June 2017.

##### 11.2.4 **Building EQ Course for Student Branches Use** - Society Directive 2 Initiative 3 (Assigned to Presidential Ad Hoc Committee.)

Mr. Comstock reported the committee is working with the presidential ad hoc committee to review content. They expect to have the Building EQ for Student Branches course in place by the Winter Conference deadline.

##### 11.2.6 **HVAC Operations Training** - PEC MBO 2 (Assigned to staff)

Mr. Comstock reported a new course has been successfully offered for first time.

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Analysis is underway to make the course widely available to the facility manager community and to assist consulting engineers and suppliers to more successfully communicate with operators to improve building performance. The UFAD and O&M Guides were published in December 2016.

### **11.2.7 Technology Portal - Society Directive 3, Initiative 1 (Assigned to staff)**

Mr. Comstock reported that the portal was launched on January 15, 2017. It includes all ASHRAE Journal articles and ASHRAE Research Reports in single portal for access with search as a member benefit.

### **11.2.8 Web Based Educational Platform - Society Directive 1, Initiative 1 (assigned to eLearning Subcommittee and staff)**

Mr. Comstock reported the new eLearning platform launched September 1, 2016 and demonstrated for the council by Ms. Njeru. It includes a personal training dashboard for members to track educational course completion, whether in the eLearning Learning Management System or self-reported training from another source. Design improvements continuing with the vision for center to be single repository for all ASHRAE training registrations are scheduled for completion by June 2017.

### **11.2.9 Cooperation with UNEP - PEC MBO 8 (Assigned to staff)**

Mr. Comstock reported that an eLearning course on “Refrigerant Literacy” for policy makers is currently under development for launch in January 2018 with an eLearning course on “Sound Refrigerant Management” for technicians to begin immediately following. The target audience for both is developing countries.

Mr. Chakroun also presented the ASHRAE UNEP Work Plan that was signed by ASHRAE and UNEP on January 30, 2017. (**Attachment R**)

### **11.2.10 ASHRAE CIBSE Training Initiative - Executive Committee Assignment (Assigned to staff)**

Mr. Comstock reported that collaboration with CIBSE to identify and produce educational products that serve the needs of ASHRAE and CIBSE members without regard to geographic boundary is underway and the anticipated focus will be on European delivery.

### **11.2.11 Global Availability of Regionally Relevant Training - Board Assignment with Planning Committee Oversight (Assigned to staff)**

Mr. Comstock reported that the plan is to develop and deliver regionally relevant training to Europe and Middle East markets. For Europe the plan is develop partnerships with national associations and chapters. For the Middle East the plan is to explore development of a training center in Dubai to sell training into government and corporate channels.



## **PUBLISHING & EDUCATION Minutes · January 31, 2017 · Las Vegas, NV**

### 12. New Business

#### 12.1 Qatar Oryx Chapter

Mr. Comstock reported Publications Committee referred to ECC an app from the Qatar/Oryx Chapter (for local chapter management), with the request that ECC review the app as a possible model for chapter apps. The app was recommended to the committee by ASHRAE President Tim Wentz.

#### 12.2 Develop Energy and/IEQ design guide for Developing Economies

Mr. Chakroun stated this publication was one of the initiatives being initiated by President Elect Olesen. The council awaits further clarification from Mr. Olesen before taking action.

### 13. Adjourn

Mr. Chakroun adjourned the meeting at 12:03 p.m.

**Report to Publishing and Education Council (PEC)  
Journal Advertising Sales Subcommittee  
Meeting of January 24, 2017**

**Members Attending:**

Mick Schwedler, Appointed Chair of Meeting  
Mark Fly  
JinJin Huang  
Steve Comstock, Staff Liaison

**Members Absent With Reason:**

Walid Chakroun, Chair

**Action Items for PEC:**

None

**Information Items:**

1. ASHRAE Journal's print advertising market share (SOM) is at 59%, a one-percent increase compared to the same time period during 2015, in a three-publication competitive market. While ASHRAE Journal did not sell as many advertising pages in the past 12 months, its competitors have also lost advertising pages during the same time period, resulting in the aforementioned gain in SOM.
2. Journal advertising sales is on track for reaching the 2016-17 forecast. Online advertising on track to exceed FY16-17 budget.
3. With more competition for advertising dollars, ASHRAE Media is increasing opportunities with sponsorships, online advertising, Online Handbook links, Journal newsletter and supplier webinars. Programs are sold in packages as part of an integrated marketing strategy to maximize available audience channels.
4. The Journal's book share and SOM was discussed. The book share shows how many advertising pages are sold by a particular territory within a set of issues. The SOM equals 100% when comparing ASHRAE Journal and competitors.
5. The subcommittee suggested additional tracking of advertising rates per page of advertising sold within ASHRAE Journal. Staff will add this metric for the subcommittee's review, beginning with the Annual Conference in Long Beach.
6. The HPB magazine business plan was provided to the Finance Committee as requested by Finance to review opportunities for fiscal performance improvement. The business plan describes steps already taken to improve performance including addition of webinar opportunities, redesigned HPB newsletter, increased advertising rates and reduction in expenses. It was noted that five competing magazines in the sustainable buildings marketplace have ceased publication due to declining advertising revenues. The business plan explains how HPB magazine's circulation reaches beyond ASHRAE Members to architects and building owners, helping to fulfill ASHRAE's mission of leadership in the sustainability movement. It was noted that HPB magazine now has increased ASHRAE branding for the Society's promotion of sustainable technologies. Depending on feedback from the Finance Committee, the subcommittee suggested that ASHRAE limit print circulation to owners and architect demographics only.

January 24, 2017



**Report to PEC  
eLearning Subcommittee  
Meeting of Saturday, January 28, 2017**

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Walid Chakroun—Chair  
Edward Tsui — Vice Chair  
James Bochat — Member  
Jin Jin Huang — Member  
Bill McQuade — Member  
Mick Schwedler — Guest  
Kris Tan — Guest  
Steve Comstock — Staff Liaison  
Eunice Njeru — Staff  
David Soltis — Staff

**Action Items**

None

**Information Items**

1. eLearning subscriptions have resumed after an unforeseen long HTML 5 course infrastructure rebuilding project. In December, 2016, a marketing campaign began to promote the new and improved platform and courses. The good news is that this marketing campaign has kick-started our sales and we're seeing subscriptions begin to pick up. ASHRAE anticipates a positive subscription revenue trend to continue for the rest of the budget year. The year to date revenue is 42.1 K on a year to date budget of 176.2 K. Year end forecast, however, is 172.3 K based on a year-end budget of 405.9K.

eLearning marketing efforts will continue using various marketing promotional methods and various suggested ideas from members, including CCT Training, video promotion on ashrae.org home page, and reviewing other successful platform for marketing ideas, such as edx.org.

2. The new eLearning platform is performing to expectation and we are pleased with what it offers:

- User friendly search and navigation
- Accrediting body information
- Responsive design
- My Training Record
- Self-Reported Learning

3. New Course Development Status.

eLearning continues to work with ASHRAE Members to develop new courses. Below are recently launched and upcoming courses:

<b>Course Name/Title</b>	<b>Status</b>	<b>Anticipated/Completion Date</b>
Standard 62.1-2013: Natural Ventilation Procedure	Launched	3/2016
School of Hard Knocks Controlling Moisture & Humidity in Buildings	Launched	1/20/2017
UNEP: Refrigerant Literacy – Course A	Soft Launch	1-31-2017
UNEP: Refrigerant Practices – Course B	Preliminary Phase	6/1/2017
Ethics for the Built Environment Professional Engineer	Content Review	2/28/2017
BIM Process, Practice and Workflow	Preliminary Phase	TBD
Building Energy Modeling (BEM)	Preliminary Phase	TBD
Building Energy Quotient as Designed (BEQ)	Preliminary Phase	TBD
Building Energy Quotient in Operations (BEQ)	Preliminary Phase	TBD
The Last Word on Energy Audits	Preliminary Phase	TBD

eLearning will continue to work with ASHRAE members to develop courses that meet the Society’s learning needs.

4. Phase 2 Learning Portal infrastructure development includes:

- Addition to portal of Instructor-Led Training  
This will eliminate the current time consuming, and labor intensive registration process for Instructor-Led courses. The development will automate the search, registration, access to digital course materials, and recording of earned PDHs or CEU under My Training Record.
- Career Path  
This will entail a proposed Learning Path for specialist fields within HVAC&R industry.

Learning Portal infrastructure development Status:

Phase	Type of Learning	Completion/Expected Date of	Status
1	eLearning	9/1/2016	Complete
2	Instructor-Led Training	6/1/2017	Planning
	Career Path	9/1/2017	Planning

**Suggestions from eLearning Subcommittee**

- Use CTTC Training to get eLearning portal information out to ASHRAE Members.
- Create a video of eLearning portal to be hosted on ashrae.org home page.
- Review other successful portals for marketing success stories, such as edx.org.
- Credits vs PDHs –Work with ASHRAE Members to find the right terminology.
- Corporate Member value proposition of eLearning for ASHRAE Members.
- Design courses on Basics Design and Load Calculations.
- Explore Distinguished Lecturers as a resource for course development



Fiscal Planning Subcommittee Report to  
Publishing & Education Council  
Monday, January 30, 2017

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## Action Items

1. Recommend that PEC approve the Publishing and Education Council for 2017-18 as shown on the December 31, 2016 ASHRAE Financial Statements with the awareness adjustments to the budget will continue to be made during the remainder of the fiscal year to reflect business performance.

PASSED: 5-0-0 CNV

## Information Items

1. The subcommittee reviewed and accepted the following modification to the PEC budget for the 2017-18 year and succeeding years for implementation of 125<sup>th</sup> anniversary activities pending Historical Committee program approval by PEC.

2017-18	Net 2018-19	2019-20
\$ 10,000	\$ 60,000	\$ 168,000

2. The subcommittee reviewed and accepted the fiscal impact of changing the PDF delivery format for the ASHRAE Handbook and will modify the PEC budget for 2017-18 and succeeding years pending PEC approval of a new PDF distribution plan.
3. The subcommittee reviewed and accepted the fiscal impact for the 2017-18 and succeeding year PEC budget of increasing cost development resources by \$20,000 each year to allow for four new founded courses to be produced annually rather than only 2.
4. The subcommittee reviewed and will respond to the following Members Council referrals as follows:

**Region X (San Diego Chapter) – Motion 27:**

That ASHRAE provides for sale on the website basic tools such as a duct sizer, pipe sizer, psychrometric chart and expansion calculator.

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

### Response

Tools such as a duct sizer, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership's desire to have such tools is noted. Thank you for the feedback.

### **Region XIII (Hong Kong Chapter) – Motion 64:**

That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals.

Background: Few members complain that they didn't receive ASHRAE handbooks and journals regularly. Those undelivered publications would then be returned back to the ASHRAE HQ that cost huge amount of postage charges as well as a lot of administrative works to handle the delivery problems. Moreover, this problem would let members be disappointed and reduced their intentions to renew their membership. Local chapters may also be suffered by receiving the complaints from members and sometimes difficult to promote ASHRAE. “ASHRAE Publication Care Program” is proposed in order to handle undelivered ASHRAE handbooks and journals. If the local chapter joins this scheme, the agent of postal service will send those undelivered items to local chapters for follow up. Local chapter will then report to the HQ and contact those members to clarify postal address. Local chapters will distribute those items to members directly after receiving confirmation of reimbursement of related postage charges by HQ.

Fiscal Impact: Positive.

### Response

Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure. PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. PEC continues to explore improvements of publication delivery service to members outside the US and Canada. For example, a new Journal mailing service is being used which has shown marked improvement in delivery success and delivery times.

### **Region XII (Chile Chapter) – Motion 40:**

That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

**Response**

ASHRAE's most demanded standards (such as 90.1, 62.1, 189.1) are available (English language only) in read only format on the ASHRAE website. If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). It should be noted a cost is incurred based on the number of views for read only standards. Also, Spanish language translations of many ASHRAE documents are not available and translations into other languages have even less availability. Many ASHRAE chapters support students in design competitions by purchasing standards for student use. It is recommended this solution be considered.

**Region XIII (Philippines Chapter) – Motion 67:**

That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID's, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.

Background: There were recurring complaints coming from our members the non-receipt of their packages which results to disappointments and thus delayed and even non-renewal of their annual membership. By giving chapters advice from society on return to sender package problems, we can trace the origin of the problem and help members be aware that society and the chapter are concern of their membership and welfare.

Fiscal Impact: No fiscal impact, only time spent for info dissemination.

Staff Action Item: Publishing and Membership Staff to investigate and determine the issues and provide chapters with a process of receiving missed packages.

**Response**

A new Journal mailing service for international mailing has been implanted with improved delivery success and time reduction. A new plan for PDF delivery of Handbook has been developed reducing the need for mailing. The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.





## Functional Planning Subcommittee of PEC Report to PEC

Meeting of Monday, January 30, 2017

### 2016-2017 Subcommittee Members

Michael Schwedler, Chair  
Roger Jones  
C S Ow  
Florentino Mendez  
John Nix  
Frank Mills  
Richard Rooley  
Walid Chakroun  
Steve Comstock, Staff Liaison

### Motions

1. That PEC approve the following changes to Handbook Committee's Manual of Procedures (MOP) as shown:

*[begin excerpt]*

- 2.1.2 The Manual of Procedures (MOP) for Technical Committees, Task Groups, and Technical Resource Groups states:

~~“Each TC/TG/TRG is charged with the responsibility of reviewing Handbook chapters within its field of interest and making appropriate recommendations to the Handbook Committee. The TC/TG/TRG is responsible for the technical content of these chapters, but review and revision must be coordinated with the publication schedule established by the Handbook Committee.” (Para. 3.2.1)~~

Each TC/TG/TRG is charged with the responsibility of reviewing Handbook chapters within its field of interest and with making appropriate recommendations to the Handbook Committee and the responsible TC, TG, or TRG for a specific chapter(s).

The TC/TG/TRGs are responsible for the technical content of these chapters, but review and revision must be coordinated with the publication schedule established by the Handbook Committee. The most authoritative reference for TC/TG/TRG handbook responsibilities and procedures is the Handbook Authors and Reviser's Guide.

MTGs review Handbook chapters within its field of interest and make appropriate recommendations if this responsibility is part of its scope.”

*[end excerpt]*

Background: Changes made corrects a reference used in the Handbook MOP to match with the Manual of Procedures for Technical Committees, Task Groups, Technical Resource Groups.

Fiscal Impact: None.

*(Functional Subcommittee Approved 3-0-0 CNV)*

**2. That PEC approve the following changes to Publications Committee's Manual of Procedures (MOP) as shown in Attachment A**

Background: Changes reflect previously approved changes to the Publications Committee section of the Rules of Board (ROB) concerning number of committee members, as well as, organization changes and editorial corrections.

Fiscal Impact: None.

*(Functional Subcommittee Approved 3-0-0 CNV)*

**3. That PEC approve and recommend to the Board of Directors (BOD) the following changes to the Historical Committee section of the Rules of the Board (ROB) as shown in Attachment B.**

**Background:** The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non- Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone.

Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM's to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective.

**Fiscal Impact.** The estimated fiscal impact of adding two voting members to the committee is \$2,500/year, maximum, for transportation, if requested.

*(Functional Subcommittee Approved 3-0-0 CNV)*

## **Information Items**

### **MBO #1**

Prepare study & recommendations on product alignment (format, delivery mechanism, content, context) with younger members for future media dissemination.

Ideas were generated from young members in a large chapter. The YEA Committee was contacted. They will develop and distribute the survey, then share it with the subcommittee. (**Attachment C**)

### **MBO #2**

Identify product needs & prepare implementation roadmap for O&M market focus.

Functional Planning working group has developed a plan. (**Attachment D**)

### **MBO #5**

Refine User Manual Development Plan in collaboration with Tech Council.

Tech Council has contracted for 90.1 User's Manual, updated their User's Manual Development manual. SSPC 90.1 Chair, Drake Erbe, is working with Steve Comstock on a web-based User's Manual for the future. (**Attachment E**)

### **MBO #6**

Develop and implement strategies to deliver products and services globally.

Functional Planning working group has developed a plan. (**Attachment F**)

### **MBO #9**

Develop educational and publishing programs to align with 2016-2017 Society theme.

Functional Subcommittee is following the lead and supporting PDC, Publications Committee and bEQ Committee. The Consulting Engineering Essentials course outline has been approved by PDC and is scheduled to be made available in June. PDC is waiting for the bEQ Training package which is expected in the fall to then begin developing supporting courses for bEQ.

### **MBO #10**

Create 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.

Is still currently under development with Publications Committee and the Functional Subcommittee working group.

Respectfully submitted,

Mick Schwedler  
Chair, Functional Planning Subcommittee

31 January 2017

**DESCRIPTION**

MBO	Background
Prepare study & recommendations on product alignment (format, delivery mechanism, content, context) with younger members for future media dissemination	Goal is to <u>deliver content that meets needs and expectations of better serve</u> younger ASHRAE members. <u>Publishing</u> Technology has changed significantly as have learning <u>preferencesstyles</u> . We have no YEA members on Tech Council today and need to ensure they are involved in this investigation and the <u>outcome</u> .
Identify product needs & prepare implementation roadmap for O&M market focus	Goal is to provide guidance for the O&M market. Roger led a group that made significant progress in 2015-16 and will continue this <u>year</u> .
Refine User Manual Development Plan in collaboration with Tech Council.	Goal is to develop User's Manuals <u>so they align as closely as possible to publication of the respective standardQuickly</u> . President Tom Phoenix came to a PEC meeting in 2015 and stated the question he was asked the most was why it took so long to publish User's Manual. Mick Schwedler worked with ASHRAE <u>Technology</u> Staff, PEC leadership and Tech Council to develop options. It was decided at that time that Tech Council will continue to take the lead. An update on progress is sought. Then plan refinements can be <u>suggested</u> .
Develop and implement strategies to deliver products and services globally	Goal is to deliver ASHRAE products and services <u>which have increased value</u> globally. There were recommendations in the MCI report <u>one of which was assigned to PEC for local structures to delivery content that is adapted for a specific region. - Other recommendations are -A number of them were not accepted being reconciled by -</u> Planning Committee <u>is reconciling them</u> . Mick Schwedler is a member of PLC and can communicate updates from PLC to this task group.
Develop educational and publishing programs to align with 2016-2017 Society theme	Goal is to support President Wentz's initiatives <u>that more effectively bring ASHRAE technical resources to the membership.-</u> Quite a few of President Wentz's initiatives involve new publications and courses. Publications and Professional Development Committees are doing significant work to deliver on those initiatives. PEC should support the Committees and allow them to take the lead if they wish.
Create 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.	Goal is <u>better enable members to understand the process by which ASHRAE develops resources and training.-</u> This MBO is already being worked on by Publications Committee.

**Comment [CS1]:** But we do have YEA members on Publications Committee and Professional Development Committee I believe. They should be engaged since they are groups that deal with product development not Tech Council.

**Comment [CS2]:** You also have that very good list of referrals which has just been sent to TCs, staff and other committees.

**Comment [CS3]:** Steve Comstock is working with SSPC 90.1 on a Users Manual format that makes it an online product aligned with an online version of the standard. Once this online product is available, updating it for future editions should be much easier in that the UM can be updated as the Standard is revised through addenda. In effect this makes the UM a living document.

[begin excerpts from Publications Committee Manual of Procedures]

**I. Scope and Purpose** This manual describes procedures for accomplishing the duties and responsibilities assigned by the ~~Board Approved Rules (BAR)~~ Rules of the Board (ROBs) applicable to the Publications Committee. The Scope and Purpose of the Committee shall be:

1. To formulate the editorial policies of ASHRAE periodicals, books, and software products in print and nonprint formats in accordance with the policies of the Board of Directors.
2. To be responsible for the ~~Rules of the Board~~ Board-Approved Rules as follows:  
*ASHRAE Journal* is to maintain and enhance its leadership role in the communication of HVAC&R information to and from the profession, industry, and related interests through its worldwide readership and editorial content.

*ASHRAE Insights* shall be the primary vehicle for intrasociety communications.

Publications that are not *ASHRAE Handbook*, *ASHRAE Journal*, and *Insights* shall be referred to as special publications, including nonprint formats.

~~ASHRAE shall produce technical publications. This group of technical publications shall be referred to as special publications and shall be defined as all technical publications including nonprint formats except the *ASHRAE Handbook*, *ASHRAE Journal*, and *Insights*.~~

**II. Committee Organization**

- A. *Committee Structure*<sup>\*</sup>: The Committee shall comprise a Chair, a Vice Chair, and ~~eight~~ ten other members appointed by the president-elect. Service on this Committee is intended to be for a 3-year term. Appointments are made, however, each year by the president-elect for the administrative year covered by his/her term as president. CO, BOD Ex-Officio, and Staff Liaison complete the committee. The Committee shall include a Planning Subcommittee.

...

- D. *Planning Subcommittee*: A subcommittee ~~shall~~ may be appointed by the Chair.

- E. *International Subcommittee*: A subcommittee ~~shall~~ may be appointed by the Chair.

- F. ~~MOP/BAR/ROB~~ Functional Subcommittee: The Vice Chair shall be responsible for enhancements and updates of the Committee's MOP and ~~BAR/ROBs~~ and presentation of changes for approval at Publishing and Education Council.

- G. TAC Liaison: The Chair shall appoint members of the Publications Committee to liaison to ~~one or more section~~ each sections of the Technical Activities Committee.

...

**IV. Committee Operations**

**Comment [HJ1]:** We are proposing to increase the number of members by 2 in order to have adequate representation at each of the technical committees. Having regular and direct communication with the TCs will improve the special publications update rate. Keeping the special publications more up to date increase sales and that increase will provide more benefit than the cost of adding 2 members.

**Comment [HJ2]:** These two committees should be left for the Chair to decide each year, pending the need of the society and the chosen MBOs.

**Comment [HJ3]:** The 2 additional members will allow one liaison for each of the 10 TCs and allow the Chair and Vice Chair to perform their duties.

<sup>\*</sup>See the Reference Manual for specific details concerning Committee structure.

...  
D. Prior to the Society Annual ~~(Summer) Conference Meeting~~, the Committee vice chair or the individual who will be the next year's chair will prepare objectives for the Committee for the next year and present these objectives to the Committee for review at the Committee meeting held during the Society Annual ~~Conference Meeting~~. The preparer of the objectives has the option of proposing objectives that extend beyond one year as long as the first-year objectives are clear and measurable. The objectives will be included in the Committee's report to the council at the Annual ~~Conference Meeting~~ as an information item, and a copy of the objectives will be sent to the Assistant to the Board of Directors.

**Comment [HJJ4]:** I think specifying that it is the summer annual meeting would help clarify for incoming officers.

...  
**VI. Staff Liaison** The staff liaison shall carry out the requirements of the ~~ROBsBAR~~ and MOP and shall:

- Act as Secretary to the Committee in the preparation and mailing-distribution of the minutes.
- ~~Send copies of~~ Distribute minutes of the past four Committee meetings and the MOP to new Committee members. This shall occur as new appointments are made by the President-Elect.
- Distribute copies of the agenda, reports and other materials to members of the Publications ~~s~~ Committee.

*[end excerpts from Publications Committee Manual of Procedures]*

[begin excerpt]

## 2.410 HISTORICAL COMMITTEE

### 2.410.001 SCOPE AND PURPOSE

The Historical Committee shall encourage and carry on historical research and provide support to history- related activities of the Society.

### 2.410.002 MEMBERSHIP

#### 2.410.002.1 Composition

The members of this committee are as follows:

- A. ~~Seven (7)~~ Nine (9) voting members including the chair and vice chair
- B. Non-voting members include a BOD ex officio member and a coordinating officer.  
(92-01-29-36C/98-01-16-13/06-06-28-11B/07-01-31-10/07-06-27-20)
- C. Corresponding members include a Regional Historian from each region

#### 2.410.002.2 Qualifications

- A. It is recommended that at least one committee member be from outside the United States.  
(96-02-22-51/01-06-27-22B)
- B. At least three (3) of the voting members shall should have served as a Regional Historian (RVC) or as a Chapter Historian

#### 2.410.002.3 Term of Service

The term of service for voting members is intended to be three (3) years, subject to ROB 3.300 *Election and Appointment Procedures*.

[end excerpt]

**Background:** The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non-Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone.

Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM's to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective.

**Fiscal Impact.** The estimated fiscal impact of adding two VM to the committee is \$2,500/year, maximum, for transportation, if requested.



Attachment C  
Functional Planning Subcommittee Report to PEC

MBO #1: Product alignment with younger members

30 January 2017

**ACTION 1: (Tino Mendez)**

My approach to this was to contact my local Chapter's YEA group, which is very active, and gave them the opportunity to provide input on this question. What follows is the text of an e-mail that was sent to approximately 60 YEA members of the Central Oklahoma Chapter.

*You are receiving this e-mail because ASHRAE wants your input on how publications could best serve the needs of our members. You are the only YEA group being contacted at this time, so your input is very important. Please reply. See below.*

*The Publishing and Education Council has tasked its Functional Subcommittee, of which I am a member, to get input from YEA members on product alignment (format, delivery mechanism, content and context).*

*You could consider how this would affect all of ASHRAE's technical material. Also, consider the fact that not all ASHRAE members live in developed countries and delivery of printed material is a challenge.*

*I need to report prior to the winter meeting in Las Vegas so a prompt reply will be appreciated.*

*This is your opportunity, as an ASHRAE YEA member, to influence how ASHRAE technical material is made available to the General Membership.*

*Think about it and share your views by sending me an e-mail to [tinomendez@cox.net](mailto:tinomendez@cox.net) with your ideas or call me at 405-590-4479 to discuss.*

*THANKS !!*

I have received several replies with recommendations and suggestions that I will itemize below:

- 1 - I dislike that there is no "update" possibility on standards, e.g. need to buy a new standard once an update is out.
- 2 - No additional discounts for educators or students (smaller institutions do not have access to all standards through their library).
- 3 - DRM of pdf's may lead to issues if changing computers for some vendors of pdf documents (no good suggestion to solve the issue, don't recall if that was a major issue for ASHRAE standards).

4 - DRM sometimes prevents comments from being made into the pdf (don't recall which standard was the issue, but I ran into that issue)

5 - It would be great to sign up on a news-list specific to standards that were purchased previously.

6 - It would be good for committees to continually update the electronic version of the handbook rather than fixing that on the regular cycle of several years. If the deadline is not met by authoring committees then ASHRAE will otherwise lose the capability to update chapters until the next revision round.

7 - This sounds an awfully lot like trying to get away from physical books. If this is the case, I personally will always want a hardback book and it is the primary motivation behind being an ASHRAE member for myself.

8 - If I had to guess, I would think a lot of people will want both worlds, physical copy and "E-book", if you will. Going to a single eBook would most likely need to be accompanied by a drastic drop in membership fees.

9 - For ASHRAE Materials, I think an App where you can download chapters of the books to mobile devices would be useful. It would be important that the chapters be easily download-able and delete-able for this to work. There are many places where the handbooks would be useful, but lugging around a laptop with the CD or the physical book is not always the most practical when walking through a plant etc. Many of the areas where we work (inside factories for example) have limited cell service so having the chapters be downloadable so you can take specific sections of the book on your cellphone/tablet with you would be very helpful.

10 - The other thing I think would be useful are video/animation tutorials. The books are extremely useful, but there are times when a quick 1-2 minute video explanation would go a long way to providing an overview and better initial understanding that we can achieve with just text. There are other places where you can get these types of videos, but as the ASHRAE is the non-biased governing body it would be nice to have ASHRAE produced content linked in the chapters of the book to help illustrate some of the principles that are being discussed in each chapter.

11 - The last comment I have really falls more into IIAR territory and is more specific than I think you are looking for with the question you have but I will pass it along anyway. One of the issues I have recently run across is a lack of standard definition for ammonia refrigeration pipe allowable corrosion. One of the projects we are dealing with is requesting an assessment of piping integrity for ammonia systems. Everything we have found is very loosely defined RAGAGEP information, and there does not seem to

be any consensus for how much corrosion of pipe is acceptable before replacement is required. It would be nice if ASHRAE could work with IIAR/ASME to come up with some specific standards for when piping and/or equipment must be replaced that are less subjective than the RAGAGEP everyone is working under now (IE: If pipe wall is 90% of original wall thickness must be replaced with-in 1 year, if pipe wall is 70% of original wall thickness must be replaced with-in 1 month, less than 70% within one week...). I am sure there are liability issues that go along with this that people want to stay away from, so it may be a non-starter. Just something I have run-across recently that ASHRAE technical committees may be able to assist with.

I have explained to them how TCs work and clarified some misconceptions as to how Handbook Chapters are updated but I wanted to include all of their comments for your benefit.

As far as recommendations go, I believe that items 1, 5, 9 and 10 are worthy of further consideration. Other items may be of interest to committees and should be forwarded.

#### **ACTION 2: Engage YEA Committee**

- Contacted Erich Binder, YEA ExO who arranged a conference all with YEA Chair Haynes and Vice Chair Jake Kopocis
- Explained the MBO and requested their assistance
- We were invited to attend the YEA Committee meeting in Las Vegas and did so
- YEA Committee assigned a three person ad hoc to develop a survey, send it to YEA members (not just YEA Committee members) and report back
- No specific dates were set, but they generally move forward with tasks quickly
- Jake attended the Functional Subcommittee meeting along with one of their ad hoc members.
- Wednesday the ad hoc will meet to elect a Chair
- They will develop a draft survey and share it with Mick and Tino.

MBO #2: Identify product needs & prepare implementation roadmap for O&M market focus

PEC O&M Ideas to Support ASHRAE’s New Strategic Plan	Proposed Referral Assignments	POC	MBO 2 Assign	Notes
<p>1 <b>O&amp;M Video</b> Develop ASHRAE service (fee based) to generate O&amp;M video for specific projects. Store in ASHRAE cloud.</p>	<p>ECC Tech Council (TC 7.3)</p>	<p>Steve Faulkner Jim Vallort</p>	<p>Roger Jones</p>	
<p>2 <b>Chapter O&amp;M Resources</b> Develop O&amp;M package for use by local chapters. Target facilities personnel to join local chapter as benefit/enhance skill sets.</p>	<p>Members Council/CTTC</p>	<p>Bjarne Olesen</p>	<p>Roger Jones</p>	
<p>3 <b>DBOSS App</b> Develop app for DBOSS: Dynamic Building Optimization Systems and Service</p>	<p>Publications Committee</p>	<p>Jin Jin Huang</p>	<p>John Nix</p>	<p>DBOSS subcommittee is new and met for first time at AM2015</p>
<p>4 <b>Guides &amp; Cheklists</b>  Create practical guides and check lists for effective building operations geared toward operations staff.</p>	<p>Tech Council (TC 7.3)</p>	<p>Jim Vallort</p>	<p>Richard Rooley</p>	
<p>5 <b>Standardized Sequence of Operation</b> Educate consulting/specifying engineering community on our Handbook resources regarding standard sequences of operation.</p>	<p>Tech Council (TC 1.4; TC 7.3)</p>	<p>Jim Vallort</p>	<p>Richard Rooley</p>	
<p>6 <b>Terminology Database</b> Offer our O&amp;M Terminology via cloud hosted database as a resource for visitors (read-only) and members (read/write/comment). Benefits include reduced confusion and increased uniformity.</p>	<p>Tech Council (TC 1.6; TC 7.3)</p>	<p>Jim Vallort</p>	<p>Richard Rooley</p>	

7	<b>O&amp;M Manual App</b> Develop an app to generate a building specific O&M manual	Publications Committee Tech Council (TC 7.3)	Jin Jin Huang Jim Vallort	Richard Rooley
8	<b>BIM</b> Promote ideas involving big data usage and BIM.	Tech Council (MTG BIM; TC 1.5; TC 7.3)	Jim Vallort	Roger Jones
9	<b>Service Life and Maintenance Cost Database</b> Create a program to crowd source the Service Life and Maintenance Cost Database (managed by TC 7.8).	ASHRAE Marketing Tech Council (TC 7.5; TC 7.9)	Vanita Gupta	Roger Jones
10	<b>Virtual Reality</b> Explore how the new virtual reality programs could be used to support the O&M market.	Tech Council (TC 1.5; Emerging Technologies)	Jim Vallort	John Nix

- TC 1.4 Control Theory and Applications
- TC 1.5 Computer Applications
- TC 1.6 Terminology
- TC 7.3 O&M Management
- TC 7.5 Smart Building Systems
- TC 7.9 Building Commissioning
- MTG BIM Multidisciplinary Task Group - Building Information Modeling

## PEC O&M Ideas to Support ASHRAE's New Strategic Plan

1. Develop an ASHRAE service (for a fee) to generate an O & M video for a specific project and keep it in the ASHRAE cloud. This project specific video, developed by engineers with ASHRAE software, would cover the basis of design, how the building is supposed to operate, the basic functions and operating parameters of the control system. If the building is remodeled, or it's intended use modified, these control strategies would need to be modified. ASHRAE could provide some system templates to help engineers create the videos. User cost needs to be low, like the YouTube model, to prevent others from offering a competing service. Benefits are ASHRAE Brand exposure and potential advertising. **(Propose assign to TC 7.3, ECC)**

Comments from our working group:

- a. "The great shame, maybe disgrace, is that we design buildings that are energy efficient; maintain occupant comfort and they don't work. Many don't work on day 1 much less in 2-3 years. Commissioning helps (certainly on day 1) but the training of the operating personnel especially after turnover is lacking."
- b. "In this age of computerized everything it seems like if, as a part of the "design package", ASHRAE helped create a video presentation by the engineer that showed the intent of the control sequences in plain language it would help not only the operating personnel but also the commissioning authority to make sure everything operates as intended. An additional fee would be warranted."
- c. "It is imperative that Temperature Controls and Control Strategies that are included with plans and specs as part of the facility design. The contractor and engineer do their best to see that the operating personnel at the facility understand the "intent" of the written word. Commissioning has come a long way toward the goal of having the facility operating as originally designed and re-commissioning could help in making sure that "new" operating personnel continue to operate the facility as originally intended."
- d. "Unfortunately, a lot of facilities do not have the luxury of getting so much attention and after a few years the operation barely resembles the original intent and results in low indoor air quality and wasted energy. In my own experience I found that if I sat down with a new operator and explained what we were trying to do, they were willing to use the tools that they were given to make it happen."
- e. "Having worked for many automatic temperature controls companies (Johnson Controls, Honeywell, Automated Logic and Staefa) one of our biggest frustrations is that we train owner personnel on the operation of our systems and six months later, they have moved on and there is no institutional memory of their building or our systems."
- f. "We have tried to roll training into service contracts, but it usually gets short shrift and is one of the first things to get cut when O&M budgets get tight."

2. Another item that concerns Operating and Maintenance is the training and management of the facility operating personnel. ASHRAE has not effectively marketed our available educational materials to this audience. We could put together an "O&M Package" that could be used by our.

Chapters to invite these operating individuals to our meetings and to join our Society and join our TCs and in so doing make their service to their employers more valuable. This could lead to more formalized training and maybe certification. Approaching BOMA and other related organizations and making them partners in the educational effort would benefit all. **(Propose assign to TC 7.3, Members Council, CTTC)**

3. ASHRAE DBOSS (Dynamic Building Optimization Systems and Service) uses software that communicates with "every item" in the building to optimize collective performance, reduce building energy and maintenance costs, and enable predictive maintenance/service. An ASHRAE app to help select DBOSS program features and/or predict savings could be of great interest to the O&M community and generate ASHRAE revenue. ASHRAE could also publish more DBOSS case studies like the ones on ASHRAE HQ.

**(Propose assign to TC 1.5, Publications Committee, TC 7.5)**

4. Create practical guides and check lists for effective building operations geared toward operations staff.

**(Propose assign to TC 7.3)**

a. Strategies to utilize fault detection diagnostic tools for building operations, to deal with the large volume of data on alarms and operations monitoring.

b. Research leading to a publication on best practices in effective building operations, with case studies.

- c. Develop and publish high performance building operations specifications, guidelines for specific building types.
5. We are starting to see ASHRAE standardized sequences in consulting engineers' specifications, but it is more the exception than the rule. One possible solution would be to educate consulting/specifying engineering community on our Handbook resources. **(Propose assign to TC 1.4, TC 7.3)**
  - a. This addresses the many controls companies that simply cut & paste the specified sequences of operation into their programming without much thought as to whether they work or not.
6. Expand the development and use of O&M Terminology by offering a filterable website database application of all terms and definitions tracked by TC 1.6. The cloud sourced database could be hosted in the ASHRAExCHANGE area with accessible read-only for visitors, but also read-write for commenting based access levels using ASHRAE's existing user database and/or ASHRAE Exchange. **(Propose assign to TC 1.6, TC 7.3)** This effort would help ASHRAE become visible as a source for O&M Terminology.

Such a database could:

- a. Allow building owners and maintenance groups to know what ASHRAE's definitions are, reducing confusion.
  - b. Bring more uniformity to ASHRAE consultants, contractors, researchers writing papers, code committees, etc. Position ASHRAE as a more authoritative source – having better definitions for O&M Terms.
  - c. Reduce risk for users of standard terminology and greater harmonization to occur as committees are allowed to see other term definitions in use with the O&M community.
  - d. Allow for expansion, with future efforts in graphical symbols, abbreviations, etc.
  - e. An app to generate inputs for a BEQ operation submission.
7. An app to generate a building specific O&M manual. **(Propose assign to TC 7.3, Publications Committee)**
  8. Promote ideas involving big data usage and BIM.
    - a. BIM does allow us to enter this new world of big data. It seems to allow us to move into the digital age - where most other industries already operate - but not Buildings. The UK is about to press ahead with compulsory BIM for government funded projects. As a large building owner/operator the UK government has a lot of clout and interest in getting this technology adopted. They have said from 2016 all their projects have to use BIM. ASHRAE needs to promote BIM. **(Propose assign to MTG BIM, TC 1.5, TC 7.3)**
  9. ASHRAE creates a program to crowd source the Service Life and Maintenance Cost Database (managed by TC 7.8). This database would allow O&M to more accurately plan and budget their operations. This database should accept spreadsheet information with pull down menu's that mimic the database elements per TRP 1237 and the existing database. The goal is to seed the database adequately so that it becomes the leading open source of building operating cost and service life for the built environment. TC 7.5 and TC 7.9 have indicated they have data to input. **(Propose assign to TC 7.5, TC 7.9, ASHRAE Marketing)**
  10. ASHRAE should explore how the new virtual reality programs could be used to support the O&M market. **(Propose assign to TC 1.5, Emerging Technologies)**

#### Scope of TC 1.5

TC 1.5 is concerned with determination of computer applications to the design and optimization of refrigeration, heating, and air-conditioning systems, equipment and components thereof; and with programs for all such uses. TC 1.5 has several additional specialized subcommittees: Emerging Applications (described below) and two recently formed subcommittees, DBOSS and Cyber Security. Check the home page for the meeting times of these subcommittees.

#### DBOSS: Dynamic Building Optimization Systems and Service

The TC 1.5 DBOSS subcommittee is newly formed and met for the first time at the 2015 Annual Conference in Atlanta. More information will follow.



# PEC Functional Subcommittee - MBOs 2016-2017 SY

DESCRIPTION		RESPONSIBILITY													COMMENTS					
		Standing Committees						Subcommittees				Other								
		ASHRAE Strat Dir	Certification	ECC	Handbook	Historical	PDC	Publications	Functional	Fiscal	eLearning	Journal Advert.	Research Journal	PEC Chair	Staff	Status		Functional Volunteers	Lead	Committee also has MBO
1	Prepare study & recommendations on product alignment (format, delivery mechanism, content, context) with younger members for future media dissemination		-	-	-	-	-	-	X	X	X	-	-	-	X		How do we get YEA involved to ensure we have their input?	Tino, Mick	Tino	eLearning
	<b>Background</b>	Technology has changed significantly as have learning styles. We have no YEA members on PEC today and need to ensure they are involved in this investigation and these decisions. There are YEA members on the Publications and Professional Development Committees that could be contacted																		
2	Identify product needs & prepare implementation roadmap for O&M market focus		-	-	-	-	-	-	X	X	-	-	-	-	X		Build on 2015-16 work	Richard, John, Roger	Roger	
	<b>Background</b>	Roger led a group that made significant progress in 2015-16 and will continue this year. 2015-16 Referrals concerning O&M were shared																		
5	Refine User Manual Development Plan in collaboration with Tech Council.		-	-	-	-	-	-	X	X	-	-	-	-	X		Plan developed but not implemented as outlined. Refinement underway.	Mick	Mick	
	<b>Background</b>	President Tom Phoenix came to a PEC meeting in 2015 and stated the question he was asked the most was why it took so long to publish User's Manual. Mick Schwedler worked with ASHRAE Staff, PEC leadership and Tech Council to develop options. It was decided at that time that Tech Council will continue to take the lead. Drake Erbe (90.1 Chair) and Steve Comstock have also been discussing possible online products for the 90.1 Users Manual																		
6	Develop and implement strategies to deliver products and services globally		X	X	-	-	X	X	X	X	-	-	X	X		Waiting on MCI Report	Frank, Richard	Frank		
	<b>Background</b>	There were recommendations in the MCI report. A number of them were not accepted. Planning Committee is reconciling them. Mick Schwedler is a member of PLC and can communicate updates to this task group.																		
9	Develop educational and publishing programs to align with 2016-2017 Society theme		-	-	-	-	X	X	X	-	-	-	-	-	X			John, CS	John	Publications; Jin Jin Huang (Chair) PDC; James W. Bochat (Chair)
	<b>Background</b>	Quite a few of President Wentz's initiatives involve new publications and courses. Publications and Professional Development Committees are doing significant work to deliver on those initiatives. PEC should support the Committees and allow them to take the lead if they wish.																		

# PEC Functional Subcommittee - MBOs 2016-2017 SY

DESCRIPTION		RESPONSIBILITY													COMMENTS					
		Standing Committees						Subcommittees				Other								
		ASHRAE Strat Dir	Certification	ECC	Handbook	Historical	PDC	Publications	Functional	Fiscal	eLearning	Journal Advert.	Research Journal	PEC Chair	Staff	Status		Functional Volunteers	Lead	Committee also has MBO
10	Create 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.		-	-	-	-	-	X	X	-	-	-	-	-	X		Aim is to enable clearer understanding and application of the wide range of ASHRAE publications, and also to provide a diagnostic to determine gaps and overlaps.	Roger, Frank	Publications in lead, Roger & Frank to support and report	Publications; Jin Jin Huang (Chair)
	<b>Background</b>	The goal is to help all groups involved understand publication relationships between committees and groups. This MBO is already being worked on by Publications Committee and one of their MBOs.																		

**PEC MBO 5 Refine User Manual Development Plan in collaboration with Tech Council.**

28 January 2017

**Background**

President Tom Phoenix came to a PEC meeting in 2015 and stated the question he was asked the most was why it took so long to publish User's Manual. Mick Schwedler worked with ASHRAE Staff, PEC leadership and Tech Council to develop options. It was decided at that time that Tech Council will continue to take the lead.

**June 2016 – January 2017 Progress**

**Present User's Manuals**

We received the following information from Pat Graef, Chair of Tech Council:

*“Standard Committee approved the recommendation that Standards Committee revise its approval process for the development of User's Manuals to streamline approvals and that Publications create a marketing plan to market the pre-sale of the User's Manual when the standards come out. There would be no increase in the cost and the revised UM development process would maintain the quality of the User Manual's document.*

*The contracting process will be modified to include a drop dead date for the UM completion. This drop dead date will allow for publication within a reasonable time. Other process changes will include less approvals by higher bodies once the budget has been approved. For example, approval of the project monitoring subcommittee (PMS) would be done only by the project committee, requests for works statements from project committees will be done sooner, and a staff member from Pub Ed will be added to the PMS. The PC will have a defined period for review and approval of the UM final draft and if no response from the PC is received by the conclusion of the review period, the UM will automatically proceed to publication.*

*These changes will permit ASHRAE to announce/co-market the Standard and the User's Manual jointly; thereby, potentially increase UM sales. The UM will automatically ship when completed by the previously agreed upon date.”*

SSPC 90.1 will receive the first draft of the User's Manual in February. There is a strict timeline. The schedule calls for the final publication to be transferred from the contractor to ASHRAE in August of 2017.

Mick Schwedler also reviewed and commented on the new User's' Manual development process document.

**Future User's Manuals**

Drake Erbe (90.1 Chair) and Steve Comstock have been discussing possible online products for the 90.1 User's Manual.

Steve Comstock is working with SSPC 90.1 on a User's Manual format that makes it an online product aligned with an online version of the standard. Once this online product is available, updating it for future editions should be in that the UM can be updated as the standard is revised through addenda. In effect this makes the UM a living document.

Drake is enthusiastic about these developments.

## **MBO #6**

### **Develop and implement strategies to deliver products and services globally**

#### **ASHRAE – PEC Services to Overseas Members**

Scope: this group has considered the types and range of publication and education services which could and should be provided for members outside North America.

Background: ASHRAE has seen a significant growth in overseas membership and now has over 25% of members 'outside North America'.

The current structure to identify, prepare and publish is based around the ASHRAE TC's, TRG, SSPC, and related committees which generally meet in North America during the winter and summer meetings. Whilst overseas members can attend, their meetings, join these committees and/or take part as corresponding members, they are principally made up of North American members.

There is a strong case for gaining more involvement of overseas members...

- ASHRAE is the World leader in HVAC and Refrigeration and aims to provide relevant technical information for the benefit of all members – including overseas members.
- There are many ASHRAE overseas members who are experts/specialist/world leaders in their area of expertise and should have the opportunity to contribute. Many do, for example the author of this report (Frank), and many others including President elect Bjarne Oleson.
- The developing economy countries have unique demands which will require some bespoke solutions. See, for example, Hot Climate Design Guide.

#### Overseas Membership

Historically, overseas members joined because they wanted to 'tap into' the available ASHRAE technology. They received the Journal, Handbooks and could purchase Standards, Guides, Educational programs etc. it is evident that this certainly provides those members to have the most up to date technical information available and to apply it during their daily work activities. It has been developed around a North American view point by virtue of the fact that most of the content has been published through the TAC structure using North American expertise. There has been overseas members input which has been extremely valuable, for example Professor Ole Fanger's input – and others.

#### Forward Planning

PEC should continue to develop services around the current North American model, because that it still a major requirement and is a service need of the majority of members.

Additionally, PEC should start to identify a range of services to overseas members, including their effective delivery.

#### 'HANDBOOK'

The handbooks are now regarded as the leading source of HVAC and R technical guidance worldwide. TAC is encouraging TC's to involve overseas members in the task of Chapter updates and this is leading to a more 'international' content.

The Cold Climate Design Guide was published by ASHRAE using a team of authors from North America, Scandinavia, UK and parts of Europe.

The guide has been extremely popular and there is a request to publish a second edition which will be launched at the next Cold Climate Conference in Sweden in 2018.

#### Hot Climate Design Guide

Following the successful format of the Cold Climate Design Guide, this new publication (due in 2018) has used the ASHRAE Hot Climate Conference, held in Doha, as the catalyst for a new MTG consisting of authors who are currently preparing the content. The MTG Committee consists of North American and International members and has developed a content list which includes material from basic, low cost, low energy building solutions, to high tech, modern architecture including for example, tall glass buildings in desert climates.

#### Linking Conferences to PEC

The experience gained from the Cold Climate and the Hot Climate conferences indicates that there is an opportunity to link a specialist conference to a new publication and related learning packages – which could thus be delivered by Chapters.

#### **Other points**

'Waiting on MCI Report' – see PEC MBO 2 roadmap for OM Market focus

There were recommendations in the MCI report. A number of them were not accepted. Planning Committee is reconciling them. Mick Schwedler is a member of PLC and can communicate updates to this task group.



**Certification Committee  
Report to Publishing and Education Council (PEC)**

ASHRAE 2017 Winter Conference / Las Vegas, NV

**Action Items**

None.

**Information Items**

1. ANSI

An ANSI requirement, the Certification Committee conducted its annual review of the certification program management system, including the following evaluations:

- 2016 Certification Body Internal Audit.
- 2016 2015 2014 Annual Comparison ASHRAE Facility Questionnaire Report.
- Third-party Contractor Assessment – AMP/PSI.
- Impartiality Threat Analysis.

During this review, the Committee identified several opportunities for the improvement of certification services.

2. Recertification Audit

In the case of recertification applicants who did not fulfill the requirements of an audit conducted in 2016, the Certification Committee is determining how to apply the “Guidelines for Suspending, Withdrawing or Reducing the Scope of Certification,” as outlined in the *Reference Orientation Manual*.

3. Better Buildings Workforce Guidelines (BBWG)

Energy Auditor

As a follow up to the 2016 Annual Conference in which PEC approved pursuing alignment of the BEAP with BBWG Building Energy Auditor scheme requirements, the Certification Committee adopted an exam development and transition timeline with the goal of achieving DOE approval of the BEAP in July, 2017.

## Building Commissioning Professional (BCxP)

The very first pencil-and-paper administration of the BCxP certification and BCxP recertification exams (for recertifying CPMPs) are being given in Las Vegas on Jan. 28 and Feb. 1, with these exams available as computer-based tests beginning Feb. 2. The goal is to have enough exam exposures by mid-March to produce the reports needed to gain ANSI accreditation in June and DOE approval by July, 2017.

### 4. Exam Development

The following exam development activities are underway:

- BCxP New exam form created. Next step: gather exposure data and finalize exam passing score.
- BEAP Crosswalk completed. Next step: reclassify items in bank against tasks in BBWG Energy Auditor exam blueprint
- BEMP Updated exam Detailed Content Outline approved. Next step: limited exam development
- HBDP Next step: Survey on importance of tasks on updated exam Detailed Content Outline to be conducted, followed by exam development.
- HFDP Survey on continued importance of tasks on exam Detailed Content Outline completed. Next step: Subcommittee to analyze survey data and recommend any updates.
- OPMP Updated exam Detailed Content Outline approved. Next step: limited exam development

### 5. Proposed HVAC Designer Certification

The Committee tabled to the 2018 Winter Conference a motion to recommend to PEC support of a new HVAC Designer certification.

### 6. Progress on 2016-17 MBOs (*Attachment A*)

2016-17 MBOs are in progress with anticipated completion dates for June, 2017

Respectfully submitted,  
Rich Rose  
Certification Committee, Chair  
01/31/2017



Attachment A  
 Certification Committee Report to PEC

Certification Committee  
 MBOs Society Year: 2016-2017

Chair: Rich Rose

Date: Nov. 4, 2016

Objective	SP 2014	Completion Date	Fiscal Impact	Responsible Party	Status	Comment
1. Attain 80% recertification rate for the 2016 renewal class, exceeding the industry average of 76%.	1B, 3D, 4B	3/31/17	Currently budgeted.	Chair, Staff	In progress.	Recertification application for 2016 class due Dec. 31. Voice-blast scheduled to go out Nov. 8 from the Certification Committee Chair. Hard copy recertification reminders mailing later in November.
2. Grow the number of applications by 10% over 2015-16.	1B, 2C, 3C, 4A, 4B	6/30/17	None, Staff Time	Staff	In progress. 3% increase Year-To-Date through October. All tactics under Comments section underway.	Tactics Underway: - Make use of Value of Certification results to quantify value for various market / membership segments, and develop marketing messages. - Continue targeting market segments e.g. guidebook downloaders, publication purchasers, ALL course registrants, YEAs.
3. Make ASHRAE certification more relevant to ASHRAE members and the industry in general.	1B, 4A	6/30/17	Volunteer and Staff Time		In progress.	Application for new, BBWG-aligned Building Commissioning Professional (BCxP) certification now available and underway. On track for ANSI accreditation and DOE recognition by end of March, 2017.
4. Manage certification programs against the ANSI/ISO/IEC 17024 accreditation standard.	2C, 4B	6/30/16	Currently budgeted.	Chair, Staff	In progress.	Following the 2016 year 1 assessment, ASHRAE granted continued accreditation under the ISO/IEC/ANSI 17024:2012 standard for the BEAP, BEMP, CPMP and HBDP.

5. Achieve DOE recognition of the CPMP.	1B, 2C, 4B	6/30/17	Currently budgeted.	Chair, Staff	In progress.	CPMP accredited by ANSI in May, 2016. On track for ANSI accreditation and DOE recognition of new BCxP by end of March, 2017.
6. Achieve DOE recognition of the BEAP.	1B, 2C, 4B	6/30/16	Currently budgeted.	Chair, Staff	In progress.	BEAP accredited by ANSI in May. Crosswalk with BBWG Energy Auditor certification requirements underway.
7. Evaluate total cost for each certification exam given to help ASHRAE understand the application fee that should be charged.	1B	12/31/16	None, Volunteer and Staff Time	Chair, Staff		
8. Evaluate total cost for recertification to help ASHRAE understand the application fee that should be charged.	1B	12/31/16	None, Volunteer and Staff Time	Chair, Staff		
9. Develop and publish FAQ summarizing past Committee discussions, decisions and actions regarding the subject of translating certification exam and other materials from English into other languages and otherwise accommodating non-native English speakers.	1B, 2A	12/31/16	None, Staff Time	Chair, Staff	In progress.	
Recommendations for Strategic Planning:						

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

**1: Market Prioritization – Member Passion and Core Market**

**B.** Only through close communication with its key constituencies can ASHRAE deliver relevant and timely products and services. ASHRAE will research the true impact of its standards and technology and share the results with the world. ASHRAE will actively reach out to its key constituencies to achieve open, two-way dialogue. The dialogue will be used to validate programs and identify new opportunities.

**2: ASHRAE Efficiency – Organizational Assessment**

**A.** ASHRAE must become more agile so that it can deliver products and services in a timely manner while respecting the value of volunteer time. ASHRAE will review all aspects of the organization to identify and remove encumbrances to agility and the respectful use of volunteer time.

- C. Alignment with other existing organizations may be the fastest way to achieve success. ASHRAE will consider all arrangements on working with other existing organizations, including consolidation, partnerships, and joint ventures.

### **3: Applied Product Development**

- C. The world of prescriptive and performance-based standards is changing. ASHRAE will work with other standards development organizations (SDOs) to map a course through this changing environment that will deliver the most positive impact to the market place.
- D. Professional development is a keystone of ASHRAE that can be delivered through our grassroots organization. ASHRAE will develop a comprehensive portfolio of practical applications courses intended to be delivered through our grassroots organization.

### **4: ASHRAE's Role in the Global Community**

- A. ASHRAE has already had significant impact in many countries around the world, but there is more that can be done. ASHRAE will conduct a detailed analysis of the needs of its global members and opportunities to work with organizations outside North America. ASHRAE will develop a strategy to serve its international members and participate in international markets. These strategies will be added to this strategic plan once approved by the Board of Directors
- B. ASHRAE can learn from others about how to be effective in the global community. ASHRAE will work with consultants and other organizations to discover best practices and develop an approach to serve its members in the global community.



**Electronic Communications Committee (ECC)**  
**Report to Publishing and Education Council (PEC)**  
ASHRAE 2017 Winter Conference / Las Vegas, Nevada

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**Items Requiring Council Attention**

(The original motions are posted to PEC's Basecamp)

1. ECC was asked to respond to Motion 4e from the Tennessee Valley chapter as referenced below. ECC asks that PEC approve and send the response to Members Council.

**Tennessee Valley Chapter – Motion 4e (10/14/2016):**

*That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A.*

*ECC's response:* A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. After discussion ECC researched estimated cost if Star Chapter was to be provided by Society for use across all chapters and estimates the cost to be \$147,256.20 set up and \$196,560.00 annually. ECC would need to know if this cost would be acceptable to proceed with a recommendation to use.

2. ECC was asked to respond to Motion 7b from the Hampton Roads Chapter as referenced below. ECC asks that PEC approve and send the response to Members Council.

**Hampton Roads Chapter – Motion 7b (10/14/2016):**

*That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members.*

*ECC's response:* After discussion, ECC determined this is not a viable solution for chapter and region use. A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that

the chapters with solutions in place are generally happy with and would recommend the solutions they are using. Although not specifically asked or stated in the survey, it can be inferred that this would hold true for official communications as well. An important item to consider is that an email from a chapter or region is not the same as a mailing from Society. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC can provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

3. ECC was asked to respond to West Virginia Chapter – Motion 7c. ECC asks that PEC approve and send the response to Members Council.

**West Virginia Chapter – Motion 7c (10/14/2016):**

*That ASHRAE Society's ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable.*

*ECC's response:*The websites subcommittee reviewed this motion and will draft guidance on protocols regarding the collection, sharing, and opting out of contact information to be submitted to Members Council prior to the Long Beach Annual conference for consideration for placement in the MCO Manual. Due to complexity of international laws ECC will focus the guidance on US laws (CAN SPAM) only, with the suggestion that international chapters should reference their local legislation.

4. ECC was asked to respond to Spacecoast Chapter – Motion 7j. ECC asks that PEC approve and send the response to Members Council.

**Spacecoast Chapter – Motion 7j (10/14/2016):**

*That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017.*

ASHRAE Society cannot take responsibility for chapter and region email communications. A whitepaper from ECC regarding basic email best practices is forthcoming for the Long Beach Annual Conference and will be made available via the ASHRAE website.

The use of ASHRAE's domain for sending emails could blur the line between chapter and Society communications in the eye of Internet Service Providers and could cause Society emails to be blocked, blacklisted, or undelivered depending on what is sent by the chapters and to whom. In addition, Society has a special and specifically-negotiated contract for its email service provider, RealMagnet, to send emails and provide marketing automation technologies at an enterprise level for Society.

Since each chapters needs are different not only in terms of email contacts and email volume, but also technical expertise to use such a solution, it becomes quite complex to begin to estimate both cost and time and resources needed for implementation for all chapters. There is also an additional element of staff infrastructure that would be needed to onboard any chapters that would use the solution.

Lastly, to assist chapters (and regions) with their emailing needs, ASHRAE's electronic collaboration tools subcommittee is working on a document based on survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC will provide a document outlining basic email best practices to help

chapters and regions improve the delivery rate of all their email communications, including official communications.

### **Information Items**

1. ECC continues to assign new Basecamp 3 sites to groups that ask for them and will continue to roll Basecamp 3 out with a goal of completing the rollout by the end of the 2016-2017 year. Most Basecamp 2 sites have been transitioned to Basecamp3 and all new Basecamp sites are created only in Basecamp 3.
2. In an effort to improve communication among Society, Regions, and Chapters in terms of electronic communications support, ECC sent an update to RECC, DRC, Chapter President, and Chapter ECC positions advising of activities ECC is working on with an invitation to attend the Winter Meeting in Las Vegas.
3. ECC's Cindy Callaway, along with Handbook Editor Mark Owen, presented *Seminar 30 Electronic Project and Document Management: An Introduction and ASHRAE's Systemas* part of a Seminar co-sponsored by TC 7.1.
4. Survey results on what Chapters / Regions are using for planning/website/email/payment were posted to ECC's Basecamp Fall 2016. The subcommittee is working on a white paper based on those results to be posted on the ASHRAE.org website. Overall findings indicate that chapters have varied solutions in place for electronic communications and that chapters are generally satisfied with, and would recommend, the solutions they are using.
5. ECC's social media subcommittee has prepared guidance for submitting material to ASHRAE for posting on Society's YouTube channel, and for ASHRAE group YouTube content. The guidance will be posted to the Electronic Communications Committee page of the ASHRAE.org website.
6. ECC discussed app creation by chapters and will continue to monitor and review. At this time the committee believes it most expeditious to consider adding mention in the existing ASHRAE Policy and Procedure for Format, Activity, and Content of Internet Sites for ASHRAE Groups regarding app development by ASHRAE groups (including chapters). The committee will continue to look into this before Long Beach.
7. ECC reviewed, upon request, ECC recommendations that were put forth for consideration by the PAOE subcommittee in order to provide feedback prior to their meeting Monday.
8. 2016-2017 MBOs are in progress to be complete before July 1. (*Attachment A*)

Respectfully submitted,  
Steven Faulkner  
Electronic Communications Committee, Chair

01/28/2017

SF: jmr

**Electronic Communications Committee**

MBOs for Society Year 2016-17

Chair: Steven Faulkner Date: 30 June 2016

Objective	SP 2014	Compl. by	Fiscal Impact	Resp. Party	Comment/Status
1. Determine membership of subcommittees prior to Long Beach meeting (including new member welcome phone calls and mentor assignments).	2A	Jun 2017	None	Steven Faulkner, Heather Schopplein	Ongoing
2. Initial implementation/ training of Basecamp3 at Board, Council, Regions, Chapters and Committees levels.	2A	Jun 2017	None	ECT	Working with BOD and Councils on training plan for their members. Updating rollout plan report for PEC Functional in Las Vegas.
3. Develop and increase social media user base and expand usage by 20% among ASHRAE TAC and PEC voting members.	2A	Jun 2017	None	SMS	Ongoing
4. Create webinar for Social Media Best Practices.		June 2017	None	SMS	In Progress
5. Create a guidance/policy for producing content on ASHRAE YouTube, PowerPoint webinar		Jun 2017	None	SMS	In Progress
6. Develop ECC cross committee/council/staff relationships		June 2017	None	Steven Faulkner	On Going
7. Create webinar for ASHRAE membership: Best practices for a Region Website.		Jun 2017	None	WS	In Progress
8. Research and create white paper for ASHRAE membership on LaTeX software, licensing, free?		June 2017	None	ECT	In Progress
9. Develop a survey to Chapters/Regions to see what they are using for event planning/website/email/payment with goal of creating a white paper to be posted on the ASHRAE.org website.		June 2017	None	ECT	In Progress
<b>Additional Recommendations for Strategic Planning:</b> None at this time					

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

**ECT** = Electronic Collaboration Tools Subcommittee

**SMS** = Social Media Subcommittee

**WS** = Web Sites Subcommittee



**Handbook Committee Report to  
Publishing and Education Council (PEC)  
Meeting of January 31, 2017**

**Action Items**

(None)

**Information Items**

1. The committee continued training and promotion of the new ASHRAE Authoring Portal ([authoring.ashrae.org](http://authoring.ashrae.org)), a collaborative authoring site, to TC Handbook Chairs in the Sunday training session. The Portal allows TCs or other authoring groups to store and revise copyrighted intellectual property in a secure, ASHRAE-approved location, with multiple authors able to work on a document simultaneously. Google Analytics data shows 160 users and 2590 pageviews since launch last June. The portal is also in use by ASHRAE Learning Institute (ALI), and requests to use the portal have been received by authoring groups from Standards and several special publications.
2. The 2017 *ASHRAE Handbook—Fundamentals* is on schedule for publication June 1, 2017.
3. The status of 2016-2017 MBOs is shown in *Attachment A*.

Respectfully submitted,

Forrest Yount  
Chair, Handbook Committee  
01/31/2016  
FY: mso



### Handbook Committee

MBOs for Society Year 2016-2017

Chair: Forrest Yount

Date: 31 January 2017

Objective	SP Init.	Compl. Date	Fiscal Impact	Responsible Party	Status	Comment
1. Achieve 10 percent improvement in each volume revision score over previous volume score.	3	6/20	None	Chair, liaisons	Staff provided revision history. 2017F revisions in edit; results pending. 2018R, 2019A, 2020S review/revision in progress.	To remain relevant, Handbook chapters must be kept up to date. <i>Measure:</i> TCs regularly updating content as recorded in revision history reported by liaisons, staff.
2. Identify opportunities and risks in Handbook content areas.	3	6/17	None	Volume Subcoms; liaisons; Chair; staff	Staff provided revision history. Data under evaluation by liaisons; communicating to TCs.	To remain relevant, Handbook must meet users' needs. This objective is to identify those needs and the steps needed to meet them. <i>Measure:</i> areas needing attention identified.
3. Improve recognition of contributors to Handbook content.	2A	6/17	None	ExCom	Contributors list available from staff.	Volunteer recognition is important for supporting Handbook development. <i>Measure:</i> recognition given to contributors.
4. Pilot annual revision cycle with selected TC(s) to update ASHRAE Handbook Online.	2A	6/20	None	ExCom	TC 7.9 to pilot early revisions to their Ch 43 in 2019A. To present lessons learned 6/17.	Agile methodology--small sprints vs. 4-year cycle. Gain lessons learned, to help TCs better use volunteer time. <i>Measure:</i> TC(s) participate and report experience.
5. Solicit and receive feedback on new ASHRAE Authoring Portal.	2A	1/17	None	Training Subcom	Portal launched 6/17. Now 160 users, with requests to use by others.	Action to improve use of TC volunteer time. <i>Measure:</i> feedback received.
<b>Additional Recommendations for Strategic Planning:</b> None.						

**SP Init.** = Strategic Plan 2014 Initiative addressed by objective  
FY: mso 31 January 2017



**Historical Committee (HC)**  
**Report to Publishing and Education Council (PEC)**  
ASHRAE 2017 Winter Conference / Las Vegas, NV

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**Action Items**

Request a change to the Historical Committee ROB, that PEC Functional Subcommittee increase Historical Committee voting members from 7 to 9. *Attachment A*

Request that PEC Fiscal Subcommittee approve the proposed budget for Historical Committee's projects for the 125<sup>th</sup> Anniversary. *Proposed Action Plan, Attachment B*

**Information Items**

1. Historical Committee continued discussion to increase voting members. The committee voted to increase membership from 7 to 9 voting members.
2. Historical Committee discussed how, where, and how many years to retain historical documents.
3. Historical Committee discussed establishing a process to review historical documents before they were destroyed.
4. Historical Committee discussed the need to provide assistance to chapters for electronic storage of historical and other important documents. Committee recommended establishing a connection with ECC for electronic storage recommendations – a digital file cabinet – to assist chapters.
5. Historical Committee discussed the value of holding interim meetings via teleconference or Go to Meeting between Winter and Annual Conferences.
6. Historical Committee discussed the Leadership Recall process and named Tom Phoenix to be interviewed in June 2017 at the Annual Conference. A second candidate may be named via email with committee.
7. Historical Committee discussed the progress made by the Committee on projects being developed for the 125<sup>th</sup> Anniversary.
8. Historical Committee discussed ways to recognize ASHRAE's connection with international associate societies for the 125<sup>th</sup> Anniversary.
9. Historical Committee discussed PAOE point changes made by the PAOE subcommittee.

Respectfully submitted,  
Randy Schrecengost  
Historical Committee, Chair  
01/31/2017

RS: ess

## 2.410 HISTORICAL COMMITTEE

### 2.410.001 SCOPE AND PURPOSE

The Historical Committee shall encourage and carry on historical research and provides support to history-related activities of the Society.

### 2.410.002 MEMBERSHIP

#### 2.410.002.1 Composition

The members of this committee are as follows:

- A. Nine (9) voting members including the chair and vice chair
- B. Non-voting members include a BOD ex officio member and a coordinating officer.  
(92-01-29-36C/98-01-16-13/06-06-28-11B/07-01-31-10/07-06-27-20)
- C. Corresponding members include a Regional Historian from each region

#### 2.410.002.2 Qualifications

- A. It is recommended that at least one committee member be from outside the United States.  
(96-02-22-51/01-06-27-22B)
- B. At least three (3) of the voting members ~~shall~~should have served as a Regional Historian (RVC) or as a Chapter Historian

#### 2.410.002.3 Term of Service

The term of service for voting members is intended to be three (3) years, subject to ROB 3.300 *Election and Appointment Procedures*.

[end excerpt]

**Background:** The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non-Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone.

Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM's to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective.

**Fiscal Impact.** The estimated fiscal impact of adding two VM to the committee is \$2,500/year, maximum, for transportation, if requested.



Historical Committee (HC)  
January 31, 2017

## **ASHRAE 125 Year Anniversary Celebration – Proposed Action Plan** (Details for each project included on following pages)

**NOTE:** Fiscal impact and budget requirements to be developed by staff for future fiscal year approvals – complete by January 2017 meeting

### **Proposed 125 Year Anniversary Projects List**

- 1 Produce quality industry selective history related publications** (hard or soft cover and/or electronic version)
- 2 Update the 100 most important Transactions Papers (add 25 papers)**
- 3 Publish about 12 historical articles in the *ASHRAE Journal***
- 4 Sponsor a technical paper session for the winter 2020 meeting.**
- 5 Develop a pictorial calendar for 2019 and 2020.**
- 6 Additional project by staff: update ASHRAE Society History (*Proclaiming the Truth*)**
- 7 Develop brochure: "How HVAC&R has improved the quality of life worldwide"**

## Proposed 125 Year Anniversary Projects Details

**1 Produce quality industry selective history related publications** (hard or soft cover and/or electronic version)

### **Possibilities identified so far:**

*“How HVAC&R has improved the quality of life worldwide”* This would be written to appeal to a general audience thus promoting the importance of engineering and ASHRAE as a benefit to humanity. Ron Vallort has volunteered as author.

*“History of development of air conditioning systems 1920-2020”* Focus would be both equipment and materials, written and illustrated to appeal to engineers as well as a wider audience. David Arnold has volunteered as author with other co-authors possible.

*“Evolution of components and design build practices after 1900”* This would cover the development of factory engineering and construction practices from the inventors/innovators design build to the application manufacturing to application engineering to engineering consultants and then mechanical contractors. Bruce Flaniken has said he might author this.

*“Pioneers of HVAC&R”* This work would be person oriented and would highlight the contributions of individuals. Resources for this work would mainly use our existing data base which includes ASHRAE Hall of Fame, Pioneers of the Industry, Leadership Recall and the *Heat & Cold* book, and any other important persons not present in these existing resources. No author yet.

**2 Update the 100 most important Transactions Papers.** This list was published for the ASHRAE Centennial in *Proclaiming the Truth*. Steve Comstock will update the book and has suggested the important papers section be updated by adding papers for each year after 1995. This project was suggested to Technology Council

**3 Publish at least 6 historical articles in the ASHRAE Journal.** Previously the *Journal* published 12 articles for the centennial and later did a 12 article series titled *100 Years of Air Conditioning*. This project would address the suggestions we are receiving for coverage of very specific industry advances. These suggestions usually come from strong advocates who could be tapped to write articles. The topics and authors would be solicited through the Technical Committees, Regional and Chapter Historians. We should be able to easily get 6 authors and possibly many more. Consideration could be given to binding these articles into a stand-alone publication as was done with the *100 Years of Air Conditioning* series. We already have a number of topics identified by the sub-committee members as well as TC members (see list of topics below)

**4 Sponsor a technical paper session for the winter 2020 meeting.** Solicit 4 or more papers to be presented in a technical session or sessions (not as a conference paper, which are not printed in *ASHRAE Transactions*). The advocacy and resource comments above in #3 also apply to this project.

**5 Develop a pictorial calendar for 2019 and 2020.** This would be similar to the historical calendars produced annually by CIBSE. These calendars could be sold by ASHRAE to members and companies.

**6 Additional Project by Staff: ASHRAE Society History**

“Proclaiming the Truth” book will be updated to cover the 25 year period after the Centennial. This will not be a Historical Committee project. Steve Comstock has said ASHRAE staff will do the update.

**7 Develop brochure "How HVAC&R has improved the quality of life worldwide":** Some possible source material, article from Ron Vallort (already submitted to ASHRAE Journal.)

**Sources for topics/advances that might be covered in publications issued for the 125th. Anniversary Updated January 2016:**

These topics are more suitable for articles and papers than a stand-alone publication due to the appeal to a more limited audience.

- Origins of building energy simulations
- Development of steam and electric motor drivers as the precursor to HVAC&R technology development
- Development of ROT, SWAG and WAG in the Engineering Fields
- History of frozen foods
- Development of service water heating
- Open standard protocols, specifically BACnet, that allow building systems to interact with one another through integration.
- Combined heat and power systems
- Production and installation of affordable residential air conditioners
- Production and distribution of consensus-based standards that improve the indoor air quality and energy efficiency
- Development of Unit Ventilators in the early 20th Century
- Development of VAV systems complete with variable speed air handlers, fan powered terminals and digital controls.
- Improved curtain walls, glass and mullions
- Development of underfloor air delivery systems
- Workplace more efficient by creating comfort
- ASHRAE publications

## Historical Committee 2016-2017 MBOs

	Objective	SP Goal	Completion Date	Fiscal Impact	Delegated to:	Status	Comment
125th	Finalize 125 Year ASHRAE Anniversary celebration Action Plan	1	Winter meeting 2019	Major	125th Anniversary Celebration sub committee	Ongoing Overall	Currently working with Staff on overall schedule and requirements for publications. We have defined: the Focus for Articles; basic Specifications for such articles; 3 Action Items at this time; and, a preliminary Schedule.
			Winter Meeting 2017	Minor	125th Anniversary Celebration sub committee	Complete	Meeting to discuss the schedule and develop a Call for Papers publication notice for Submission Guidelines. Las Vegas Winter Meeting January. <b>Complete (See attached): Will run a call for articles in the March 14 ASHRAE Journal newsletter, and will run it again in multiple issues.</b>
			March 1, 2019	Minor	125th Anniversary Celebration sub committee	Ongoing	Will run a final date for all materials (final drafts, figures, captions, photos) by March 2019.
125th	Assist in publicizing 125 <sup>th</sup> Anniversary. Develop seminars of historical interest that can be presented at National and Regional Meetings	1	Winter meeting 2019	Major	125th Anniversary Celebration sub committee	Ongoing - Next update June Summer Meeting 2017	A sub-committee has been formed and will develop proposals for submission to PEC to support the anniversary and demonstrate to members the strength in depth of our Society.
125th	Planning/implentation begun on publication/s to celebrate 125th Anniversary	1	Winter meeting 2019	Major	125th Anniversary Celebration sub committee	Ongoing - Next update June Summer Meeting 2017	Currently working with Staff on overall schedule and requirements for publications.
125th	Incorporate a Women In Engineering component to the 125 Year ASHRAE Anniversary celebration	1	Winter meeting 2019	Major	Communication Sub Committee	Ongoing	The 125 Year ASHRAE Anniversary celebration will include a Women In Engineering element
			Winter Meeting 2017	None	Historical Committee Chair	Complete	Proposed to add a PAOE line item "For a local Chapter Historical activity performed by an actively engaged "Woman in ASHRAE (WIA)" member". <b>Proposed and accepted by PAOE Committee, however, a WIA and YEA cannot be double counted.</b>
PAOE	Recommend a change to the overall criteria for PAOE	1	Summer meeting 2017	None	Historical Committee Chair/PEC/PEAC	Complete	Historical category should be included as one of the 7 categories in which chapters must meet a minimum of points. <b>Proposed and rejected by PAOE Committee. It was stated that Historical is not a Grassroots Committee so the PAOE Criteria would not be changed.</b>
PAOE	Preparing several suggested changes to Historical PAOE criteria	1	Summer meeting 2017	None	Historical Committee Chair/PEC/PEAC	Complete	Suggested changes to several PAOE Historical category points criteria including adding a WIA component to YEA activities; specifying acceptable exceptions to chapter histories outside the chapter geographic area; tightening criteria for what constitutes an acceptable history; establishing criteria for incoming chapter historians. <b>Proposed and accepted by PAOE Committee.</b>
WIA/YEA	Encourage women and younger members of ASHRAE to have interest in history-related activities of the Society	2	Summer meeting 2017	None	Communication Sub Committee	Ongoing	Contacts provided by Tim Dwyer are considering how this might be achieved.



			Summer meeting 2017	None	Historical Committee Chair	Complete	Proposing to keep the PAOE line item "For a local Chapter Historical activity performed by an actively engaged YEA member" <b>Proposed and accepted by PAOE Committee, however, a WIA and YEA cannot be double counted</b>
	Develop proposals to improve the opportunities for Regional Historians to participate in Historical Committee activities.	1	Summer meeting 2017	None	Communication Sub Committee (the previous "RVC Guideline sub committee" was rolled up under Communication)	Ongoing	Prepare a guideline for RVCs to supplement current guidance and develop a proposal to allow on-line participation of non-voting members (RVCs) at Committee meetings.
	Foster collaboration with other international societies to improve our historical research and support history-related activities of the Society	4	Summer meeting 2017	None	Communication Sub Committee	Ongoing	Historical committee already has links with similar groups in CIBSE and AiCARR - opportunity now being pursued to work with similar committees in CEN, International Institute of Ammonia Refrigeration (IIAR), International Institute of Refrigeration (IIR), and the Global Cold Chain Alliance (GCCA). <b>Oswaldo D S Bueno, PE. was to address ASA.</b>
	Leadership Recall Arrange for videos to be taped at Annual meeting 2017	1	Summer meeting 2017	\$1,000 Already Budgeted	Leadership Recall Sub Committee	Ongoing	Arrange to interview Tom Phoenix and one other. Review other potential interviewees. Perhaps list others such as deceased Presidential family members and friends (e.g. Lynn Bellenger); or, interviews with older members with significant contributions (e.g., Ray Cohen from Purdue)
	Digitize Archived Journals + Transactions	2	Summer meeting 2017	Major	Archives Sub Committee / PEC	Ongoing	Searchable indexes now available
	Finalize "Historically Significant" document retention policy	2	Summer meeting 2017	TBD	Administration Sub Committee	Ongoing	Administration Subcommittee is researching suggested retention policy for historical documents and other items be possibly added to the ROB.



**Professional Development Committee**  
**Report to Publishing and Education Council (PEC)**  
ASHRAE 2017 Winter Conference – Las Vegas

**Motions**

None

**Information Items**

PDC reorganized the subcommittee meeting schedule to have separate Planning subcommittee and Operations subcommittee meetings to improve training course output.

Seven (7) new courses will be presented at the 2017 Winter Conference and five (5) additional courses are in the development process. PDC plans for a minimum of four (4) per year in varying stages of development or revision. An increase in the budget of development costs for next Society Year was approved by the PEC Fiscal Subcommittee.

PDC approved development of the Consulting Engineering Essentials course, with completion by June 2017.

PDC reviewed existing course offerings and approved to sunset nine (9) older courses. An action item was established to contact the authors and TCs of an additional ten (10) courses to determine if they are candidates for revision or should be sunset.

PDC will seek input from active TC representatives for development of courses for their discipline. PDC will monitor the development and revisions of ASHRAE standards and guidelines to ensure course offerings exist to cover those products.

PDC MBOs are attached. (*Attachment A*)

Respectfully submitted,  
Jim Bochat, Professional Development Committee, Chair  
January 31, 2017

**Professional Development Committee**

MBOs for Society Year 2016-17

Chair: Jim Bochat    Date: June 27, 2016

Objective	SP 2014	Completed by	Fiscal Impact	Responsible Party	Comment/Status
1. Develop a 5-year plan on developing young engineer training products that can reach a wider audience than just our design class	1C	June 2017	None	Full Committee	In Progress
2. Develop a standard guideline on the method to develop and produce courses.	2A	January or June 2017?	None	Planning Subcommittee	Complete
3. Develop outlines for additional practical applications courses to 'fill the gaps' in our current offerings.	3D	June 2017	None	Planning Subcommittee	Process outline complete  Subcommittee members have an ongoing responsibility to submit new course topics
4. Develop a standard guideline on the method to develop, translate and produce courses to an international market	4?	January 2017	None	Full Committee	Not started
5. Develop and launch two residential courses. <ul style="list-style-type: none"> <li>• Course 1</li> <li>• Course 2</li> </ul>	5A	January or June 2017?	None	Planning Subcommittee	Negotiating development costs. Received one proposal from posted RFP. Proposal in review.
6. Develop training for use in university curriculum. <ul style="list-style-type: none"> <li>• bEQ Task Force Prototype</li> <li>• Develop second course</li> </ul>	1C	June 2017	TBD	TBD	PDC to develop additional courses once Building EQ course is complete. Survey indicated HVAC design fundamentals was desired  Ad hoc led by Michael Brandemuehl is developing the Building EQ prototype for rollout in Fall 2017.

ASHRAE Strategic Plan 2014 Initiatives addressed by Objective.



**Publications Committee Report to  
Publishing and Education Council  
Meeting of January 31, 2017**

**Action Items**

(None)

**Information Items**

1. The committee awarded two winners from submissions to its inaugural Apps Contest and is preparing to announce the 2017 contest, with some adjustments to criteria and schedule based on lessons learned from the first contest.
2. The new web app for modeling compliance with Standard 90.1-2010 using the Energy Cost Budget (ECB) Method described in the standard now has 727 users and 473 projects registered.
3. The committee referred to ECC an app from the Qatar/Oryx Chapter (for local chapter management), with the request that ECC review the app as a possible model for chapter apps. The app was recommended to the committee by ASHRAE President Tim Wentz.
4. The committee selected an article for the 2016 *ASHRAE Journal* Paper of the Year. This result was submitted to the Honors and Awards Committee for approval, with announcement slated for later this year.
5. Liaisons from the committee contacted authoring groups regarding the need for revision or replacement of ASHRAE publications four or more years old (and especially those 10 or more years old).
6. Special publications completed from June 2016 through January 2017 are listed in *Attachment A*.
7. A status summary of upcoming publications is shown in *Attachment B*.
8. The status of MBOs for 2016-2017 is reported in *Attachment C*.

Respectfully submitted,

Jin Jin Huang  
Chair, Publications Committee  
01/31/2017  
JJH: mso

**PUBLISHED PROJECTS**  
**July 2016 to date**

**July 2016**

- Standard 41.8-2016
- Standard 20-1997 (RA 2016)

**August 2016**

- St. Louis Seminars DVD
- Fundamentals of Psychrometrics SI
- Standard 90.4-2016
- Standard 154-2016
- Standard 126-2016

**September 2016**

- ASHRAE IAQ 2016 papers download
- Spanish Standard 188-2015
- Second International Conference on Efficient Building Design: Materials and HVAC Equipment Technologies* (Beirut flash drive contents)
- Standard 55 User's Manual*

**November 2016**

- Fundamentals of Refrigeration (SI), 2<sup>nd</sup> ed. (SDL)
- Standard 62.1 User's Manual*
- Standard 90.1-2016 (I-P)
- Standard 90.1-2016 (SI)
- ASHRAE Transactions* Vol. 122 Pt. 2 (St. Louis)
- Duct Size Calculator

**December 2016**

- UFAD O&M Guide/Bundle
- Buildings Conference 2016 Papers
- Standard 130-2016
- Standard 145.2-2016
- Standard 86-2013 (RA 2016)
- Standard 124-2007 (RA 2016)
- Standard 138-2013 (RA 2016)
- Standard 160-2016
- Guideline 33-2013 (RA 2016)
- Standard 15-2016
- Standard 34-2016
- Standard 184-2016
- Standard 16-2016

**January 2017**

- Energy Efficiency in Buildings and Communities—  
ERDC Published Research 2006–2016 [CD]
- Standard 62.2 User's Manual*
- Standard 62.1-2016, Spanish

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
<b>Books</b>					
ASHRAE Design Guide for Cleanrooms	TC 9.11	[Apr 28, 2016]	Proofs to authors	Feb 2017	Contact: Wei Sun
ASHRAE Design Guide for Dedicated Outdoor Air Systems	TC 8.10; RP-15651712	[Dec 28, 2016]	Editing	Apr 2017	PI: Svein Morner
ASHRAE Design Guide for Sustainable Refrigeration Facilities and Systems	SP 131; AHRI/IIAR UNEP; RP-1634	2014 <del>Aug 31, 2016</del> Feb 1, 2017	Writing	TBD	per M Vaughn
ASHRAE Design Guide for Air Terminal Units	TCs 5.3, 7.7	<del>Jan 2015</del> <del>Jul 2016</del> Feb 2017	Writing	<del>Oct 2016</del> Jun 2017	Authors: David John, Gus Faris
ASHRAE Design Guide for Duct Systems	TC 5.2; RP-1180	<del>Jun 2010</del> <del>Jul 2011</del> <del>Aug 2011</del> <del>Feb 2013</del> <del>Jun 2013</del> <del>Jan 2014</del> <del>Sep 2014</del> <del>Nov 2014</del> <del>Jan 2015</del> <del>Jul 2015</del> <del>Jan 2016</del> <del>Jul 2016</del> Feb 2017	Approving?	<del>Jun 2004</del> <del>Sep 2004</del> <del>Nov 2010</del> <del>Oct 2011</del> <del>Apr 2013</del> <del>Nov 2013</del> <del>Jan 2015</del> <del>Feb 2015</del> <del>Jun 2015</del> <del>Dec 2015</del> <del>Oct 2016</del> Jun 2017	TC 5.2 contact: Pat Brooks As of Jan 2016: Contractor Farnsworth defaulted; TC 5.2 will finish the rest
ASHRAE GreenGuide, 5 <sup>th</sup> ed.	TC 2.8	Jun 2017	Writing	Fall 2017	
PHVAC and PHVAC Solutions Manual revisions	N/A	PHVAC: Jul Sol Man: Aug	Revising	PHVAC: Nov Sol Man: Dec	Every four years (2017, 2021, 2025)
Pocket Guide revision	N/A	I-P: Aug SI: Sep	Revising	I-P: Dec SI: Jan	Every four years (2017, 2021, 2025)
Proclaiming the Truth, 2 <sup>nd</sup> ed.	SComstock	2019	Planning	2019	8/25/2016 per SComstock; part of ASHRAE 125 <sup>th</sup> Anniversary
HVAC&R Pioneers	Staff; TBD	2019	Planning	2019	8/25/2016 per SComstock; part of ASHRAE 125 <sup>th</sup> Anniversary
What to Expect from the Commissioning Process (w/supplemental files)	Gerald Kettler	<del>Jul 2016</del> <del>Winter 2016</del> Summer 2017	Compiling/ Writing	TBD	BCA to co-sponsor or hold joint copyright
Member's Survival Guide: Design/Build section	Mitchell Swann	TBD	Revising	TBD	Aims to have draft for TC in January 2016

## Attachment B

## SPECIAL PUBLICATIONS PROJECTS : January 24,2017

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
District Cooling Guide, 2 <sup>nd</sup> ed.	TC 6.2; SP-XXX	TBD	In discussion	June 2018	With funding from Empower (UAE)
District Cooling Guide Operations Manual	TC 6.2; SP-XXX	TBD	In discussion	June 2018	With funding from Empower (UAE)
Structural and Vibration Guidelines, 2 <sup>nd</sup> ed (Datacom Series)	TC 9.9	<del>Jun-2015</del> TBD	Revising	<del>Oct-2015</del> TBD	Still valuable in current form. TC will update as time allows but not in 2016 per DBeaty 6/26/16.
Datacom Equipment Power Trends and Cooling Applications, 3 <sup>rd</sup> ed (Datacom Series)	TC 9.9	<del>Jan-2015</del> 2017	Revising	<del>Apr-2015</del> TBD	Major rewrite per DBeaty 6/26/16
Particulate and Gaseous Contamination, 2 <sup>nd</sup> ed (Datacom Series)	TC 9.9	<del>2015</del> TBD	Revising	TBD	per Don Beaty, 1/25/15
ASHRAE Design Guide for Hazardous Spaces	TCs 5.8, 9.2	TBD	Writing	TBD	Author: Mike Baucom Draft to be complete mid Jun per 6/2/16 email from MBaucom
Economizers for Datacom Facilities (Datacom Series)	TC 9.9	<del>Jul-2010</del> <del>Jun-2011</del> <del>Oct-2011</del> <del>Sep-19, 2013</del> TBD	Planning	<del>Jan-2011</del> <del>Oct-2011</del> TBD	per DBeaty, Aug 2013 email to Steve C.
IT Equipment Cooling book (Datacom Series)	TC 9.9	<del>Jun-2011?</del> <del>Nov-2011</del> TBD	Writing	<del>Oct-2011?</del> TBD	per DBeaty 9/8/11; white paper first
Engineering Concepts in Supporting Community Containment Measures During Public Health Incidents	TC 9.6	TBD	Planning	TBD	
Integrated Building Design Applications Manual	TC 7.1	<del>Jan-2009</del> <del>Jun-2010</del> TBD	Writing	<del>January-2008</del> <del>Jun-2008</del> <del>Sep-2010</del> <del>Jan-2015</del> TBD	MOwen queried CGulledge 6/2/16 email

## Attachment B

## SPECIAL PUBLICATIONS PROJECTS : January 24,2017

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
Heat Load Estimating Guide for Electrical Equipment (a Design Guide)	RP-1395; RP-1104	TBD		TBD	May be better to simply incorporate the data into the Handbook (keep selling RP reports, too).
ASHRAE Design Guide for Hot-Climature Buildings	MTG.HCDG	TBD	Planning	TBD	MTG Ch Frank Mills
Residential IAQ Guide	EHC; RP-1663	TBD	Writing	TBD	
ASHRAE Design Guide for Cool Thermal Storage	TC 6.9; RTAR-1719	TBD	Proposed	TBD	TC working on work statement
A Comprehensive HVAC Design Guide for Justice Facilities	TC 9.4	TBD	Writing	TBD	
Advanced Control Sequences for HVAC Systems: Phase I, Air Distribution and Terminal Systems	TC 1.4; RP-1455	TBD	RP in progress	TBD	
(Report listing and reviewing international standards and guidelines related to IEQ.)	IEQ-GA	Summer 2017	Planning	Fall 2017	Bjarne Olesen initiative for 2017-18
<b>Standards and Guidelines and User's Manuals</b>					
Standard 90.1-2016 User's Manual	Contractor	Aug 2017	Writing	TBD	Contact: LPratt
Standard 90.4	SSPC 90.4	Jun 2016	Editing	Jul 2016	
Standards/addenda to be published after approval at Annual Conference	Varies	Jul/Aug 2016		Aug/Sep 2016	Every 6 mos.
Revision of Standard 90.1	SSPC 90.1	Aug/Sep 2016		Oct 2, 2016 (electronic)	Every three years (2016, 2019, 2022)
Standards/addenda drafts going for approval at Winter Conference	Varies	mid Oct 2016		Nov 30, 2016	Every 6 mos; publish = ready for review at conf
Revision of Standard 52.2	SSPC 52.2	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Revision of Standard 90.2	SSPC 90.2	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Revision of Standard 140	SSPC 140	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Standards/addenda to be published after approval at Winter Conference	Varies	Feb/Mar 2017		Mar/Apr 2017	Every 6 mos.
Standards/addenda drafts going for approval at Annual Conference	Varies	Mid-Apr 2017		Jun 1, 2017	Every 6 mos; publish = ready for review at conf



## Attachment B

## SPECIAL PUBLICATIONS PROJECTS : January 24, 2017

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
Revision of Standard 135.1	SSPC 135	2017		2017	Per Stephanie R phone 7/7/14
Revision of Standard 189.1	SSPC 189	Sep 2017		Oct 2017	Every three years (2014, 2017, 2020)
18-month Addenda Supplements to Code-Intended Standards	Varies	Spring 2018		Sep/Oct	Every three years (2015, 2018, 2021)
Revision of Standard 62.1	SSPC 62	Spring 2019		Summer 2016	Every three years (2016, 2019, 2022)
Revision of Standard 62.2	SSPC 62	Spring 2019		Summer 2016	Every three years (2016, 2019, 2022)
Revision of Standards 15 and 34	SSPCs 15, 34	Jul 2019		Oct 2019	Every three years (2019, 2022, 2025)
<b>Specialty Conferences</b>					
Sustainable Management of Refrigeration Technologies in Marine and Off-Shore Fisheries Sectors (Bangkok)	Tony Giometti			Conf is April 6-8, 2017	
Thermal Performance of the Exterior Envelopes of Whole Buildings XIII [flash drive]	Andre Desjarlais (ORNL)	Jun 2019		Nov 2016	Every three years (2019, 2022, 2025)
IAQ Conference [flash drive]	Tony Giometti	Aug 2019		Conf is Sep 12-14, 2016	Every three years (2019, 2022, 2025)
<b>Self-Directed Learning (SDL) Textbooks</b>					
Fundamentals of Heating Systems (I-P)	Mark Hegberg	<del>Mar 16, 2012</del> <del>Mar 31, 2012</del> <del>Jun 15, 2015</del> <del>Dec 15, 2015</del> <del>Dec 31, 2015</del> <del>late Jan 2016</del> <del>Mar 25, 2016</del> [May 5, 2016]		Sep 2016	Awaiting query responses from author
Fundamentals of Heating Systems (SI)	Mark Hegberg	<del>Mar 16, 2012</del> <del>Mar 31, 2012</del> [May 5, 2016]		Sep 2016	Awaiting query responses from author
Fundamentals of Design and Control of Central Chilled-Water Plants (I-P) [supplemental files]	<del>Mark Hydeman (2009)</del> Steve Taylor (2010)	<del>Nov 2009</del> <del>Mar 15, 2012</del> <del>Fall 2012?</del> 2014 Chs 1-6: Dec 7, 2015 Chs 7-8: <del>Jan 2016</del> May 11 and 23, 2016		<del>Jul 2012</del> March 2017	We only have the text; we have not yet received the figures
Fundamentals of Heating and Cooling Loads (I-P)	<del>Jeff Spittler (2009)</del> Laura Southard (2015)	<del>Aug 2009</del> <del>Spring 2010</del> <del>Aug 2012</del> <del>Jan 2013?</del> <del>Aug 2016</del> <del>Dec 2016</del> TBD		<del>Dec 2012</del> TBD	

## Attachment B

## SPECIAL PUBLICATIONS PROJECTS : January 24, 2017

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
Fundamentals of Heating and Cooling Loads (SI)	Jeff Spitzer (2009) Laura Southard (2015)	Aug 2009 Spring 2010 Aug 2012 Jan 2013? Aug 2016 Dec 2016 TBD		Dec 2012 TBD	
Fundamentals of Water System Design (SI) [conversions only]	Dick Hegberg Mark Hegberg (2009; 2015)	Aug 2009 Jun 15, 2011 Mar 19, 2012 Apr 20, 2012 May 21, 2012 Dec 2015 late Jan 2016 Apr 4, 2016 Mid-June, 2016 TBD		Jan 2016 TBD	Final I-P files supplied for conversion Nov 2, 2015
Fundamentals of Design and Control of Central Chilled-Water Plants (SI)	Mark Hydeman (2009) Steve Taylor (2010)	Nov 2009 Fall 2012? 2014 [August 2016]		March 2017	
<b>Position Documents</b>					
PD on Climate Change	Steve Hammerling	Spring 2016 Early July 2016 Fall 2016 Feb 2017	In TC Review	TBD	
PD on Ammonia as Refrigerant	Steve Hammerling	Spring 2016 Early July 2016 Fall 2016 Feb 2017	Under Review	TBD	
PD on Environmental Tobacco Smoke	Steve Hammerling	July 2016 Feb 2017	Revising	TBD	Current version was reaffirmed in Jul 2016 to keep it posted online until revision is complete
PD on IAQ	Steve Hammerling	Early July 2016 Feb 2017	In progress	TBD	
PD on Unvented Combustion of Solid Fuels and IAQ-Indoor Air Quality in Primarily Developing Countries	Steve Hammerling	Oct 2015 Jan 2016 Spring 2016 July 2016		Nov 2015 Feb 2016 TBD	
PD on Energy Efficiency in Buildings	Steve Hammerling	Nov 2015 Spring 2016 Feb 2017	In progress	Dec 2015 TBD	Per Steve H: New PD, so full editorial review needed
PD on Legionellosis	Steve Hammerling	Dec 2015 Jan 2016 Spring 2016 Late 2016 Feb 2017	In progress	Jan 2016 Feb 2016 TBD	
<b>Translations</b>					

## Attachment B

## SPECIAL PUBLICATIONS PROJECTS : January 24,2017

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
Standard 15-2013 (Spanish)	ATEAAR	<del>2015</del> TBD	Contracted	TBD	
Standard 100-2015	Argentina Chap.	TBD	Contracted	TBD	
Water System Design SDL (Spanish)	Mexico Chapter	TBD		TBD	
IAQ Guide (Spanish)	Miami Chapter	<del>May 2014</del> TBD	Contracted	TBD	
Thermal Guidelines for Data Processing Environments, 2nd edition (Spanish)	ATEAAR	<del>May 2011</del> TBD	Contracted	TBD	
Standard 34-2007 or -2010 (Spanish)	ACAIRE	<del>Dec 2010</del> TBD	Contracted	TBD	
Standard 90.1-2007 (Spanish)	Mexico City Chapter (AMERIC)	<del>2009</del> TBD	Contracted	TBD	
Fundamentals of HVAC Control Systems SDL, 2001 edition (Spanish)	ASHRAE Monterrey Chapter (MX)	<del>2010</del> TBD	Contract sent; unsure if signed	TBD	
Standard 188-2015	Spain Chapter	TBD		TBD	
189.1-2009 User's Manual (Spanish)	ATEAAR	<del>2011</del> TBD	Contracted	TBD	
Standard 90.1-2010 (Spanish)	Argentina Chapter	TBD	Contracted	TBD	
Standard 41.3-1989 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Standard 41.1-1986 (RA 2006) (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Standard 90.1-2016 (SI)	Spain Chapter	TBD	Waiting on Signed Contract	TBD	
Guideline 2-2010 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Guideline 22-2008 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Standard 111-2008 (Spanish)	Mexico City Chapter (AMERIC)	<del>2013</del> TBD	Contracted	TBD	
HVAC Design Manual for Hospitals and Clinics, 2 <sup>nd</sup> Ed (Spanish)	ATEAAR	TBD	Waiting on Signed Contract	TBD	
Standard 52.2-2012 (Spanish)	Mexico City Chapter (AMERIC)	TBD	Waiting on Signed Contract	TBD	
Standard 90.1-2013 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Standard 189.1-2009 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Guideline 0-2013 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Guideline 1.1-2008 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
<b>CDs/DVDs</b>					
Weather Data Viewer DVD	Michael Roth	[Dec 2016]		Feb 2017	Every four years (2017, 2021, 2025)
<b>Online Products</b>					
ASHRAE Terminology	TC 1.6	Ongoing		Ongoing	Contact: Art Hallstrom

## Publications Committee report to PEC

Title	Responsible Entity	Date Exp to Receive [Recd]	Current Status	Expected Publish Date	Comments
Cold Climate website		Ongoing	Gathering content	Ongoing	
Thermal Comfort Tool, Ver 3	SSPC 55	<del>Summer 2014?</del> April 2015 TBD		TBD	Contact: Abhijeet Pande; might be published with Std. 55 UM instead
<b>Recurring Conference-Related Projects</b>					
Annual Conference Seminars DVD	Tony Giometti	Request spreadsheet first week in Jul; submit art Jul 22		Proof content Aug 5–9; approve by Aug 12	Needed in inventory by Sep 1
Annual Conference Transactions (Part 2)	Staff	Aug/Sep		Oct	
Winter Technical Papers	N/A	Sep–Nov		Nov	
Winter Papers Download	N/A	Nov		Submit content Nov 27, art Dec 9	
Winter Conference Seminars DVD	Tony Giometti	Request spreadsheet first week in Feb; submit art Feb 25		Proof content Mar 4–8; approve by Mar 11	Needed in inventory by Apr 1
Winter Conference Transactions (Part 1)	Staff	Feb/Mar		May	
Annual Technical Papers	N/A	Mar–Apr		mid-Apr	
Annual Papers Download	N/A	Apr		Submit content Apr 23, art May 6	

MSO 24 Jan 2017

**Publications Committee**

MBOs for Society Year 2016-17

**Chair:** Jin Jin Huang **Date:** 31 January 2017

Objective	SP 2014	Compl. by	Fiscal Impact	Resp. Party*	Comment/Status
1. Continue the development of 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.	1	6/17	None	<b>Ferguson,</b> Bansal, Lacharite, Tome	Aim is to enable clearer understanding and application of the wide range of ASHRAE publications. Strengthen communication collaboration with at least two other ASHRAE committees. <i>Status:</i> Second draft completed; in refinement phase.
2. Expand on ASHRAE apps competition with lessons learned and develop new apps competition.	3	6/17	TBD	<b>Beaty,</b> Ow, Vallort, Correa	Builds on 2015-16 MBO #2. Contest launched at 2016 Winter Conference. <i>Status:</i> Results from first contest complete; lessons learned. 2017 contest announcement pending.
3. Strengthen communication with TCs and improve special publications refresh rate.	2	6/17	TBD	<b>Huang,</b> ALL	Assign a liaison to each TAC Section. Focus on special publications in the top sales list and work with TCs specifically to update those 10 yrs or older. <i>Status:</i> Liaisons contacted TAC Sections at Winter Conference.
4. Conduct and monitor mentoring program for new members.	2	6/17	None	<b>Lacharite,</b> Kourakos, Ferguson	Continuation of MBO#5 from 2015-2016. <i>Status:</i> Process revision recommendations identified.
<b>Additional Recommendations for Strategic Planning:</b> None at this time					

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

\*Lead for each MBO is shown in **boldface**.

JJH: mso 31 January 2017

**Report to the Publishing and Education Council (PEC)  
From Handbook Ad Hoc  
Meeting of Jan 31, 2017 (Tue)**

Recommendation for the PEC approval:

**MOTION 1:**

Propose to change the method of transfer the Handbook pdf files from CD format to electronic means starting from 2018-19.

Background:

**Disadvantage of CD**

- We periodically receive complaints regarding non-delivery of printed Handbooks and/or CD;
- CD is a mean of transferring PDF file and there are other technologies to transfer files nowadays;
- CD technology is phasing out and disappearance of CD drives in most of the new mobile devices;
- ASHRAE CDs do not work in Mac environments. Files are sent on request to such users. Spend extra staff working hours;
- Expensive mailing cost;

**Propose alternative to Handbook CD**

**Transfer the Handbook PDF files through download**

**What is it?**

- Regular Members can download the handbook chapter PDF files through Handbook Online;
- Developing Countries reduced fee members can download the PDF through a Cloud based delivery platform;
- Files can be accessed when offline;
- Files can be read in computers (PC/Mac) or tablet and files are responsive;

**COST to ASHRAE**

<p><b>PDF archiving capability to Handbook online</b> (for regular members who choose HOL)</p> <ul style="list-style-type: none"> <li>• One-time setup cost:     <b>\$10,000</b></li> <li>• Annual cost:             <b>\$30,000</b></li> <li>• Mailing cost:             <b>\$0</b></li> </ul>	<p><b>PDF Cloud based delivery platform</b> (for regular members who choose print Handbook and developing economies members)</p> <ul style="list-style-type: none"> <li>• One-time setup cost:     <b>\$5,000</b></li> <li>• Annual cost:             <b>\$0</b></li> <li>• Mailing cost:             <b>\$0</b></li> </ul>
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**Costing and Saving**

		COST	SAVING
<b>Motion 1 &amp; 2:</b>			
a.	Saving from NOT producing and mailing CD (per year)		\$125,374
	Cost increase for add PDF download to Handbook Online		
b.		Year 1: \$40,000.00	
		Year 2 onward (per year): \$30,000.00	
c.	Cost increase for developing economies members PDF Cloud base delivery platform (one time cost)	\$5,000.00	

### Fiscal impact

Saving: **USD80,374.00** in the first year.  
(USD90,374.00 from the second year)

### **MOTION 2:**

Propose to change the members' benefit in Handbook as follows, from 2018-19,














- **Regular member:**
  1. Receive a 12 month complimentary subscription to the Handbook Online, with PDF files download; or
  2. Receive a printed Handbook and Handbook PDF cloud based files download; or
  3. Pay extra to receive both (1) & (2)
  - 4.
- **Developing economies member:**
  1. Receive Handbook PDF cloud based file (with stamp)

### Background

Same as Motion 1

Following is the how many members are receiving Handbook CD in 2016.

Background info:  
*what's format of Handbook members are choosing ...*

  	No of mbr chose for 2016	Description	No of mbr got handbook of:		
					
 + 	32,251*	mbrs chose print handbook with CD	32,251	32,251	
	6,949	mbrs chose CD only and developing economies mbrs		6,947	6,949***
	5,717	mbrs chose Handbook Online (HOL) only			5,717
 +  + 	3,226	mbrs chose print handbook with CD & Online for \$33 additional	3,226	3,226	3,226
<b>No of Handbook copies ASHRAE have to prepare</b>			<b>35,477</b>	<b>42,424</b>	

Note: information are extracted from handbook June 2016 delivery data  
 (\*): Total no of full year members is 32251 + 3226 = 35477  
 (\*\*): This was never approved BUT members (including developing economies mbrs) chose CD also got HOL by unknown reason

Summary of the propose change in members benefit:

Propose change in Member's benefit (2018-19....)					
	Handbook print	Handbook CD	Handbook Online	Handbook PDF download through Cloud platform	Handbook Online + PDF download
<b>Current up to 2017-18</b>					
Regular member - standard benefit (opt 1)	Y	Y			
Regular member - standard benefit (opt 2)			Y		
Regular member benefit for \$33 additional	Y	Y	Y		
Developing economies mbr benefit		Y			
<b>Mbrs benefit change in 2018-19</b>					
Regular member - standard benefit (opt 1)	Y				
Regular member - standard benefit (opt 2)				Y	Y
Regular member benefit for \$33 additional	Y				Y
Developing economies mbr benefit				Y	

Fiscal impact

Same saving from MOTION 1

**USD80,374.00** in the first year.

(USD90,374.00 from the second year)



### **MOTION 3:**

Propose members (assume members outside US/Canada/Europe) to pay mailing surcharge (based on the country of delivery) if they choose Handbook Print copy, from 2019-20. And ASHRAE will send those members the printed Handbook by FedEx.

### **Background**

#### **Current problem in printed Handbook delivery:**

- We periodically receive complaints regarding non-delivery of handbooks;
- Create member unhappiness to the society and chapters, due to non-delivery handbooks problem;
- Most of the complaints came from countries outside US/Canada/Europe;
- Situation was solved for countries historically with most complaint (Argentina, Mexico, India, Pakistan, Sri Lanka) by using FedEx to deliver printed Handbook to South America members, but very costly;
- Extra staff time and higher mailing cost to resend the Handbook when complaint received;

#### **Propose change**

### **Propose alternative to printed Handbook delivery**

#### **Promote Handbook Online as regular member's benefit**

- Encourage members using Handbook Online to control mailing cost;
- Add PDF download to Handbook Online platform

#### **Send the printed Handbook by FedEx to regular members in countries outside US/Canada and Europe, who choose to receive printed handbook**

- Point-to-point delivery, reduce non-delivery cases/complaints;
- Members pay the surcharge for the mailing cost if they choose printed Handbook; (or use the saving from eliminating CD to cover the additional mailing cost)

## Benefit to both the members and ASHRAE

### Benefit in using Handbook online with PDF archiving capability

#### Benefit to ASHRAE

- Improve member satisfactions;
- Promote members to select Online product;
- Less complaint on non-delivery;
- Reduce extra staff time to manage complaint and resend the print handbook;
- Cost saving in delivery cost;
- No incremental cost for additional online users;
- Can help to analysis mbrs handbook usage behavior (only for members using HOL);

#### Benefit to members

- No delivery problem;
- Instant access to Handbook PDF, no need to wait for the Handbook/CD delivery;
- Can access when offline through downloaded PDFs;
- Content searchable within the handbook chapter;
- Content will be updated all the time;
- Permanent archiving of Handbook content for lapsed members providing they download content while still members;

## Cost and saving analysis

### Background info: Cost to distribute printed Handbook

Copies of printed Handbook distributed				Cost to distribute the printed Handbook (USD)		
Country	IP	SI	Total	Country	Mailing cost	Ave mailing cost per mbr
US	22956	1030	23986	US	61,164	2.55
	1797*	170*	1967*		11,802*	6.00*
Canada	2080	1110	3190	Canada	40,736	12.77
	149*	78*	227*		4,767*	21.00*
Europe	-	-	1197	Europe	19,236	16.07
	-	-	89*		1,869*	35.54*
Special delivery countries (**)	-	-	383	Special delivery countries (**)	13,609	35.54
	-	-	38*		1,350*	21.00*
ROW	-	-	2597	ROW	51,521	19.84
	-	-	283*		5,943*	
<b>Total</b>				<b>Total</b>	<b>211,997</b>	

ROW: Rest of the World

Note: Information are extracted from handbook June 2016 delivery data ;

(\*): These are subsequent mailings after large initial mailing; mailing cost does not include \$6.00/unit for pull/pack/ship and \$10 per book mailing fee fro FedEx;

(\*\*): sent by FedEx;

### Fiscal impact

~USD60,000.00 per year based on current no of global members

**Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015):**

**That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.**

Background: The recent MC/PEC working group on ASHRAE Educational Support to Chapters identified a need. Chapters do not know which chapter members take ASHRAE sponsored training, and further, some Chapters see it as a potential loss of chapter training revenue or reduced meeting attendance. Bluntly stated, they are out of the loop and some view ASHRAE training as competition to their local training. To improve this situation and actually make all Chapters/Sections a partner in ASHRAE PEC provided education, ASHRAE should advise the Chapters monthly of who in their chapter has attended an ASHRAE course, seminar, webinar, etc. In addition, ASHRAE will provide the attendees Chapter with 15% of the training educational net income as a marketing inducement to promote and encourage their members to take ASHRAE Society provided training. (They have some skin in the game.)

Fiscal Impact: Provide the attendee lists to each chapter needs to be programmed by ASHRAE IT. Needs a defined project and then the time/cost estimate. On the income sharing for marketing support, need the attendee and net income numbers.

**Staff Comments:**

- (a) ASHRAE currently makes Society training available to chapters – with instructors or for materials only. Pricing is for cost only and for smaller chapters is subsidized. These includes short courses and professional development seminars.
- (b) ASHRAE makes available ASHRAE publications such as standards to chapters at reduced pricing when chapters organize locally provided training. (Consignment sales offered.)
- (c) Reduced pricing is already available to chapters for the purchase of Self Directed Learning Courses.
- (d) When ASHRAE organizes HVAC Design Training in a chapter geographic area, the chapter is advised and if the chapter wishes to support the effort through logistics and promotion, income is shared with the chapter after direct expenses are recovered.
- (e) The recommendation is not clear as to what type of training is to be included: instructor led ASHRAE training, SDLs, supplier webinars, online courses, eLearning, etc.
- (f) Not all training registrations are collected through the membership data base.
- (g) The recommendation is unclear regarding whether chapters are to receive funds for chapter members or chapter assigned members; also would this mean for RAL subgroups would receive funding?
- (h) Computer programming to provide reports on attendance of selected training programs by chapter members will divert time from other projects.
- (i) Administration of processing payments will be substantial. It is also likely that payments to some chapters will be very – could be less than \$1.00. Analysis of what constitutes net revenue will be required for each type and instance of training.
- (j) Since ASHRAE holds training often in conjunction with Society meetings, advantage will be given to some chapters/regions over others in terms of payment.
- (k) If this practice is adopted, will similar efforts be employed for bookstore sales for example – if a chapter member purchases a book.

- (l) The budget for PEC will need to be adjusted to show this revenue share, reducing revenue for PEC. (All PEC revenue is returned to Society for development of educational programs which benefits chapters and Society as a whole.)

A potential solution which might accomplish the intent of the recommendation is to do a better job of promoting ALI opportunities that are available to chapters. This includes the purchase of SDL and short course and professional development seminars that can be scheduled. Also the HVAC training sharing of revenue can be extended to nearby chapters where training is to be scheduled.

**TO:** Bjarne Olesen, Members Council Chair  
 Joyce Abrams, Members Council Staff Liaison  
**FROM:** Steve Comstock  
**DATE:** December 1, 2016  
**SUBJECT:** Responses and Updates to Motions Referred to PEC from Members Council

Please find responses to the referrals in red below.

\*\*\*\*\*

**Region X (San Diego Chapter) – Motion 27:**

That ASHRAE provides for sale on the website basic tools such as a duct sizer (ductulator), pipe sizer, psychrometric chart and expansion calculator.

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

**Staff Response**

**Tools such as a ductulator, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership’s desire to have such tools is noted. Thank you for the feedback.**

*(Secretary’s Note: This referral will be included on PEC’s Winter January 2017 Las Vegas Meeting)*

**Region XIII (Hong Kong Chapter) – Motion 63:**

That Society maintain the examination fee of ASHRAE Certification at US\$295 (for ASHRAE members) for the promotion of ASHRAE Certification.

Background: Hong Kong Chapter had established a long-term strategic plan to promote bEQ and ASHRAE Certification since the early stage of year term 2015-16. For promoting ASHRAE Certification, Hong Kong Chapter firstly launched a Mentoring Scheme on being “ASHRAE Certified Professionals” at early 2016 and arranged the on-site pencil examination on 31 March 2016. As a result, there were total 14 members joined this scheme and 5 members of them passed the examinations and have been achieved as ASHRAE Certified Professionals. Hong Kong Chapter has probably to launch the mentoring scheme regularly to increase the number of ASHRAE Certified Professionals in Hong Kong. However, the exam application fee has increased over 33% this year (US\$395 for ASHRAE member) by compared with last year (US\$295 for ASHRAE member) which has discouraged members to apply the ASHRAE Certification exams.

Fiscal Impact: Yes. The income from examination fee of ASHRAE Certification will be lower by US\$100 each. Assume 100 candidates, the estimated reduction of income shall be US\$10,000.00 per year.

### Staff Response

**This needs to be referred to Certification Committee. The Certification Committee Chair and staff have been informed of this referral. PEC will report after the Winter January 2017 Las Vegas Meeting.**

*(Secretary's Note: This referral was sent to Certification Chair and staff Liaison December 1, 2016. This referral will be included on PEC's Winter January 2017 Las Vegas Meeting)*

### **Region XIII (Hong Kong Chapter) – Motion 64:**

That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals.

Background: Few members complain that they didn't receive ASHRAE handbooks and journals regularly. Those undelivered publications would then be returned back to the ASHRAE HQ that cost huge amount of postage charges as well as a lot of administrative works to handle the delivery problems. Moreover, this problem would let members be disappointed and reduced their intentions to renew their membership. Local chapters may also be suffered by receiving the complaints from members and sometimes difficult to promote ASHRAE. “ASHRAE Publication Care Program” is proposed in order to handle undelivered ASHRAE handbooks and journals. If the local chapter joins this scheme, the agent of postal service will send those undelivered items to local chapters for follow up. Local chapter will then report to the HQ and contact those members to clarify postal address. Local chapters will distribute those items to members directly after receiving confirmation of reimbursement of related postage charges by HQ.

Fiscal Impact: Positive.

### Staff Response

**Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure. PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. A report will be made to Members Council at the January 2017 Winter Meeting.**

*(Secretary's Note: This referral will be included on PEC's Winter January 2017 Las Vegas Meeting)*

### **Region I (Central New York Chapter) – Motion 1:**

That Society shall revise the “My Account” section of ASHRAE.org to include the option for society members to “Opt-out” of all direct mail marketing solicitations and the sharing of member contact information with ASHRAE advertising partners. A similar “Opt-out” option shall be provided as part of the registration process for both the Summer and Winter meetings. Society shall refrain from sharing contact information with advertising partners for all members that have selected the “Opt-out” option.

Background: Chapter members have observed that member contact information and combinations of names/titles that have been shared exclusively with ASHRAE have appeared in direct mail solicitations. It appears that ASHRAE is obtaining some revenue from the sale of member contact information to direct mailers. The sale of member contact information, while financially beneficial to the society, is potentially invasive to the privacy of our members, particularly to those who seek to maintain the confidentiality of their contact information. It may also pose regulatory compliance issues in some jurisdictions.

Fiscal Impact: The direct fiscal impact of this change will vary depending upon the amount paid by direct mailers to society and the number of members that opt out. This information does not appear to be publicly available. It is also anticipated that there will be some IT effort required for society to enable the additional “opt-out” option on ASHRAE.org.

### Staff Response

**The membership application and the dues renewal process already includes the option for members to opt out of promotional mailings from third parties. This process is regularly monitored. No email addresses are provided to third parties; only physical addresses for those members who have not opted out.**

*(Secretary’s Note: This referral was to Mr. Comstock and not PEC) COMPLETE.*

### **Region XII (Chile Chapter) – Motion 40:**

That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

### Staff Response

**ASHRAE’s most demanded standards (such as 90.1, 62.1, 189.1) are available (English language only) in read only format on the ASHRAE website.**

**If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). Additional cost is incurred when number of downloads exceeds certain thresholds. As long as a new threshold is not crossed, additional standards and guidelines can be added but Student Activities should limit their request to standards and guidelines directly relevant to the competition.**

**It is not feasible for Spanish language files be made available since most translations are for older editions of standards (translations lag behind English editions) and to make standards and guidelines available in some languages and not others would provide an unfair advantage to students in some countries.**

*(Secretary's Note: This referral will be included on PEC's Winter January 2017 Las Vegas Meeting)*

**Region XIII (Philippines Chapter) – Motion 67:**

That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID's, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.

Background: There were recurring complaints coming from our members the non-receipt of their packages which results to disappointments and thus delayed and ehe pven non-renewal of their annual membership. By giving chapters advise from society on return to sender package problems, we can trace the origin of the problem and help members be aware that society and the chapter are concern of their membership and welfare.

Fiscal Impact: No fiscal impact, only time spent for info dissemination.

Staff Action Item: Publishing and Membership Staff to investigate and determine the issues and provide chapters with a process of receiving missed packages.

**Staff Response**

**Distribution of Handbooks (CD and print) is under investigation by PEC. A report will be made to Members Council at the January 2017 meeting.**

**The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC staff that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.**

*(Secretary's Note: This referral will be included on PEC's Winter January 2017 Las Vegas Meeting)*



**TO:** Steven Faulkner, Electronic Communications Committee Chair  
Joslyn Ratcliff, Electronic Communications Committee Staff Liaison

**FROM:** Joyce Abrams

**DATE:** November 11, 2016

**SUBJECT:** Members Council Referral

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During the Members Council October 2016 meeting in Atlanta, the council referred the motion below to the Electronic Communications Committee for consideration. I appreciate your keeping me advised of your actions. Let me know if you have any questions. Thank you.

**West Virginia Chapter – Motion 7c (10/14/2016):**

That ASHRAE Society’s ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable.

Background: The ASHRAE Organization at the Society level has specific rules on how to handle emails to be in compliance with spam related laws in many countries. This grassroots guidance would allow the regions, chapters, etc. to be in compliance.

Fiscal Impact: Just the volunteer time to research and write the ROB.

cc: Walid Chakroun, Publishing and Education Council Chair  
Steve Comstock, Publishing and Education Council Staff Liaison

*(Secretary’s Note: This referral was sent to ECC staff Liaison on November 12, 2016)*

**TO:** Steven Faulkner, Electronic Communications Committee Chair  
 Joslyn Ratcliff, Electronic Communications Committee Staff Liaison  
 Brian Unrein, IT Manager

**FROM:** Joyce Abrams

**DATE:** November 11, 2016

**SUBJECT:** Members Council Referrals

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During the Members Council October 2016 meeting in Atlanta, the council referred the motions below to the Electronic Communications Committee and IT Staff for consideration. I appreciate your keeping me advised of your actions. Let me know if you have any questions. Thank you.

**Tennessee Valley Chapter – Motion 4e (10/14/2016):**

That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A.

Background: ASHRAE Society can become a more efficient organization with the use of a software program to provide a streamline and polished chapter operations as well as provide a database of information to be utilized by ASHRAE Society. The software program should have the capability to run off the ASHRAE website and/or a cloud based app interfaced to NetForum. The program would have the following minimal attributes to streamline chapter operations for chapter programs.

- Input for ASHRAE Chapter Name and Number
- Input for monthly chapter program title, program speaker, date, time, and location. This information can be exported as a separate file to be used on the Chapter Website.
- Process meeting/events registrations.
- Member ID input (potentially a barcode added to ASHRAE membership card) also can look up member from name. This is to be utilized at the entry of the chapter program. A notification shall be provided for members who are shown as delinquent members or non-paying chapter due members.
- Non-Member information Input (minimum input of name and contact information) This is to be utilized at the entry of the chapter program.
- Process meeting/event payment.
- Link to renew membership or become a member of ASHRAE.
- Chapter Program questionnaire. Provide an input to be filled out by the chapter CTTC chair on comments from the program attendees. Information on this questionnaire shall be similar to DL program questionnaire.
- Manage chapter mailing lists (include members and any non-member who have attended chapter programs) and newsletter distributions.

A software program of this caliber would allow for ASHRAE to track its current members, track potential members, highlight chapter programs that are well attended, and aid in updating chapter website information. Furthermore, this program would be in line with the ASHRAE Strategic Plan, Initiative 1B and Initiative 2A.

Some chapters are currently using Star Chapter Program to achieve the above listed tasks. An advised alternate to finding a software program would be that Star Chapter Program be provided to all society chapters and include the attributes listed within the background of this motion.

Fiscal Impact: Approximately \$100,000 (\$1.78 per ASHRAE member). Saves Volunteer Time (Potential Increase Chapter Volunteers), & Increase Membership and Professionalism.

**Hampton Roads Chapter – Motion 7b (10/14/2016):**

That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members.

Background: Chapters must manually download and update email distribution lists from the ASHRAE.org site to communicate with members. Email distribution lists can be managed by the use of free or low cost email service clients, but these tools are ineffective in reaching all chapter members due to these domains being classified as spam or junk email by automatic filtering tools used at most companies and organizations. The Hampton Roads ASHRAE Chapter proposes that ASHRAE Society make their email management service available for chapters' and regions' use to send communication to their members. New members' email addresses would be uploaded periodically to the roster email distribution list and old members would be removed from the list automatically after some time. The system would allow users to add email addresses manually to a separate list which could be included in the distribution selection for each separate communication. Chapter administrators, president, president-elect and membership promotion chair would be able to access the list via the chapter's or region's management area of ASHRAE.org. The system would also allow pre-written emails to be sent at a future date. By having this system provided directly through Society, chapters and regions would have a more direct, powerful and easily manageable email service to reach its members. Since the database is already sorted by Region and Chapter, this service could be readily available for use by Chapters and Regions.

Fiscal Impact: Estimated \$7,500 initial cost for development. Annual cost of email management services would be minimal.

Note from Staff: Chapters are concerned their outgoing emails are spammed or flagged by filters as junk mail.

**Spacecoast Chapter – Motion 7j (10/14/2016):**

That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017.

Background: Currently, ASHRAE Chapters are responsible for transmitting mass e-mails to their own memberships, either from ASHRAE members designated by Chapter Presidents or from accounts with free third-party services. In both cases, Chapter e-mails are susceptible to being blocked by spam filters or flagged as spam. Furthermore, Chapters using their own domain name are susceptible to being blacklisted. From testimonies by Chapters in Region XII, this filtering could happen to Chapters sending e-mails less than four times per month.

The proposed solution would enable Chapters to use the ASHRAE.org domain name for their Chapter e-mails, a more authoritative domain name to e-mail blacklisting entities than those of Chapter domain names.

The ASHRAE.org domain name is less susceptible to spam filters and blacklisting than Chapter domain names, and Chapters may distinguish their e-mails from Society e-mails by using a subdomain name within the ASHRAE.org domain (e.g. @spacecoast.ashrae.org). Chapters who are not able to communicate to their memberships via e-mail are inhibited in advertising Chapter seminars, meetings, RP functions, and other grassroots activities. This inhibited communication could lead to an increased rate of member cancellations, reduced attendance at Chapter seminars, and smaller generation of RP funds. When extrapolated, this inhibited communication across several Chapters can have multiplied negative effects at the Society level.

Fiscal Impact: Programming support, web pages, and new policy adoption would be necessary if adopting this motion at an estimated cost of \$1,928.40. Estimated costs are based on the following assumptions:

1. Programming support and web page design would take about 40 hours, with the cost of labor for a computer programmer at \$35.71 per hour, resulting in a cost of \$1,428.40.
2. Policies would need to be established, implemented, and transmitted by ECC to Chapters in order to prevent spamming from the ASHRAE.org domain name. Staff support for ECC meetings, implementation, incorporation into Society documents, and administrative functions is anticipated to cost no more than \$500.00.

cc: Walid Chakroun, Publishing and Education Council Chair  
Steve Comstock, Publishing and Education Council Staff Liaison  
Craig Wright, ASHRAE Comptroller



# HIGH PERFORMING BUILDINGS

Real Buildings | Real Data

Published by  ASHRAE

## Business Plan 2016-17

This document articulates the *High Performing Buildings* business plan and the initiatives underway to attain its fiscal objectives.



*HPB* serves the objective of demonstrating to the engineering, architectural and building owner communities that, with sound design and commitment to appropriate building operation and maintenance procedures, buildings can deliver reduced operating costs, productive environments and meet sustainability objectives.

## **HPB Profile**

- Publishes case studies of today's best performing buildings based on efficiency and sustainability.
- Published four times per year in print and digital forms.
- All information is available free of charge on HPBmagazine.org. The website is organized by building sector for ease-of-use by building professionals.
- Recognized as an award-winning publication for its editorial content and promotion of sustainability.
- Webinar opportunities for suppliers to demonstrate “thought leadership” to sustainability decision makers.
- Redesigned newsletter for a 'digital-first' model. Latest editorial appears in the newsletter, followed by publishing in print.
- Website features online-only content that enhances the print product and also attracts thought leadership articles written by building professionals.
- 75,000 total circulation, including 13,000 non-members with principal activities of architecture, facility management, design-build.
- Total readership is estimated at 130,000 when considering reader responses about the number of people with whom they share their copy of HPB magazine.

## **Benefit**

*HPB* offers these benefits to ASHRAE:

- Provides a membership benefit that delivers engineering information unique in the market place;
- Positions ASHRAE as a leading resource for construction and operation of buildings that are sustainable.
- Increases ASHRAE influence in communities that professionally partner with ASHRAE by providing those communities with experiences that demonstrate how sound engineering practice translates to comfortable, energy efficient buildings with favorable returns on investment.
- Delivers contact information for non-member audiences (owners, architects, engineers, operators) that can be used for non-HPB related promotional and outreach efforts.

# Strategic Positioning

HPB offers Real Data for Real Buildings, a unique position in the market. The magazine's publishing strategy is to be graphically appealing, with descriptive text that effectively communicates real world relevance. This type of publication style brings ASHRAE to the attention of new demographics who do seek out highly technical engineering literature. This broadens the ASHRAE base.

**CASE STUDY CORPORATION HALL**

## Urban Challenge

BY PERRY HAUSMAN, P.E., MEMBER ASHRAE



**Front facade** facing the street in downtown Kalamazoo. This redevelopment of a neglected property now provides a pharmacy within walking distance to downtown residents.

**HOME TO AMERICA'S** first outdoor pedestrian shopping mall, Kalamazoo, Mich.'s downtown has persisted as a vital part of the city through three centuries. Now, the thriving district is home to shops, restaurants and urban residences. Its vibrancy made it the ideal location for a developer seeking to revitalize the neglected 137-year-old Corporation Hall by integrating modern technology with sustainable and energy-efficient design. Despite the challenges of a tight urban site and cold climate, the building team found innovative solutions to install a geothermal system, setting an example of energy efficiency in a historic and urban location.

Corporation Hall has served several uses over its history, including a fire station, the city's first City Hall, a library and a department store. By the late 2000s, the building was nearing the end of its useful life and was in need of a complete transformation. One of the primary challenges of the revitalization project was getting a historic building in a cold climate to perform with low and sustainable energy use. The solution involved installing a geothermal heating and cooling system beneath the building (as opposed to locating the system on adjacent property). This design allows heating to flow in and out of the building as needed and mitigates the need to install load equipment on the roof of the building.



**Rooftop view** featuring a vegetative roof and large sloped glass roof monitors to capture natural light and bring it deep into the public zones.

**CASE STUDY CORPORATION HALL**

entire building and is supplemented with the air system as a secondary heat source. This design was chosen because the low-temperature heat system maximizes the efficiency of the central station heat pump. The heat pump provides low-temperature heating water and chilled water using an earth-coupled heat exchanger. Paired together, the two systems complement each other.

Along with these systems are the condensing boilers used for secondary domestic water heat, redundant building heat and snow melt. The boiler-generated heating water loop is maintained at a 160°F supply temperature to satisfy a 140°F domestic water storage setpoint.

Domestic hot water is preheated with return heating water to provide cold return water to the boiler. The water is stored at 140°F to eliminate the possibility of growing bacteria such as Legionella in the tank.

The condensing boiler's efficiency increases inversely with return water temperature: colder water means higher efficiency. Pressure-independent control (PIC) valves continuously match heating and chilled water flow to the building's demand. They perform real-time balancing to maintain system performance at changing building loads. As a result, the variable speed pumps run no longer

**Energy Efficiency**  
Engineers on the project team developed an energy model for making informed design decisions, ultimately arriving at several strategies that

Seeing LEED Gold certification, the finished Corporation Hall building is mixed-use, housing a furniture and décor store, a financial advisory office, and a pharmacy on the lower levels, and two-story residential units on the second and third levels. Each apartment has access to a private rooftop terrace and a covered parking garage.

**Energy Efficiency**  
Engineers on the project team developed an energy model for making informed design decisions, ultimately arriving at several strategies that

**Figure 1 SOLAR THERMAL SYSTEM**



**Solar Thermal Panels:** Domestic water is preheated with solar thermal panels piped to a tube bundle inside the storage tank. The 131 ft<sup>2</sup> collector is sized to provide an annual energy benefit of 34,600 kWh.



Solar light tubes on the vegetative roof provide natural light deep into the building.

## ASHRAE's Business Decision for HPB

HPB provides ASHRAE members with a well-received membership benefit, helps members create and operate better performing buildings, promotes specification of products offering new technologies, and creates awareness of the ASHRAE brand to key demographics. The question is to what degree ASHRAE wishes to fund these benefits since revenue generated has been unable to cover all costs of publication.

## Background

ASHRAE's *HPB* magazine began publishing in December 2007 as part of ASHRAE's mission to promote a sustainable world. Its circulation includes more than 70,000 readers, including all ASHRAE Members. It also includes a supplemental audience of architects, facility managers and building owners for additional ASHRAE outreach.

*HPB* was part of a three-legged stool on which ASHRAE's early 21<sup>st</sup> century efforts rested:

Leg 1. *HPB* to provide successful experiences to practitioners, owners and operators

Leg 2. BEAP and BEMP to ensure a qualified work force for sustainable buildings

Leg 3. Building EQ to provide a tool to align design and performance.

**CASE STUDY** IOWA UTILITIES BOARD AND OFFICE OF CONSUMER ADVOCATE

# FROM DARKNESS TO LIGHT

## ENGAGING EMPLOYEES TO SAVE

BY SCOTT BOWMAN, P.E., MEMBER ASHRAE, AND GARY NAGLE, AIA

MOVING FROM A CAVE-LIKE WAREHOUSE to an environment filled with daylight represented a dramatic shift for employees of the Iowa Utilities Board and Office of Consumer Advocate (IUBOCA). Employees jumped on board with the energy-efficiency efforts, giving up comforts such as individual coffee makers, and opening and closing windows as needed to operate the natural ventilation system. An integrated design that maximizes passive strategies provides significant energy savings, but employee cooperation, especially involving plug load reduction, has proven key to reaching and maintaining performance goals.

The IUBOCA was created to house the agencies that regulate Iowa's utilities and represent utility consumers, and demonstrate what can be accomplished in the built environment with a commitment to fiscal and environmental stewardship. Funded not by tax dollars but by the utility industry, the IUBOCA is a far cry from the agencies' previous rented warehouse on the Des Moines River. A "perfect storm" involving the end of the lease, a supportive state administration and an aggressive bidding environment allowed the agencies to cost-effectively build their own facility, one that is an asset and an example. The net zero ready facility has received LEED Platinum certification and 100 Energy Star rating. It consumed 21.75 kWh/ft<sup>2</sup>-yr in 2014 (or 17.2 kWh/ft<sup>2</sup>-yr after factoring in rooftop photovoltaic energy production). A code-compliant similar office building would use nearly four times the energy.

### Back to Basics

The IUBOCA sits on an idyllic area at the southeast edge of the Iowa State Capitol complex. Its storm water management system is inspired by Iowa farm terraces and filters water from its 6-acre site and runoff from an adjacent 6 acres (Figure 1). Key components of the treatment train include pervious pavement, infiltration basins, bio-swales and a native prairie restoration. Additional connections to the historically natural landscape see the bluestem plants filling the entrance courtyard and a watergrass-inspired sculpture titled "Prairie Grass."

The building's south wing accommodates the IUB on two levels, while the north wing houses the OCA on the second level and provides common spaces on the ground level (including the hearing room, conference rooms and luncheon).

### BUILDINGS AT A GLANCE

Name: Iowa Utilities Board and Office of Consumer Advocate  
Location: Des Moines, Iowa  
Owner: Iowa Department of Administrative Services  
Principal Use: Office building  
Includes: Open offices, private offices, conference rooms, hearing rooms, records room, lobby  
Employees/Occupants: 83  
Design Occupancy: 103  
Percent Occupied: 82% (based on design), 100% (based on workdays)  
Gross Square Footage: 44,400  
Conditioned Space: 44,400  
Certifications: 2014 AIA COTE Top Ten Plus Award, 2014 ASHRAE Sustainability Award, National Green Building Award (GreenSource), 2012 AIA COTE Top Ten Green Projects, 2012 LEED Platinum Certification  
Total Cost: \$5.5 million  
Cost per Square Foot: \$213  
Substantial Completion/Occupancy: January 2015

Top: The use of artificial lighting—shown here illuminating the south wing at dusk—is restricted by daylight sensors and occupancy sensors throughout the IUB/OCA building. Artificial lighting at night and on weekends is only allowed if staff is working, and is limited to the occupied zone and emergency signs.  
Opposite: The second floor lobby—like all spaces in the IUB/OCA building—is naturally illuminated by daylight, which also drives an interior design punctuated at key locations with regionally harvested natural materials.

Summer 2015 HIGH PERFORMING BUILDINGS 7

## An Evolving Market

When *HPB* began publication three magazines occupied the "green building" market:  
Environmental Design and Construction (published by Business News Publishing)  
Sustainable Facility (published by Business News Publishing)  
Green Source (published by McGraw Hill)

USGBC Plus (published by USGBC) entered the space later.

The only remaining publication other than *HPB* is USGBC Plus. What occurred is that advertisers returned to their traditional media outlets.



Through insights gained from the ASHRAE advertising sales team, we have learned that investments in the publications that reach focused specifiers of products have been determined to deliver greater return. For example, readers of a “green building” publication could include a circulation that includes a base of readers wanting to specify air conditioning, another lighting, yet another landscaping and still another cleaning equipment and suppliers. The readership could include engineers, architects, owners, facility operations staff, or maintenance managers. Advertisers were not willing to invest in significant numbers of wasted circulation, that is, pay for circulation that had no or little influence in purchase of their products. Pages migrated back to such magazines as

- Illuminating Engineering*
- Architectural Record*
- Architectural Products*
- Building Design and Construction*
- Building Operating Management*
- Buildings*
- Engineered Systems*
- HPAC Engineering*
- ASHRAE Journal*

The obstacle faced by *HPB* as one of the last remaining “green building” magazines is that a manufacturer of products specified by an architect has a long standing history and likely an existing ad program with books in the architectural field, making a buy for *ASHRAE* unlikely. Similarly, *ASHRAE Journal* has that advantage with air-conditioning manufacturers.

CASE STUDY: THE RENWICK GALLERY OF THE SMITHSONIAN AMERICAN ART MUSEUM

John Gruber, Middle Fork, 2015  
The original vented ceiling was restored, revealing the intersection of a flat-awning that was installed in the 1970s to conceal HVAC ductwork.

Gallery Area Gallery

# PRESERVING A NATIONAL TREASURE

BY ROGER CHANG P.E., ASSOC. AIA, BEMP

**HOME TO THE SMITHSONIAN AMERICAN ART MUSEUM'S** arts and crafts program since 1972, the Renwick Gallery was built in 1859 as the original Corcoran Gallery of Art. It is a principal structure in the Smithsonian Institution portfolio, based on the era of construction and its historic significance as the first purpose-built art museum in America. The building was originally designed by James Renwick, Jr., the architect of the Smithsonian's "Castle" and St. Patrick's Cathedral in New York City. It is often referred to as the American Louvre, with many similarities to the Second Empire Style Tuileries Gallery of the Louvre in France. The building was at risk of being demolished in the 1980s to make room for a new government facility. First Lady Jacqueline Kennedy led a successful campaign to bring new stewardship to the facility, including a modernization to restore the building's use as a museum. The building was listed on the National Register of Historic Places on March 25, 1969, and was one of the first buildings of the modern historic preservation movement.

CASE STUDY: THE RENWICK GALLERY OF THE SMITHSONIAN AMERICAN ART MUSEUM



ABOVE Historic Photo (1861).  
LEFT Main Elevation: the building occupies a prominent site at the intersection of Pennsylvania Avenue and 17th St NW, only a block West of the White House and directly adjacent to the Blair House. Masonry was restored and 54 new windows were installed.

**F**ast forward to the 21st century and the building's comprehensive two-year renovation program, the first in 45 years, to address aging infrastructure, worn finishes, and align systems with today's standards and codes. The integrated design firm Westlake Reed Leskoski was selected as architect engineer (2012), and Conaigi Construction Co., Inc., as general contractor (2014), to carefully develop an approach to ensure the building would reach both old and new audiences for the next 50 years, efficiently, sustainably, and openly. On Nov. 13, 2015, the museum opened again to the public, with an innovative exhibit, "Wonder," which has generated significant interest in the intersection of art and historic architecture. The inscription on the building's front entrance, "Dedicated to Art," now holds renewed meaning: the art and science of design and construction now comes together more than ever, to ensure the sustainability of a cherished building for another generation.

**Resource Efficiency: Stewardship of the Collection**  
The project incorporates systems designed to provide an ASHRAE Class A museum environment, per the *ASHRAE Handbook—HVAC Applications* (Chapter 23) and Smithsonian's standard of 72 ±4°F and 45% RH ±3% RH, developed based on significant research over the past decade to best balance efficiency and control with a diverse collection and building stock.



## ***HPB* Unique Value Proposition**

The editorial mission of *HPB* is to showcase buildings that achieve measured energy efficiency targets while satisfying comfort requirements. *HPB*

Supports the ASHRAE Mission – To advance the arts and sciences of heating, ventilating, air conditioning and refrigeration and related human factors to serve the evolving needs of the general public and ASHRAE members.

And the ASHRAE Vision – ASHRAE will be the global leader, the foremost source of technical and educational information, and the primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.

*HPB* effectively does this by reaching inside the ASHRAE membership and also to other stakeholders in the building industry. External reach through products that offer perceived value outside the ASHRAE membership is unusual for ASHRAE and a distinguishing characteristic of the magazine.

More broadly, *HPB*'s value proposition in the market is that it provides actual performance data, describing how buildings perform after design and providing lessons learned as design moves to operation. This is a value proposition unique in the market at time of launch and which continues today.

## **Value Other than Advertising**

While advertising dollars may have fled the “green building” magazine market that does not mean there are no other benefits that ASHRAE accrues from the *HPB* reach in the “green building” market.

Reaching architects and building owners and operators is a key tenant of the integrated building design approach. Demonstration to building owners that “green buildings” are both achievable and sound investments is crucial to driving the enlightened purchasing decisions when owners commission design work, approve the construction of building envelopes, and purchase equipment. To borrow from an advertising line from another industry, “An educated consumer is our best customer.”

Moving the broad building community to actions that support sustainability is the role of ASHRAE in serving its members' commercial interests and more importantly fulfilling the Society's not for profit mission.

Plus, *HPB* offers ASHRAE members with content that is unique in the building field.

## Brand Positioning and Advertising Promotion

### At Launch

*HPB* was originally positioned to be perceived as a non-engineering publication. This was accomplished through a graphic centric design and descriptive rather than highly technical text. The ASHRAE brand association was minimized to minimize the perception of *HPB* as an engineering publication by and for engineers.

This approach won *HPB* significant acceptance in the architectural and building operating management fields as evidenced by circulation statements.

### Current

With advertising pages failing to meet budgeted expectations, beginning in 2015-16, ASHRAE modified brand positioning:

**Association with ASHRAE:** *HPB* is well received by virtually all readers in its market. Its graphical presentation, descriptive text and delivery of performance data is highly valued. In order to enable the ASHRAE brand to benefit from this high acceptance, the ASHRAE logo was added to the cover of *HPB* and given greater emphasis on the publisher page. ASHRAE is able to benefit from a halo effect and achieve greater awareness of its activities among partner professionals.

**Packaged Sales with ASHRAE:** Beginning with the 2017 calendar year, ASHRAE raised rates for *HPB* to be equal to those for *ASHRAE Journal* (roughly a 50% increase.) While this might seem extreme considering difficulties *HPB* experienced attracting advertising the logic is sound:

- *HPB* reaches the entire ASHRAE circulation (albeit in digital form) justifying alignment with *ASHRAE Journal* rates.
- While digital copies are generally perceived to have less value than print by advertisers this negative is counterbalanced by *HPB*'s additional 20,000 reader circulation in the architectural and operating management fields.
- *HPB* is portrayed as being especially valuable to companies promoting highly energy efficient products because when reading *HPB*, ASHRAE members (along with their professional partner communities) are wearing their "sustainability hats" when reading the magazine.

Whether this approach has succeeded will be evaluated at the July 2018 meeting of the advertising sales and publishing teams.

## Product Modifications and Enhancements

To improve fiscal performance, several product changes have been introduced, some to reduce cost and others to add revenue streams.

## Cost Reduction

**Eliminate non-essential promotional expenses:** For *ASHRAE Journal* with its \$3 million plus in advertising revenue, ASHRAE employs several services to support the sales effort. Some of these same services were used in support of *HPB*, specifically agency promotions and competitive publication tracking. After analysis of sales needs, these non-essential support services (competitive analysis and advertising to advertising agencies) were discontinued.

**Paper costs:** At launch the paper selected was of a very high grade for color display and with high sustainability index. A different grade is now used which offers close to the same advantages at significantly less cost.

**Circulation cleansing;** Stray controlled (non-ASHRAE member) circulation not specifically within the architectural or building operations communities was eliminated to reduce printing cost and postage costs.

## Building Digital Portfolio

In 2016 ASHRAE began to rebuild and strengthen the *HPB* digital product folio, following a strategy to build web site traffic to increase digital ad inventory and to offer new digital products. The growth of *HPB* revenue has been on the digital side, and *HPB* allows an outlet for digital advertising demand that cannot be met through *ASHRAE Journal* and *ASHRAE.org*.

**Addition of web-only content to *HPB* website:** Web-only content has been added to *HPBmagazine.org*. This content is staff prepared and can include interviews with authors, news or additional content associated with articles that was not published in the print/digital editions of the magazine. Also, editors are asking experts throughout the industry to write thought leadership articles. The purpose is to increase “stickiness” of the site and increase return visits. Both help deliver advertising inventory.

**Redesign of *HPB* Newsletter:** Two major editorial changes were made to the *HPB* newsletter along with a redesign. First, the web-only content is teased in the newsletter, which is emailed monthly to *HPB* subscribers. Second, articles appearing in the print/digital editions of *HPB* first appear in the newsletter, increasing newsletter value with the aim of increasing open rates over the long term and therefore enhancing the ability to serve ads and help drive more traffic to the website. The average readership in 2016 was 68,000 recipients, 16,000 unique opens and a 23% unique open rate.

**Launch of Webinars.** Webinars are the preferred advertising medium in today’s market for lead generation. Webinars enable companies, especially larger firms, to display thought leadership through the presentation of technical content rather than the promotional messages that is the strategy employed in brand awareness advertising. In 2016 *HPB* began offering supplier webinars to tap into this market. Sales are gaining strength, offering advertisers the opportunity to reach beyond the traditional HVAC&R engineering market to architects and owners/operators and providing relief for sold out *ASHRAE Journal* webinar opportunities. The sales strategy is to also package webinars with print/digital advertising sales.

## Specific 2016-17 Actions to Improve Fiscal Performance

- Rate Increase Nov 1, 2016
  - Display advertising rates increased 22%.
  - Online advertising rates increase 10%.
  - Webinar rates increase 25%.
- Branding Program with ASHRAE Journal
  - ASHRAE Journal advertisers now able to count HPB advertisements as part of its ASHRAE Journal program. This offers reduced rates per advertisement purchased and generates more revenue to ASHRAE through greater advertising programs per account.
  - ASHRAE Media's publisher representatives incentivized to sell HPB advertising as part of its commission bonus program.
- Circulation
  - Circulation by demographic category being more closely monitored to improve renewal rates and in target categories. Current nonmember circulation levels are:
    - i. Architects: 3,298
    - ii. Facility Managers: 4,769
    - iii. Designers: 10,198
    - iv. Engineers: 22,289
    - v. Executives: 22,211
  - Circulation by demographic category for nonmembers only are:
    - i. Architects: 243
    - ii. Facility Managers: 440
    - iii. Designers: 1,294
    - iv. Engineers: 3,274
    - v. Executives: 2,433
  - Objective is to maintain above targets with 90% in first year subscription confirmation. Currently, 68 of the circulation is in the first-year category.
- Webinars
  - Along with the 25% rate increase referenced above in Item A, HPB webinars will be offered monthly to advertisers.
  - Webinars were introduced in last half of 2016 and will continued monthly in 2017.
- Promotions
  - Media Kit bundled with ASHRAE opportunities in promotions to emphasize that HPB reaches all ASHRAE members.
- Content
  - Increase in number of online articles through use of editorial staff to increase website traffic and improve advertising desirability and ad inventory.

## Looking Forward: *HPB* Business Model Strategy

Opportunities to generate revenue and maintain or lower cost are constantly reviewed for *HPB*. The current strategy is being employed:

- 1) Continue increased ASHRAE branding to enable ASHRAE to benefit from *HPB* critical acclaim.
- 2) Continue packaging of *HPB* advertising with ASHRAE Journal with assessment of success in July 2017.
- 3) Continue improvements to digital assets to drive expansion of digital ad inventory.
- 4) Continue to improve digital assets to increase web and newsletter readerships.
- 5) Continue sales emphasis on supplier webinar opportunities with packages including print/digital *HPB* issue advertising.

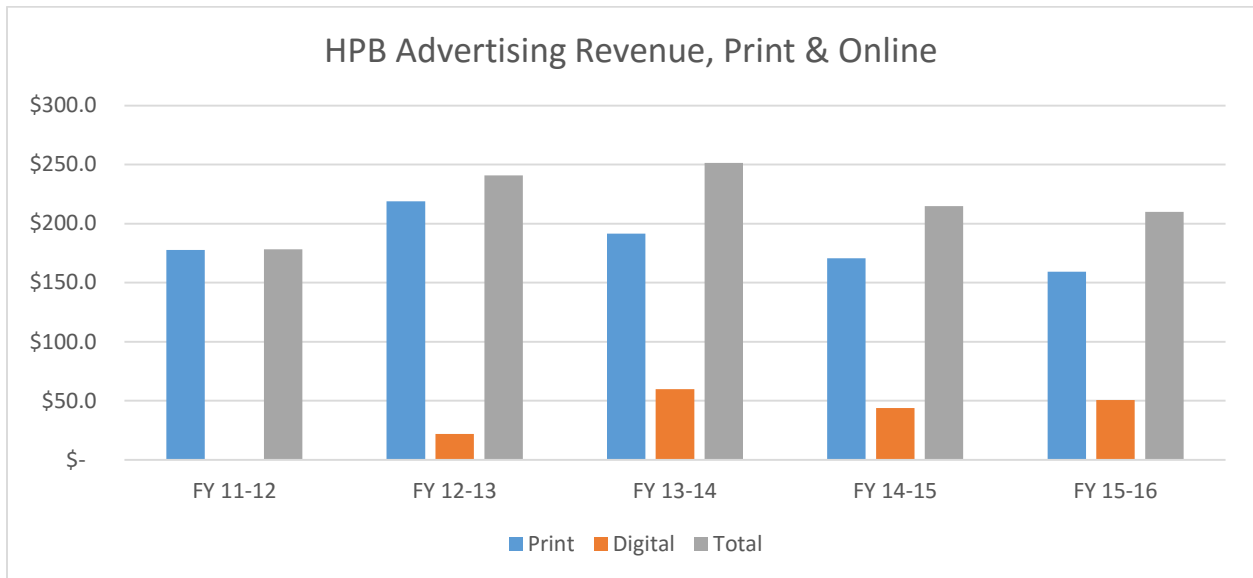
If ASHRAE determines the member benefit, prestige of publication and key demographic outreach cannot be justified, the annual investment in *HPB* can be lessened short of ceasing publication entirely.

- 1) Change the quarterly frequency of the print publication to semi-annual.
- 2) Include the semi-annual editions of *HPB* as bound in or standalone inserts mailed with *ASHRAE Journal* (June and December issues).
- 3) Eliminate “flip-book” *HPB* magazine and instead continue monthly newsletter publication with articles published on the newsletter cycle and immediate posting to the website.

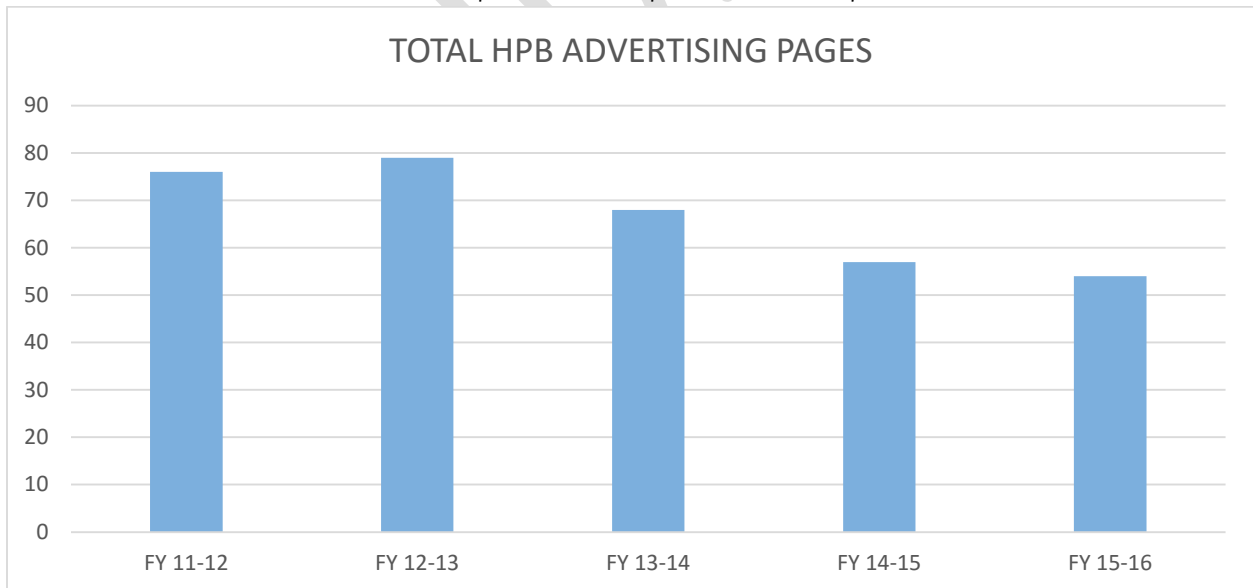
This alternate strategy could be employed beginning in January 2018 if ASHRAE chooses to lessen the investment. Expenses would be reduced annually by approximately 40% with revenue reduced by approximately 50%. Pursuing this strategy would lessen the annual investment to approximately \$225,000 (compared to current investment of approximately \$370,000). The net performance, however, is estimated to be unchanged.

To be considered is the diminished impact of being a standalone publication and elimination of non-member circulation impacting ASHRAE industry influence. (While nonmember circulation could still be offered, there would be little interest since *HPB* would be packaged with HVAC&R content).

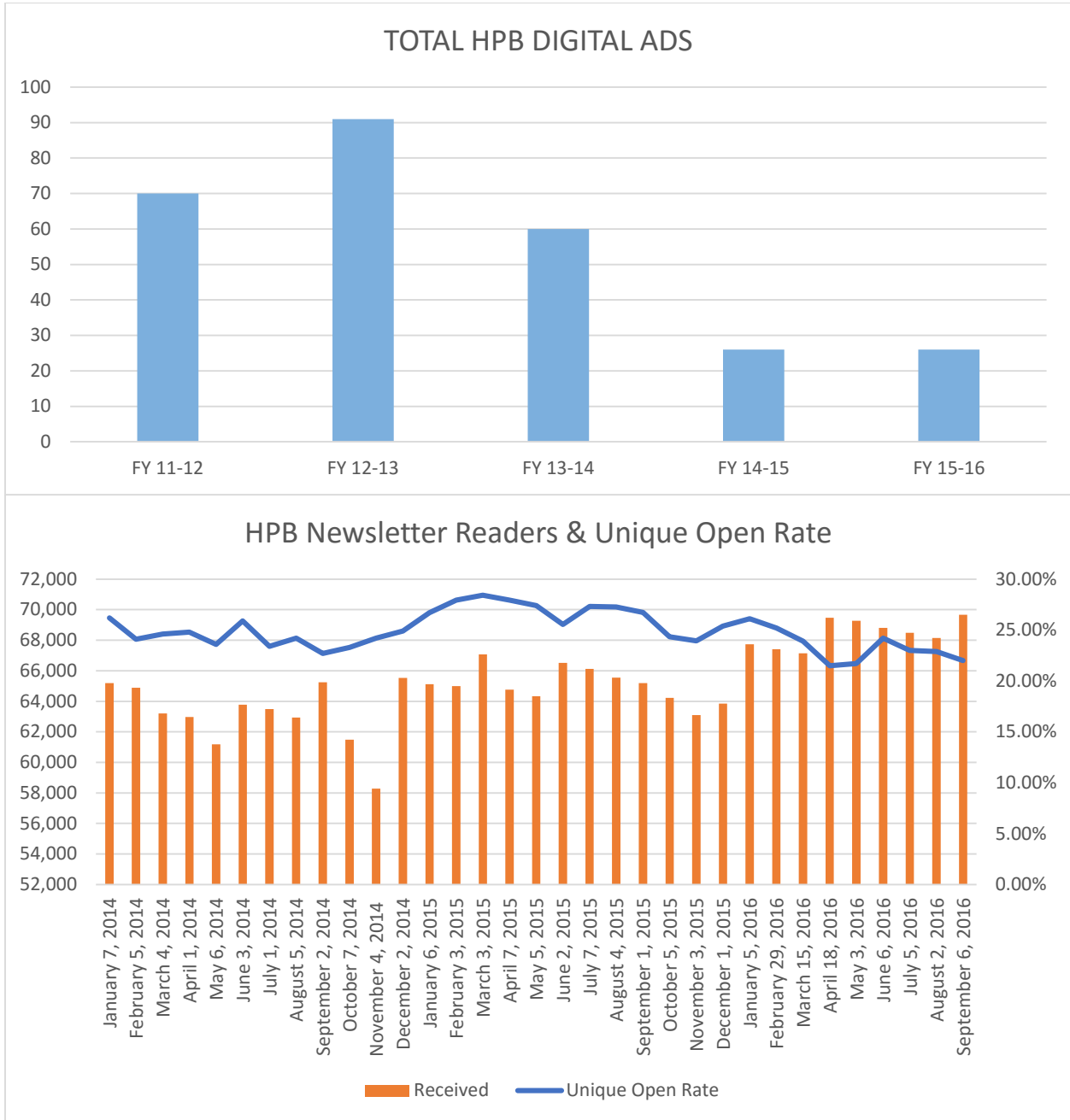
## Fiscal Performance & Budget



	Print	Digital	Total
FY 11-12	\$ 177.8	\$ 0.4	\$ 178.2
FY 12-13	\$ 219.0	\$ 21.8	\$ 240.8
FY 13-14	\$ 191.5	\$ 59.9	\$ 251.4
FY 14-15	\$ 170.8	\$ 44.0	\$ 214.8
FY 15-16	\$ 159.3	\$ 50.6	\$ 209.9

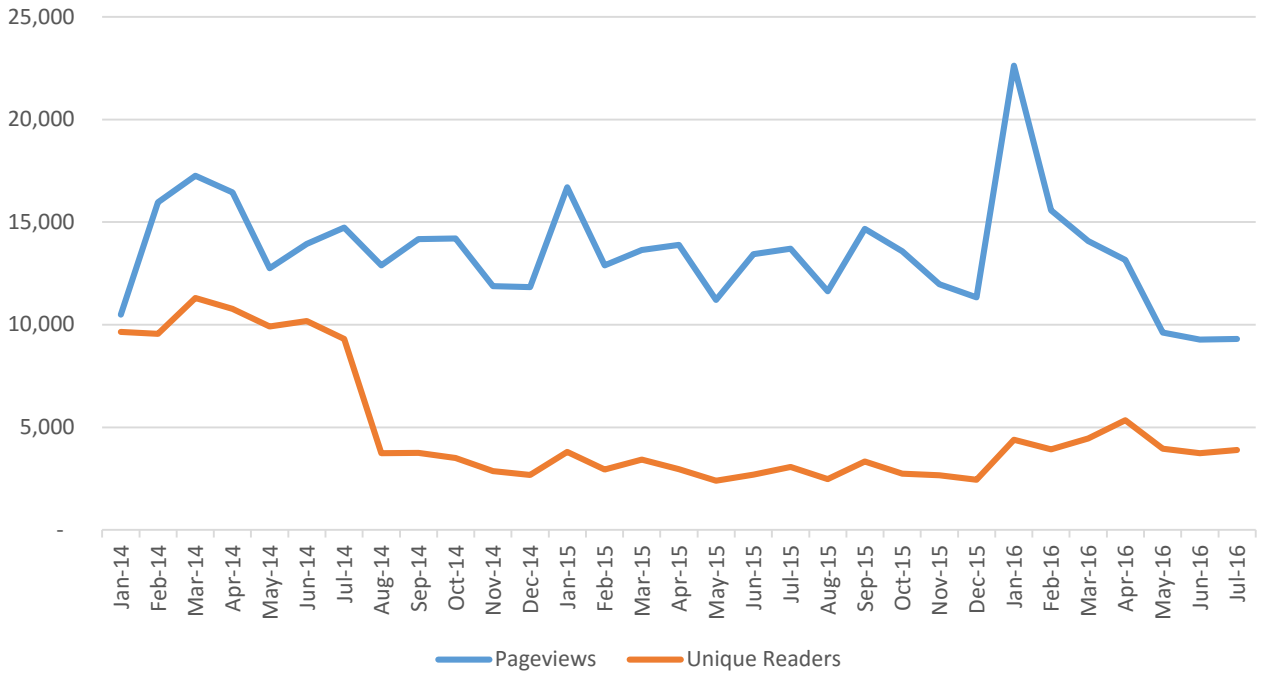


# Web Site Statistics

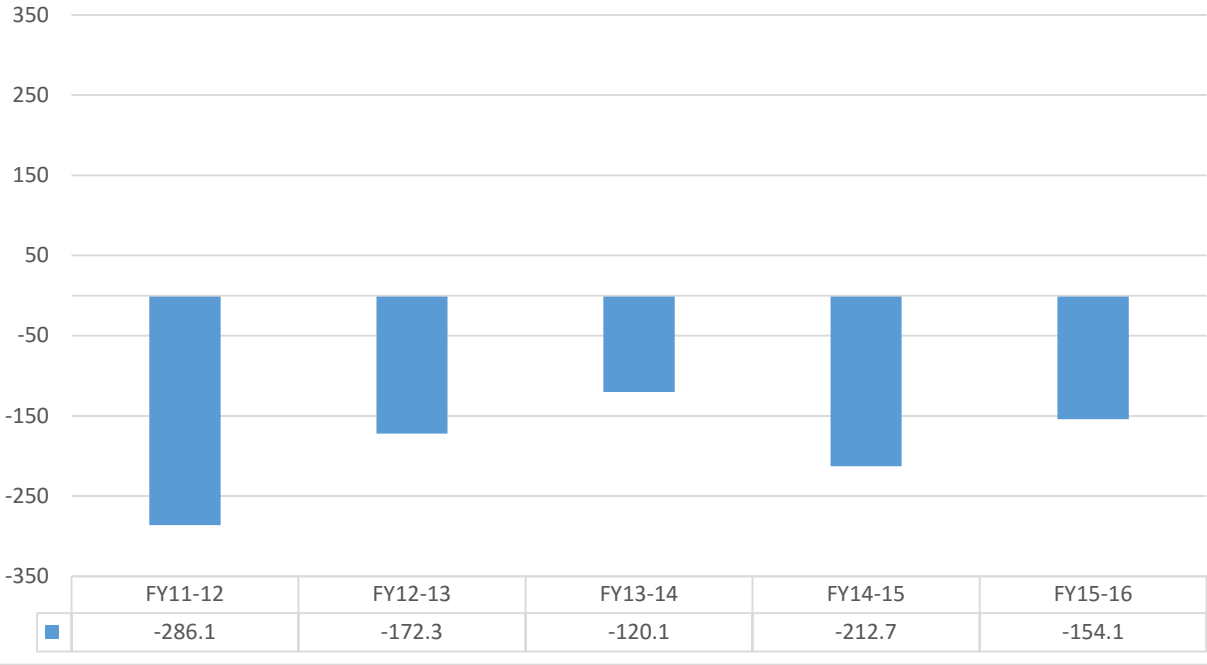




### HPBmagazine.org Pageviews & Unique Readers



### HPB Surplus/Deficit Before Overhead



## HPB Advertising Messages

### Corporate Purchasing Power

\$20 M or more .....	<b>40%</b>
\$5 M to \$20 M .....	<b>23%</b>
Less than \$5 M.....	<b>27%</b>

### Personal Purchasing Power

\$5 M or more .....	<b>51%</b>
\$1 M to \$5 M .....	<b>26%</b>
Less than \$1 M.....	<b>23%</b>



of readers take time out to discuss an advertisement/article with their colleagues.<sup>1</sup>



of readers rate High Performing Buildings magazine overall as excellent or good.<sup>1</sup>



of readers rate High Performing Buildings as a "must read" or containing a good amount of information.<sup>1</sup>

## Overall Reader Impressions<sup>1</sup>

Excellent Overall Quality .....	<b>96%</b>
Good Presentation of information.....	<b>96%</b>
Excellent quality of writing.....	<b>95%</b>
Valuable selection of topics.....	<b>89%</b>
Knowledgeable & Credible Authors ...	<b>85%</b>
Practical Information & Solutions .....	<b>83%</b>
Concise & Easy to Read.....	<b>82%</b>
Helpful to Me in My Work .....	<b>76%</b>
Publication I Regularly Save for Future Reference.....	<b>67%</b>



**31 Minutes**

# HPB Reaches 131,532 Sustainable Building Decision-Makers in Print and Online<sup>1</sup>



of HPB readers have purchasing power<sup>2</sup>



of HPB readers take action on advertisements<sup>1</sup>

## Do **YOU SHARE** your copy of HPB magazine?

2 people on average read each print issue of HPB.<sup>1</sup>

### Total Buyers Reached Through HPB<sup>1</sup>

103,600	.....	HVAC Systems & Equipment
87,500	....	Sustainable Design Systems & Services
80,700	.....	Lighting
75,400	.....	Building Envelope & Materials
75,400	.....	Sensors & Monitors
71,000	.....	Building Automation
72,000	.....	Water/Hydronic Systems
61,000	.....	Fire & Smoke Control
51,100	.....	Acoustics
45,700	.....	Design Tools
33,600	.....	Building Security
28,200	.....	Furnishings



“I like how the articles have figures and highlight detail notes, lessons learned, energy at a glance, key sustainable features, etc.”<sup>3</sup>

– *Architect, architectural firm*



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## *Science and Technology for the Built Environment* Publisher's Report

Presented by Alexa Flood, Managing Editor  
Prepared by Danielle Adamowitz, Editorial Assistant



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## EDITORIAL

**Managing Editor:** Alexa Flood (alexaflood@taylorandfrancis.com)

**Publisher:** Lindsay Allen (lindsay.allen@taylorandfrancis.com)

### EXECUTIVE SUMMARY

This report details the current status of *Science and Technology for the Built Environment* in terms of circulation and readership, Impact Factor, and other measures. The following is a summary of the key updates and achievements for the journal. Further details can be found in the relevant section or Appendix.

This table shows the relative percentages of citations, contributions, and subscriptions from the major regional markets. Subscription numbers are from 2016, and the contribution and citation figures reflect 2011-2016.

Region	% of Subscriptions	Region	% of Contributions	Region	% of Citations
Caribbean	1%	Africa	1%	Africa	1.5%
Asia	30%	Asia	22%	Asia	18%
Australasia	2%	Australasia	1%	Australasia	1.5%
Europe	26%	Europe	30%	Europe	36%
North America	35%	North America	45%	North America	39%
South America	1%	South America	1%	South America	4%
Middle East	5%				

- As of December 31, 2016, “Fault-tolerant optimal control of a building HVAC system,” by Sorin C. Bengea, Pengfei Li, Soumik Sarkar, Sergey Vichik, Veronica Adetola, Keunmo Kang, Teems Lovett, Francesco Leonardi, and Anthony D. Kelman, from Volume 21, Issue 6, is the most-downloaded article with **959** full-text downloads for the year.
- The journal’s 2015 Impact Factor is **0.871**, with a ranking of 37/61 in Construction & Building Technology, 86/132 in Engineering, Mechanical, and 43/58 in Thermodynamics. Its 2015 5-year Impact Factor is **1.145**.
- “Development of Spiral Heat Source Model for Novel Pile Ground Heat Exchangers,” by Yi Man, Hongxing Yang, Nairen Diao, Ping Cui, Lin Lu, and Zhaohong Fang, from Volume 17, Issue 6, is the most cited article, published between 2011 and 2016, with **26** citations.



## CIRCULATION

The table below shows the number of institutions with access to the journal through various means. The following sections explain each circulation type in detail.

Subscription Type	2015 VOL. 21 (1-4)	2015 VOL. 21 (5-8)	2016 VOL. 22(1-4)	2016 VOL. 22 (5-8)
Core Subscriptions to <i>Science and Technology for the Built Environment</i>	94		81	93
Taylor & Francis online sales agreements	2,271		2,280	
ASHRAE Members (print + online; online-only; sponsored institutions)	172	135	116	125
EBSCO Usage	1,091		data not yet available	

### A. Core Subscriptions and Breakdown by Region and Country

Subscription Type	2015	2016
Institutional	92	91
Individual	2	2

As of December 31, 2016, *Science and Technology for the Built Environment* had **91** institutional subscribers. The journal ended 2015 with a total of **92** institutional subscribers. The table below shows regional comparison of 2015-2016 subscriptions, and the chart on the following page shows a 2016 regional breakdown.

Region	Country	2015	2016
	Trinidad, Tobago	1	1
<b>Caribbean Total</b>		<b>1</b>	<b>1</b>
	Brazil	-	1
<b>South America Total</b>		<b>-</b>	<b>1</b>
	New Zealand	2	2
<b>Australasia Total</b>		<b>2</b>	<b>2</b>
	Utd. Arab Emir.	2	3
	Israel	1	1
	Jordan	1	1
	Kuwait	1	-
<b>Middle East Total</b>		<b>5</b>	<b>5</b>
	China	11	12
	Hong Kong	1	1
	India	2	1
	Japan	6	6
	South Korea	4	4
	Mongolia	1	1



ASHRAE  
&  
United Nations Environment Programme



## **2017-2018 Work Plan of ASHRAE-UNEP Cooperation Agreement**

ASHRAE and UNEP 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. The agreement calls for establishing a biennial work plan to address the specific technical priorities and emerging issues. This work plan is the fourth biennial joint work plan, under ASHRAE-UNEP Cooperation Agreement, and is developed through the joint Liaison Committee established by ASHRAE and UNEP to manage the implementation of the cooperation between both parties.

**The 2017-2018 Work Plan** is thematically designed under the theme of “**Working beyond High-GWP Refrigerants**” which is one of the most technological and environmental emerging issues in particular after the Kigali Amendment to the Montreal Protocol. The new work plan is designed to address two main goals in relation to the theme which are:

- 1. Advocacy and Knowledge Sharing**
- 2. Training, Education and Practice**

Under each goal there are number of programs, initiatives and activities that will be jointly implemented during the timeframe of the work plan i.e. 2017-2018. The following describes the specific programs, action items and activities associated with each goal.



## Goal 1: Advocacy and Knowledge Sharing

### Goal 1/Action 1: Global Conferences and Events

UNEP & ASHRAE will work together organizing joint global events for advocating, mainly amongst stakeholders in developing countries, latest technological development in relation to moving away from high-GWP alternatives in different refrigeration and air-conditioning sectors.

#### Activity #1:

##### **International Conference on Sustainable Refrigeration Technologies for Marine and Off-Shore Fisheries Sectors**

- Date/Venue: Bangkok, Thailand 6-8 April 2017
- Action items: Technical and Organizing committees established and managing the event

#### Activity #2:

##### **Side events at 2017 MOP/OEWGs & ASHRAE events**

- Date/Venue: OEWG-39 in Bangkok 11-14 July 2017 & MOP-29 in Montreal Nov 2017
- Action items: Liaison Committee to suggest themes and speakers as well as structure of the side events

#### Activity #3:

##### **International Conference on Feasible Low-GWP Alternatives for Developing Economies *(Tentative title)***

- Date/Venue: Spring 2018 Dubai, UAE *(To be confirmed)*
- Action items: Establish Technical Team to manage the event

### Goal 1/Action 2: Refrigerants Awareness Package

UNEP & ASHRAE will develop an Awareness Package for advocating knowledge and development associated with the alternative refrigerants and their policies and standardization.

#### Activity #1:

##### **Design a Series of seminars for the use by ASHRAE chapters and UNEP regional networks about refrigerants designation, classifications, safety, selection, policies and responsible use.**

- Action items: Liaison Committee to develop the package content, suggested list of speakers and outline of the technical materials to be offered at the seminars

**Activity #2:**

**Design a Series of dedicated Webinars about latest update of refrigerants designation and flammability standards.**

- **Action items:** Liaison Committee to suggest a program for the Webinars including topic of each session, suggested speakers as well as dates/timing

**Activity #3:**

**Develop and update joint Factsheets and Technical Briefs for policy makers and technical stakeholders**

- **Action items:** Update regularly the “Refrigerants Classification and Designation” factsheet, develop new technical factsheets as well as develop briefing papers for policy-makers about technological and standards update. The Liaison Committee to discuss and conclude on the topics of the factsheets and briefing papers.

**Goal 1/Action 3: Low-GWP Innovation Award Program**

UNEP & ASHRAE to cooperate in establishing an international Award Program for promoting the innovation designs, research and practices of low-GWP alternatives and technologies.

**Activity #1:**

**Establish Joint Committee to manage the Award Program**

- **Action items:** The Liaison Committee to establish the Joint Award Committee with tasks of:
  - A. Developing terms of reference for three award categories:
    1. Low-GWP Innovative Design Award
    2. Students Research Award
    3. Field Practice Award
  - B. Suggest the Awards and number of awarded individuals for each category
  - C. Manage the applications and act as Jury for the Award Program

**Activity #2:**

**Outreach campaign for ASHRAE-UNEP Low-GWP Innovation Award Program**

- **Action items:**
  - A. Develop campaign to promote for the Joint Award Program including leaflets, web-Ads, Webinars and brief sessions at major events.
  - B. Organize high-level Awarding Ceremonial Sessions at margins of Montreal Protocol Meeting of Parties.

## Goal 1/Action 4: Issues Related to Buildings Sector

UNEP & ASHRAE to cooperate in exploring joint activities and programs related to the Buildings Sector in conjunction with the theme of the work plan and with focus on the following areas:

- A. Energy Efficiency in Buildings
  - B. Indoor Environmental Quality (IEQ)
  - C. Buildings Codes and Standards
- Action items:
- A. The Liaison Committee will suggest products and activities that address the above three areas benefiting of ASHRAE and UNEP existing relevant programs
  - B. Present the proposal to the ASHRAE-UNEP Annual Coordination Meeting (April-2017) for concluding on the specific action items and fiscal impacts

## Goal 2: Training, Education and Practice

### Goal 2/Action 1: Online Training Program on Refrigerants

ASHRAE and UNEP to cooperate in developing and outreaching an [Online Training Courses on Refrigerants](#) and make it accessible to different stakeholders around the globe

#### Activity #1:

##### Development of two (2) online courses:

- **Course-A (Refrigerant Literacy):** For basic understanding of policy makers, facility managers and non-specialists on refrigerants main characteristics, uses and basic sound management needs.
  - **Course-B (Sound Management of Refrigerants):** For detailed training for RSS specialists on the sound and safe practices of handling and managing refrigerants during installation, servicing and disposing of refrigeration and air-conditioning applications.
- Action items:
- UNEP and ASHRAE to engage in contracting arrangements for the development of the two (2) courses including establishing joint working team, consultancy contracts for the development of the courses, review of the courses content during the development and finalize the online platform and make ready for the launch
  - UNEP and ASHRAE to Launch the courses at margins of ASHRAE and UNEP international events

**Activity #2:**

**Management and outreach the online courses**

- Action items: UNEP and ASHRAE to design an outreach campaign to promote the use of the courses by different stakeholders around the globe and in particular in developing countries. This will include the management of the online platform during 2017-2018 as well as compiling feedback on the courses.

**Goal 2/Action 2: Contemporary Learning for Universities**

ASHRAE and UNEP to cooperate in promoting the research and education activities related to Low-GWP alternatives and technologies at universities and institutes

**Activity #1:**

**Promote the research activities related to low-GWP alternatives and technologies through ASHRAE chapters and sections at Universities and Institutes**

- Action items:
  - Liaison Committee to develop a Generic Seminar on research opportunities and priorities related to low-GWP alternatives and technologies to be used by ASHRAE branches and sections at Universities and Institutes.
  - Liaison Committee to organize remote orientation sessions on the use of the Generic Seminar

**Activity #2:**

**Promote the introduction and use of UNEP Engineering Under-graduates Course on Refrigerants Management through ASHRAE Students branches**

- Action items:
  - Liaison Committee to develop a Quick Guide for the use of UNEP Course by engineering colleges and universities.
  - Liaison Committee to organize orientation sessions, remotely and in margins of relevant ASHRAE or UNEP functions, on the use of the Quick Guide
  - UNEP to follow-up on the introduction of the course and link interested universities with the respective National Ozone units (NOUs)

## Goal 2/Action 3: RAC Plants Assessment Program

ASHRAE and UNEP to cooperate in developing an Assessment Program on the Responsible Use of Refrigerants by RAC Plants

### Activity #1:

**Development of the Responsible Use of Refrigerant Assessment program which should include:**

- A. Refrigerant Containment Practices
- B. Energy Saving Practices
- C. Management and Operation Practices (logging, record keeping, etc.)

- **Action items:**

- Establish working team of experts for the development of the assessment program including the Assessment requirements, checklists and resources to be used by practitioners
- Review and finalize the assessment program including testing and piloting the program

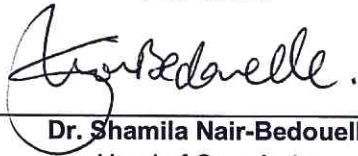
### Activity #2:

**Manage and outreach the use of the Certification Program**

- **Action items:**

- Suggest an operational model for managing the Assessment Program
- Liaison Committee to develop short support tools about the Assessment Program including leaflets, Web-Ads and through means of mass-communication
- Liaison Committee to organize orientation Webinars and Seminars, in margins of relevant ASHRAE or UNEP functions, on the use of the Assessment Program

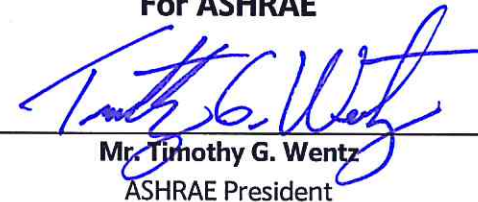
**For UNEP**



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**Dr. Shamila Nair-Bedouelle**  
Head of OzonAction

**For ASHRAE**



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**Mr. Timothy G. Wentz**  
ASHRAE President

## 2016-2017

First Name	Last Name	Email	PEC member
Walid	Chakroun	wchakroun@gmail.com	Chair
Edward	Tsui	Edward.tsui@intelligent-net.com	Vice Chair
Mark	Fly	mfly@aaon.com	Member/Director
William	McQuade	william.f.mcquade@jci.com	Member/Director
Michael	Schwedler	mschwedler@trane.com	Member/Director
Roger	Jones	rogerkentjones@verizon.net; rjones@emstec.com	Member/Director
Chee Sheng	Ow	iodised@gmail.com	Member/Past Certification
Heather	Platt	hplatt@mazzetti.com	Member/Past ECC
Florentino	Mendez	tinomendez@cox.net	Member/Past Handbook
John	Nix	nix4055@gmail.com	Member/Past PDC
Frank	Mills	famills@hotmail.co.uk; famills@low-carbon-design.com	Member/Past Publications
Mohammad	Hosni	hosni@ksu.edu	Member at Large
Richard	Rooley	richard@rooley.com	Member at Large
Richard	Rose	richr@mticontrols.com	Certification Chair
Cameron	Labunski	cameronl@tgce.com	Certification Vice Chair
Steven	Faulkner	slfaulkn@southernco.com	ECC Chair
Heather	Schopplein	hschopplein@gmail.com	ECC Vice Chair
Forrest	Yount	forrest.yount@carrier.utc.com	HB Chair
David	Yuill	dyuill@unl.edu	HB Vice Chair
Randy	Schrecengost	schrecengostrand@stanleygroup.com	Historical Chair
Kent	Anderson	M_Kent_Anderson@att.net	Historical Vice Chair
James	Bochat	jim.bochat@cxconcepts.com	PDC Chair
Kay	Thrasher	kay@townsend-engineering.com	PDC Vice Chair/Planning
Charles	Henck	chenck@wrallp.com	PDC Vice Chair/Operations
Jin Jin	Huang	HUANGJI@coned.com	Publications Chair
Kimball	Ferguson	ferggie4011@gmail.com	Publications Vice Chair
Steve	Comstock	comstock@ashrae.org	Staff Liaison

<b>Subcommittees 2015-2016</b>			
	<b>Subcommittee</b>	<b>Vote</b>	<b>Meeting Date &amp; Time</b>
<b>Fiscal SC</b>			
<b>Monday - 2:00pm-3:30pm</b>			
1	Mark Fly, Chair	yes	mfly@aaon.com
2	Rich Rose	yes	richr@mticontrols.com
3	Steven Faulkner	yes	sfaulkn@southernco.com
4	Forrest Yount	yes	forrest.yount@carrier.utc.com
5	Randy Schrecengost	yes	schrecengostrandy@stanleygroup.com
6	James Bochat	yes	jim.bochat@cxconcepts.com
7	Jin Jin Huang	yes	huangji@coned.com
8	Walid Chakroun	yes	wchakroun@gmail.com
9	Mo Hosni	yes	hosni@ksu.edu
10	Heather Platt	yes	hplatt@mazzetti.com
11	Steve Comstock	no	comstock@ashrae.org
<b>Functional SC</b>			
<b>Monday - 3:30pm-5:00pm</b>			
1	Michael Schwedler, Chair	yes	mschwedler@trane.com
2	Roger Jones	yes	rogerkentjones@verizon.net; rjones@emstec.com
3	C S Ow	yes	iodised@gmail.com
4	Florentino Mendez	yes	tinomendez@cox.net
5	John Nix	yes	nix4055@gmail.com
6	Frank Mills	yes	famills@hotmail.co.uk; famills@low-carbon design.com
7	Richard Rooley	yes	richard@rooley.com
8	Walid Chakroun	yes	wchakroun@gmail.com
9	Steve Comstock	no	comstock@ashrae.org
<b>Journal Advtg Sales SC</b>			
<b>Sunday - 7:00am-8:30am</b>			
1	Walid Chakroun, Chair	yes	wchakroun@gmail.com
2	Mark Fly	yes	mfly@aaon.com
3	Michael Schwedler,	yes	mschwedler@trane.com
4	Jin Jin Huang	yes	huangji@coned.com
5	Steve Comstock	no	comstock@ashrae.org
<b>eLearning SC</b>			
<b>Saturday - 1:30pm-3:00pm</b>			
1	Walid Chakroun, Chair	yes	wchakroun@gmail.com
2	Edward Tsui	yes	Edward.tsui@intelligent-net.com
3	James Bochat	yes	jim.bochat@cxconcepts.com
4	Jin Jin Huang	yes	huangji@coned.com
5	Bill McQuade	yes	william.f.mcquade@jci.com
6	Steve Comstock	no	comstock@ashrae.org
<b>Research Journal SC</b>			
<b>Monday - 11:00am-12:00pm</b>			
1	Walid Chakroun, Chair	yes	wchakroun@gmail.com
2	Edward Tsui	yes	Edward.tsui@intelligent-net.com
3	Eckhard Groll	yes	groll@purdue.edu
4	David Arnold	yes	d.arnold@tbanda.com
5	Reinhard Radermacher	no	raderm@umd.edu
6	Steve Comstock	no	comstock@ashrae.org
7	Mark Owen	no	mowen@ashrae.org

**TO:** Jim Vallort, **Technology Council Chair**  
 Claire Ramspeck, Technology Council Staff Liaison  
**FROM:** Mick Schwedler, PEC Functional Planning Subcommittee Chair  
**DATE:** December 5, 2016  
**SUBJECT:** PEC Recommendations for O&M Initiatives to Support ASHRAE’s New Strategic Plan

\*\*\*\*\*  
 PEC assigned PEC’s Functional Planning subcommittee MBO# 5, A– “Identify product needs & prepare implementation roadmap for O&M market focus.” In response, the subcommittee submitted **PEC O&M Ideas to Support ASHRAE’s New Strategic Plan** Report to the council at the 2016 ASHARE Annual Meeting in St. Louis. There were several recommendations including suggestions for groups to be responsible for implementation. The committees reporting to Technology Council have been highlighted in yellow.

Please let me know if you have any questions.

\*\*\*\*\*

**PEC O&M Ideas to Support ASHRAE’s New Strategic Plan**

1. Develop an ASHRAE service (for a fee) to generate an O & M video for a specific project and keep it in the ASHRAE cloud. This project specific video, developed by engineers with ASHRAE software, would cover the basis of design, how the building is supposed to operate, the basic functions and operating parameters of the control system. If the building is remodeled, or it's intended use modified, these control strategies would need to be modified. ASHRAE could provide some system templates to help engineers create the videos. User cost needs to be low, like the YouTube model, to prevent others from offering a competing service. Benefits are ASHRAE Brand exposure and potential advertising. **(Request assign to TC 7.3, ECC)**

Comments from our working group:

- a. “The great shame, maybe disgrace, is that we design buildings that are energy efficient; maintain occupant comfort and they don’t work. Many don’t work on day 1 much less in 2-3 years. Commissioning helps (certainly on day 1) but the training of the operating personnel especially after turnover is lacking.”
- b. “In this age of computerized everything it seems like if, as a part of the "design package", ASHRAE helped create a video presentation by the engineer that showed the intent of the control sequences in plain language it would help not only the operating personnel but also the commissioning authority to make sure everything operates as intended. An additional fee would be warranted.”
- c. “It is imperative that Temperature Controls and Control Strategies that are included with plans and specs as part of the facility design. The contractor and engineer do their best to see that the operating personnel at the facility understand the "intent" of the written word. Commissioning has come a long way toward the goal of having the facility operating as originally designed and re-commissioning could help in making sure that "new" operating personnel continue to operate the facility as originally intended.”
- d. “Unfortunately, a lot of facilities do not have the luxury of getting so much attention and after a few years the operation barely resembles the original intent and results in low indoor air quality and wasted energy. In my own experience I found that if I sat down with a new operator and explained what we were trying to do, they were willing to use the tools that they were given to make it happen.”
- e. “Having worked for many automatic temperature controls companies (Johnson Controls, Honeywell, Automated Logic and Staefa) one of our biggest frustrations is that we train owner personnel on the



operation of our systems and six months later, they have moved on and there is no institutional memory of their building or our systems.”

- f. “We have tried to roll training into service contracts, but it usually gets short shrift and is one of the first things to get cut when O&M budgets get tight.”
2. Another item that concerns Operating and Maintenance is the training and management of the facility operating personnel. ASHRAE has not effectively marketed our available educational materials to this audience. We could put together an "O&M Package" that could be used by our.

Chapters to invite these operating individuals to our meetings and to join our Society and join our TCs and in so doing make their service to their employers more valuable. This could lead to more formalized training and maybe certification. Approaching BOMA and other related organizations and making them partners in the educational effort would benefit all. (Request assign to TC 7.3, Members Council, CTTC)

3. ASHRAE DBOSS (Dynamic Building Optimization Systems and Service) uses software that communicates with "every item" in the building to optimize collective performance, reduce building energy and maintenance costs, and enable predictive maintenance/service. An ASHRAE app to help select DBOSS program features and/or predict savings could be of great interest to the O&M community and generate ASHRAE revenue. ASHRAE could also publish more DBOSS case studies like the ones on ASHRAE HQ.  
(Request assign to TC 1.5, Publications Committee, TC 7.5)
4. Create practical guides and check lists for effective building operations geared toward operations staff.  
(Request assign to TC 7.3)
  - a. Strategies to utilize fault detection diagnostic tools for building operations, to deal with the large volume of data on alarms and operations monitoring.
  - b. Research leading to a publication on best practices in effective building operations, with case studies.
  - c. Develop and publish high performance building operations specifications, guidelines for specific building types.
5. We are starting to see ASHRAE standardized sequences in consulting engineers' specifications, but it is more the exception than the rule. One possible solution would be to educate consulting/specifying engineering community on our Handbook resources. (Request assign to TC 1.4, TC 7.3)
  - a. This addresses the many controls companies that simply cut & paste the specified sequences of operation into their programming without much thought as to whether they work or not.
6. Expand the development and use of O&M Terminology by offering a filterable website database application of all terms and definitions tracked by TC 1.6. The cloud sourced database could be hosted in the ASHRAExCHANGE area with accessible read-only for visitors, but also read-write for commenting based access levels using ASHRAE's existing user database and/or ASHRAE Exchange. (Request assign to TC 1.6, TC 7.3) This effort would help ASHRAE become visible as a source for O&M Terminology.

Such a database could:

- a. Allow building owners and maintenance groups to know what ASHRAE's definitions are, reducing confusion.
- b. Bring more uniformity to ASHRAE consultants, contractors, researchers writing papers, code committees, etc. Position ASHRAE as a more authoritative source – having better definitions for O&M Terms.

- c. Reduce risk for users of standard terminology and greater harmonization to occur as committees are allowed to see other term definitions in use with the O&M community.
  - d. Allow for expansion, with future efforts in graphical symbols, abbreviations, etc.
  - e. An app to generate inputs for a BEQ operation submission.
7. An app to generate a building specific O&M manual. **(Request assign to TC 7.3, Publications Committee)**
8. Promote ideas involving big data usage and BIM.
- a. BIM does allow us to enter this new world of big data. It seems to allow us to move into the digital age - where most other industries already operate - but not Buildings. The UK is about to press ahead with compulsory BIM for government funded projects. As a large building owner/operator the UK government has a lot of clout and interest in getting this technology adopted. They have said from 2016 all their projects have to use BIM. ASHRAE needs to promote BIM. **(Request assign to MTG BIM, TC 1.5, TC 7.3)**
9. ASHRAE creates a program to crowd source the Service Life and Maintenance Cost Database (managed by TC 7.8). This database would allow O&M to more accurately plan and budget their operations. This database should accept spreadsheet information with pull down menu's that mimic the database elements per TRP 1237 and the existing database. The goal is to seed the database adequately so that it becomes the leading open source of building operating cost and service life for the built environment. TC 7.5 and TC 7.9 have indicated they have data to input. **(Request assign to TC 7.5, TC 7.9, ASHRAE Marketing)**
10. ASHRAE should explore how the new virtual reality programs could be used to support the O&M market. **(Request assign to TC 1.5, Emerging Technologies)**

TO: Steven Faulkner, **ECC Chair**  
Joslyn Ratcliff, ECC Staff Liaison  
FROM: Mick Schwedler, PEC Functional Planning Subcommittee Chair  
DATE: December 5, 2016  
SUBJECT: PEC Recommendations for O&M Initiatives to Support ASHRAE's New Strategic Plan

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### **PEC O&M Ideas to Support ASHRAE's New Strategic Plan**

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**TO:** Bjarne Olesen, **Members Council Chair**  
Joyce Abrams, Members Council Staff Liaison  
**FROM:** Mick Schwedler, PEC Functional Planning Subcommittee Chair  
**DATE:** December 5, 2016  
**SUBJECT:** PEC Recommendations for O&M Initiatives to Support ASHRAE's New Strategic Plan

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PEC assigned PEC's Functional Planning subcommittee MBO# 5, A- "Identify product needs & prepare implementation roadmap for O&M market focus." In response, the subcommittee submitted **PEC O&M Ideas to Support ASHRAE's New Strategic Plan** Report to the council at the 2016 ASHARE Annual Meeting in St. Louis. There were several recommendations including suggestions for groups to be responsible for implementation. The yellow highlighted groups relate to Members Council.  
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Mark Owen, Publications Committee Staff Liaison  
FROM: Mick Schwedler, PEC Functional Planning Subcommittee Chair  
DATE: December 5, 2016  
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FROM: Mick Schwedler, PEC Functional Planning Subcommittee Chair  
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TO: Bjarne W. Olesen, Members Council Chair  
Joyce Abrams, Members Council Staff Liaison  
FROM: Steve Comstock, PEC Staff Liaison  
DATE: April 4, 2017  
SUBJECT: PEC Response to Members Council referral of  
Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015)

The Following referral from Members Council was reviewed and voted on by the Publishing and Education Council.

**Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015):**

That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.

Background: The recent MC/PEC working group on ASHRAE Educational Support to Chapters identified a need. Chapters do not know which chapter members take ASHRAE sponsored training, and further, some Chapters see it as a potential loss of chapter training revenue or reduced meeting attendance. Bluntly stated, they are out of the loop and some view ASHRAE training as competition to their local training. To improve this situation and actually make all Chapters/Sections a partner in ASHRAE PEC provided education, ASHRAE should advise the Chapters monthly of who in their chapter has attended an ASHRAE course, seminar, webinar, etc. In addition, ASHRAE will provide the attendees Chapter with 15% of the training educational net income as a marketing inducement to promote and encourage their members to take ASHRAE Society provided training. (They have some skin in the game.)

Fiscal Impact: Provide the attendee lists to each chapter needs to be programmed by ASHRAE IT. Needs a defined project and then the time/cost estimate. On the income sharing for marketing support, need the attendee and net income numbers.

PEC Response:

Currently, ASHRAE Chapters can purchase ASHRAE educational materials in bulk for resale, retaining profits if they wish, and can schedule ALL instructor led seminars, charging registration fees they wish and retaining revenue. In effect, these incentives already allow chapters to “share ASHRAE provided training and income with ASHRAE chapters.”

PEC took the referral as a motion and the motion. After discussion the council decided that this motion will be hard to implement and would negatively affect the business of PEC council. Motion

(Failed 0-10-0 CNV)

Cc: Walid Chakroun

## Harr, Julie

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**From:** Harr, Julie  
**Sent:** Wednesday, April 05, 2017 10:23 AM  
**To:** Grant, Vickie  
**Cc:** Comstock, Steve  
**Subject:** Response from PEC to referral-Region IV Southern Piedmont Chapter Motion 31-11.6.2015  
**Attachments:** Response from PEC - Region IV Southern Piedmont Chapter - Motion 31 -11.6.2015.docx

Vickie,

Please see the attached response from PEC on referred motion - Region IV Southern Piedmont Chapter - Motion 31-11.6.2015.

Best regards,  
Julie Harr



**REPORT TO BOARD OF DIRECTORS  
From Publishing and Education Council  
As of January 31, 2017**

**Recommendations for BOD Approval:**

1. **That the Board of Directors approve the following changes to the Historical Committee section of the Rules of the Board (ROB) as shown in *Attachment A*.**

**Background:** The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non- Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone.

Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM's to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective. (*Functional Subcommittee Approved 3-0-0 CNV*) (*PEC Approved 10-0-0 CNV*)

**Fiscal Impact:** The estimated fiscal impact of adding two voting members to the committee is \$2,500/year, maximum, for transportation, if requested.

**Information Items:**

1. PEC voted (9-0-0 CNV) to change the method of transferring ASHRAE Handbook PDFs to members from CD format to Internet download starting with publication of the 2018 volume (2017-18 Society year). PEC took this action for the following reasons:

- We periodically receive complaints regarding non-delivery of printed and CD Handbook products;
- CD technology is an outdated means of file transfer with many electronic devices no longer having CD players;
- The ASHRAE CDs do not work in Mac environments requiring one off work arounds for members with Mac devices
- Cost of CD manufacturing and delivery and unreliability of delivery in some parts of the world.

PEC's solution is to construct a cloud based delivery platform that will have a fixed cost irrespective of number of members or location. Files will be able to be downloaded for offline use, stand as a permanent benefit of membership for the year, stamped with user information to protect against unauthorized distribution and sharing. Files will be able to read in PC and Mac environments. All current recipients of the CD will be given

access to PDFs through this system. It costs ASHRAE \$125,375 annually to manufacture and distribute the CD. There will be a one-time cost of \$15,000 to put the cloud based download system in place and an annual cost of \$30,000 to prepare Handbook files for delivery through the system. This produces a savings of \$80,374 in 2017-18 and \$95,374 in year two onwards, enabling ASHRAE to better use resources to benefit members.

2. PEC voted (9-0-0 CNV) to reaffirm the Handbook distribution policy to members entitled to the Handbook benefit with the substitution of PDF access through download rather than CD with the 2018 Handbook (Society year 2017-18) so that members:

- a) Receive a 12 month complimentary subscription to the Handbook Online, with PDF files download; or
- b) Receive a printed Handbook and Handbook PDF files download without Handbook Online; or
- c) Pay extra to receive both (a) & (b)
- d) Members paying developing economy fee receive Handbook PDF download.

3. PEC voted (9-0-0) to add a surcharge for mailing to all members who select the Handbook print copy with their membership based on the country of delivery to begin with the 2020 Handbook (Society year 2019-2020). PEC will collaborate with Members Council on implementation. Making this change effective in 2019-20 allows for appropriate communication with members and development of implementation details.

ASHRAE consistently receives complaints regarding non-delivery of Handbooks. This creates member unhappiness expressed through to chapters to Society. Most complaints come from countries outside US, Canada, and Europe. Extra expense and time is incurred to replace Handbooks with replaced Handbooks sent via Fed Ex. As ASHRAE's global membership grows this situation will only become worse. This situation has been solved by providing Fed Ex delivery to members in countries generating the greatest percentage of complaints.

ASHRAE's current total annual cost for mailing of the print Handbook is \$211,997. If copies were sent Fed Ex to all countries outside the US, Canada and Europe, the additional cost would be approximately \$60,000. Depending on the surcharge applied, this motion could result in less cost to the Society and improved service to those selecting the print Handbook.

4. PEC approved Historical Committee's plans for ASHRAE's 125<sup>th</sup> anniversary (2019-20) as shown in Attachment B with a modification to the PEC budget with the following net impacts: (\$10,000) in 2017-18; (\$60,000) in 2018-19; and (\$168,000) in 2019-20.

5. Handbook Committee continued training and promotion of the new ASHRAE Authoring Portal ([www.authoring.ashrae.org](http://www.authoring.ashrae.org)), a collaborative authoring site, to TC Handbook Chairs in a Sunday training session. The Portal allows TCs or other authoring groups to store and revise copyrighted intellectual property in a secure, ASHRAE-approved location, with multiple authors able to work on a document simultaneously. Google Analytics data shows 351 users and 5490 page views since launch last June. The portal is also in use by ASHRAE Learning Institute (ALI), and requests to use the portal have been received by authoring groups from Standards and several special publications.

6. PEC has improved the Handbook Online through development of the site as being device responsive and also adding a web-based app for access to weather data within the Handbook Online.

7. PEC has launched an improved eLearning Portal. <https://elearning.ashrae.org/>. All courses have been rebuilt in HTML 5 and among the new features is a MY TRAINING record that includes eLearning courses allows for self-entry of other types of training. Phase 2 Learning Portal infrastructure development

includes addition to the portal of Instructor-Led Training registration and suggested courses for specific career path development.

8. PEC has launched the ASHRAE Technology Portal at [www.ashrae.org/technologyportal](http://www.ashrae.org/technologyportal). The portal includes all ASHRAE Journal articles and ASHRAE Research Reports as a free benefit to members with robust search features.

9. PEC approved the creation of two non-US training centers (one to be located in the Middle East and one to be located in Europe) to support the Customized Training Plan that PEC is implementing in support the Global Initiatives developed by Planning Committee.

10. PEC has launched free online access for ASHRAE members to Science and Technology for the Built Environment, ASHRAE's research journal [www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment](http://www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment). Strategically, this strengthens ASHRAE's position in the university and research communities.

February 1, 2017

Date

| Walid Chakroun |

Walid Chakroun, Chair

[begin excerpt]

## **2.410 HISTORICAL COMMITTEE**

### **2.410.001 SCOPE AND PURPOSE**

The Historical Committee shall encourage and carry on historical research and provide support to history- related activities of the Society.

### **2.410.002 MEMBERSHIP**

#### 2.410.002.1 Composition

The members of this committee are as follows:

- A. Seven (7) Nine (9) voting members including the chair and vice chair
- B. Non-voting members include a BOD ex officio member and a coordinating officer.  
(92-01-29-36C/98-01-16-13/06-06-28-11B/07-01-31-10/07-06-27-20)
- C. Corresponding members include a Regional Historian from each region

#### 2.410.002.2 Qualifications

A. It is recommended that at least one committee member be from outside the United States.  
(96-02-22-51/01-06-27-22B)

B. At least three (3) of the voting members shall should have served as a Regional Historian (RVC) or as a Chapter Historian

#### 2.410.002.3 Term of Service

The term of service for voting members is intended to be three (3) years, subject to ROB 3.300 *Election and Appointment Procedures*.

[end excerpt]

**Background:** The Historical Committee currently only has 7 Voting Members (VM), which is the smallest ASHRAE standing committee except for the Rules (6) and Audit (3) Committees. Regional Historians are Non-Voting Members (NVM) however a majority of them do not attend Society meetings, and they are not authorized travel to attend. The Regional Historians are responsible for the grass roots activities, including PAOE and reporting, of Chapter Historians.

In the past, the HC has had VM representation by the Regional Historians, especially during major Society historical events such as the Centennial recognitions and celebrations of ASHRAE and its predecessor Societies. The 125<sup>th</sup> Anniversary of the founding of ASHRAE will be celebrated in 2019-2020 and a number of events are being planned by the committee to recognize the milestone.

Because committee member terms are for 3 years, the current membership does not always allow for new leadership to have served on the committee for long before moving up to Chair or Vice Chair; having 9 members with staggered 3-year terms will provide the best pool of leadership candidates. The committee also has a number of subcommittees (5 – Administrative, Archives, Communications/RVC Guidance, Leadership Recall/Awards, and 125<sup>th</sup> Anniversary) and there are not enough VM's to support the subcommittees without multiple assignments, including the Chair and Vice Chair. Increasing the number of VM on the committee to 9 will provide enough committee members for the HC to be effective.

**Fiscal Impact.** The estimated fiscal impact of adding two VM to the committee is \$2,500/year, maximum, for transportation, if requested.



**Historical Committee (HC)  
January 31, 2017**

**ASHRAE 125 Year Anniversary Celebration – Proposed Action Plan**  
(Details for each project included on following pages)

**NOTE:** Fiscal impact and budget requirements to be developed by staff for future fiscal year approvals – complete by January 2017 meeting

**Proposed 125 Year Anniversary Projects List**

- 1 Produce quality industry selective history related publications** (hard or soft cover and/or electronic version)
- 2 Update the 100 most important Transactions Papers (add 25 papers)**
- 3 Publish about 12 historical articles in the *ASHRAE Journal***
- 4 Sponsor a technical paper session for the winter 2020 meeting.**
- 5 Develop a pictorial calendar for 2019 and 2020.**
- 6 Additional project by staff: update ASHRAE Society History (*Proclaiming the Truth*)**
- 7 Develop brochure: "How HVAC&R has improved the quality of life worldwide"**

## Proposed 125 Year Anniversary Projects Details

**1 Produce quality industry selective history related publications** (hard or soft cover and/or electronic version)

### **Possibilities identified so far:**

*“How HVAC&R has improved the quality of life worldwide”* This would be written to appeal to a general audience thus promoting the importance of engineering and ASHRAE as a benefit to humanity. Ron Vallort has volunteered as author.

*“History of development of air conditioning systems 1920-2020”* Focus would be both equipment and materials, written and illustrated to appeal to engineers as well as a wider audience. David Arnold has volunteered as author with other co-authors possible.

*“Evolution of components and design build practices after 1900”* This would cover the development of factory engineering and construction practices from the inventors/innovators design build to the application manufacturing to application engineering to engineering consultants and then mechanical contractors. Bruce Flaniken has said he might author this.

*“Pioneers of HVAC&R”* This work would be person oriented and would highlight the contributions of individuals. Resources for this work would mainly use our existing data base which includes ASHRAE Hall of Fame, Pioneers of the Industry, Leadership Recall and the *Heat & Cold* book, and any other important persons not present in these existing resources. No author yet.

**2 Update the 100 most important Transactions Papers.** This list was published for the ASHRAE Centennial in *Proclaiming the Truth*. Steve Comstock will update the book and has suggested the important papers section be updated by adding papers for each year after 1995. This project was suggested to Technology Council

**3 Publish at least 6 historical articles in the ASHRAE Journal.** Previously the *Journal* published 12 articles for the centennial and later did a 12 article series titled *100 Years of Air Conditioning*. This project would address the suggestions we are receiving for coverage of very specific industry advances. These suggestions usually come from strong advocates who could be tapped to write articles. The topics and authors would be solicited through the Technical Committees, Regional and Chapter Historians. We should be able to easily get 6 authors and possibly many more. Consideration could be given to binding these articles into a stand-alone publication as was done with the *100 Years of Air Conditioning* series We already have a number of topics identified by the sub-committee members as well as TC members (see list of topics below)

**4 Sponsor a technical paper session for the winter 2020 meeting.** Solicit 4 or more papers to be presented in a technical session or sessions (not as a conference paper, which are not printed in *ASHRAE Transactions*). The advocacy and resource comments above in #3 also apply to this project.

**5 Develop a pictorial calendar for 2019 and 2020.** This would be similar to the historical calendars produced annually by CIBSE. These calendars could be sold by ASHRAE to members and companies.

**6 Additional Project by Staff: ASHRAE Society History**

“Proclaiming the Truth” book will be updated to cover the 25 year period after the Centennial. This will not be a Historical Committee project. Steve Comstock has said ASHRAE staff will do the update.

**7 Develop brochure "How HVAC&R has improved the quality of life worldwide":** Some possible source material, article from Ron Vallort (already submitted to ASHRAE Journal.)

**Sources for topics/advances that might be covered in publications issued for the 125th. Anniversary Updated January 2016:**

These topics are more suitable for articles and papers than a stand-alone publication due to the appeal to a more limited audience.

- Origins of building energy simulations
- Development of steam and electric motor drivers as the precursor to HVAC&R technology development
- Development of ROT, SWAG and WAG in the Engineering Fields
- History of frozen foods
- Development of service water heating
- Open standard protocols, specifically BACnet, that allow building systems to interact with one another through integration.
- Combined heat and power systems
- Production and installation of affordable residential air conditioners
- Production and distribution of consensus-based standards that improve the indoor air quality and energy efficiency
- Development of Unit Ventilators in the early 20th Century
- Development of VAV systems complete with variable speed air handlers, fan powered terminals and digital controls.
- Improved curtain walls, glass and mullions
- Development of underfloor air delivery systems
- Workplace more efficient by creating comfort
- ASHRAE publications

REPORT TO BOARD OF DIRECTORS

**PEC Information Items Report to BOD**

(Excludes information items reported to the Board in Las Vegas, February 1, 2017)

**Recommendations for BOD Approval:**

None.

**Information Items:**

1. PEC approved the following change to the Handbook Committee Manual of Procedures (MOP):

*[begin excerpt]*

- 2.2.4 At their first ASHRAE Annual Meeting, the incoming volume subcommittee chair meets with the incoming volume subcommittee
  - (a) to review duties and responsibilities of the subcommittee,
  - (b) to review and finalize chapter assignments, and
  - (c) to review and discuss commentary forms for each chapter as prepared by the prior volume subcommittee liaisons.

2.2.5 At the following ASHRAE winter conference, the incoming volume subcommittee uses the chapter revision history maintained by Handbook staff to determine the status of each chapter regarding its timeliness and currency. The volume subcommittee uses its collective judgment, taking into account the stability of each chapter's content. The volume subcommittee members (liaisons) inform each TC of the status of their chapter(s) as determined. Adjustments to status may be suggested by the respective TCs, in conjunction with the liaison, for possible change.

*[end excerpt]*

Background: The revision history for each chapter is compiled by Handbook editorial staff to inform committee liaisons of their TCs' chapter revision activity over recent four-year cycles. This new paragraph describes how new volume subcommittees should use this history to focus action on encouraging TCs to keep Handbook content up to date and, therefore, relevant.

Fiscal Impact: None.

2. PEC will respond to the following five referrals from Members Council as indicated below:
  - **Motion 11 (11/5/2015):** That ASHRAE strengthen the local chapter value in developing programs and promotions that enable ASHRAE chapters to educate a wider range of audiences, the society shall provide ASHRAE endorsed webinars, including manufacturer



sponsored webinars, with financial incentives to local chapter for marketing and promoting the webinar to the chapter's membership.

Chapters receive reduced pricing for ALL instructor led seminars and materials. If chapters assist in logistical support for ASHRAE organized instructor led seminars, chapters receive support as compensation. Sharing of revenue is not possible for sponsored webinars because revenue is combined with advertising packages. Also no mechanism to determine chapter participation and would place chapter volunteers being in position of promoting commercial events sometimes of competitors.

- **Region VII (Mobile Chapter) – Motion 13g (11/5/2015):** That ASHRAE create an ad-hoc committee to review alignment of ashrae.org website content with ASHRAE’s commercialism policies.

Commercial policy recognizes that ASHRAE Journal and Website can offer opportunities for advertising.

- **Region V (Cleveland Chapter) – Motion 29g (11/6/2015):** That ASHRAE PEC notify chapters monthly of everyone in their chapter area who has signed up for an ASHRAE product.

In some cases only email address are available. Most importantly providing email addresses would violate privacy policies since it would be based on purchase of a commercial product and would expose membership purchasing preferences. Also what constitutes an ASHRAE product is unclear.

- **Region VII (West Virginia Chapter) – Motion 29h (11/6/2015):** That ASHRAE notify chapters monthly of individuals in their chapter area that have signed up for an ASHRAE sponsored webinar or educational training.

Providing membership purchasing preferences to third parties would be a violation of privacy policy. Attending webinars is managed through an outside learning platform, and information is not available in the ASHRAE member database.

- **Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015):** That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.

Currently, ASHRAE Chapters can purchase ASHRAE educational materials in bulk for resale, retaining profits if they wish, and can schedule ALL instructor led seminars, charging registration fees they wish and retaining revenue. In effect, these incentives already allow chapters to “share ASHRAE provided...training and income with ASHRAE chapters.”

### **Journal Advertising Sales Subcommittee**

3. ASHRAE Journal’s print advertising market share (SOM) is at 59%, a one-percent increase compared to the same time period during 2015, in a three-publication competitive market. While ASHRAE Journal did not sell as many advertising pages in the past 12 months, its

competitors have also lost advertising pages during the same time period, resulting in the aforementioned gain in SOM.

4. Journal advertising sales is on track for reaching the 2016-17 forecast. Online advertising is on track to exceed FY16-17 budget.
5. ASHRAE Media is increasing opportunities with sponsorships, online advertising, Online Handbook links, and Journal newsletter and supplier webinars. Programs are sold in packages as part of an integrated marketing strategy to maximize available audience channels.
6. HPB magazine business plan was provided to the Finance Committee as requested by Finance to review opportunities for fiscal performance improvement. The business plan describes steps already taken to improve performance including addition of webinar opportunities, redesigned HPB newsletter, increased advertising rates and reduction in expenses. It was noted that five competing magazines in the sustainable buildings marketplace have ceased publication due to declining advertising revenues. The business plan explains how HPB magazine's circulation reaches beyond ASHRAE Members to architects and building owners, helping to fulfill ASHRAE's mission of leadership in the sustainability movement. It was noted that HPB magazine now has increased ASHRAE branding for the Society's promotion of sustainable technologies. Depending on feedback from the Finance Committee, the subcommittee suggested that ASHRAE limit print circulation to owners and architect demographics only.

**eLearning Subcommittee**

7. eLearning subscriptions have resumed after HTML 5 course infrastructure development. In December, 2016, a marketing campaign began to promote the new and improved platform and courses. The good news is that this marketing campaign has kick-started our sales and we're seeing subscriptions begin to pick up. ASHRAE anticipates a positive subscription revenue trend to continue for the rest of the budget year. The year to date revenue is 42.1 K on a budget of 405.9k.
8. eLearning marketing efforts will continue using various marketing promotional methods and various suggested ideas from members, including CCT Training, video promotion on ashrae.org home page, and reviewing other successful platform for marketing ideas, such as edx.org.
9. eLearning continues to work with ASHRAE Members to develop new courses. Below are some recently launched and upcoming courses:

<b>Course Name/Title</b>	<b>Status</b>	<b>Anticipated Completion Date</b>
Standard 62.1-2013: Natural Ventilation Procedure	Launched	3/2016
School of Hard Knocks Controlling Moisture & Humidity in Buildings	Launched	1/20/2017
UNEP: Refrigerant Literacy –Course A	Soft Launch	1-31-2017
UNEP: Refrigerant Practices – Course B	Preliminary Phase	6/1/2017
Ethics for the Built Environment Professional Engineer	Content Review	2/28/2017
BIM Process, Practice and Workflow	Preliminary Phase	Unknown
Building Energy Modeling (BEM)	Preliminary Phase	Unknown

Building Energy Quotient as Designed (BEQ)	Preliminary Phase	Unknown
Building Energy Quotient in Operations (BEQ)	Preliminary Phase	Unknown
The Last Word on Energy Audits	Preliminary Phase	Unknown

### **Fiscal Planning Subcommittee**

10. PEC approved the PEC budget for 2017-18 as shown on the December 31, 2016 ASHRAE Financial Statements with awareness that adjustments to the budget will continue to be made during the remainder of the fiscal year to reflect business performance.

11. Fiscal Planning Subcommittee reviewed and will respond to the following Members Council referrals as follows:

- **Region X (San Diego Chapter) – Motion 27:** That ASHRAE provides for sale on the website basic tools such as a duct sizer, pipe sizer, psychrometric chart and expansion calculator.

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

Tools such as a duct sizer, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership's desire to have such tools is noted. Thank you for the feedback.

- **Region XIII (Hong Kong Chapter) – Motion 64:** That Society launch a pilot voluntary scheme of "ASHRAE Publication Care Program" for local chapters to handle undelivered ASHRAE handbooks and journals.

Background: Few members complain that they didn't receive ASHRAE handbooks and journals regularly. Those undelivered publications would then be returned back to the ASHRAE HQ that cost huge amount of postage charges as well as a lot of administrative works to handle the delivery problems. Moreover, this problem would let members be disappointed and reduced their intentions to renew their membership. Local chapters may also be suffered by receiving the complaints from members and sometimes difficult to promote ASHRAE. "ASHRAE Publication Care Program" is proposed in order to handle undelivered ASHRAE handbooks and journals. If the local chapter joins this scheme, the agent of postal service will send those undelivered items to local chapters for follow up. Local chapter will then report to the HQ and contact those members to clarify postal address. Local chapters will distribute those items to members directly after receiving confirmation of reimbursement of related postage charges by HQ.

Fiscal Impact: Positive.

Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure. PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. PEC continues to explore improvements of publication delivery service to members outside the US and Canada. For example, a new Journal mailing service is being used which has shown marked improvement in delivery success and delivery times.

- **Region XII (Chile Chapter) – Motion 40:** That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

ASHRAE’s most demanded standards (such as 90.1, 62.1, 189.1) are available (English language only) in read only format on the ASHRAE website. If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). It should be noted a cost is incurred based on the number of views for read only standards. Also, Spanish language translations of many ASHRAE documents are not available and translations into other languages have even less availability. Many ASHRAE chapters support students in design competitions by purchasing standards for student use. It is recommended this solution be considered.

- **Region XIII (Philippines Chapter) – Motion 67:** That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID’s, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.

Background: There were recurring complaints coming from our members the non-receipt of their packages which results to disappointments and thus delayed and even non-renewal of their annual membership. By giving chapters advice from society on return to sender package problems, we can trace the origin of the problem and help members be aware that

society and the chapter are concern of their membership and welfare.

Fiscal Impact: No fiscal impact, only time spent for info dissemination.

A new Journal mailing service for international mailing has been implanted with improved delivery success and time reduction. A new plan for PDF delivery of Handbook has been developed reducing the need for mailing. The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.

### **Functional Planning Subcommittee**

12. Functional Planning Subcommittee reviewed and updated the following PEC MBOs that were assigned to them:
  - MBO# 4, A – “Prepare recommendations on product alignment (format, delivery mechanism, content, & context) w/younger members for future media dissemination.” *Complete - Publications Committee has reached out to YEA & comments incorporated into planning.*
  - MBO# 5, A – “Identify product needs & prepare implementation roadmap for O&M market focus.” *Complete. (Attachment A)*
  - MBO# 7, A – “MTG.IAST formation & recommendations.” *Complete – Mr. Nix reported that the Ad Hoc for IAST has completed work on a plan to research the use and value of ASHRAE Standards and technology. An MTG has been established with Mr. Pettway as chair.*
  - MBO# 7, B – “Refine User Manual Development Plan in collaboration w/Tech Council. Implement for 2016 STDs pub cycle.” *Complete - Plan developed but not implemented as outlined. Refinement underway by Tech Council.*
  - MBO# 7, C – “Develop supplemental Standards revenue stream.” *Mr. Schwedler reported that Fiscal Planning Subcommittee is taking the lead and will report.*
  - MBO# 7, D – “MCI Report Recommendations.” *Pending - Waiting on MCI Report and recommendations Planning Committee has been asked to make.*
  - MBO# 9, B – “Identify measures to support individual member Continuing Education record keeping.” *Complete – Mr. Jones report that Mr. Comstock and staff will incorporate this feature into new LMS platform for eLearning.*
13. A Functional Planning Subcommittee task group assigned to investigate “Just in time learning” Reported several ideas are being considered but plans have not been adopted at this time. (Attachment B)
14. Functional Planning Subcommittee will hold over one open Strategic Plan Initiative (3A) MBO to develop an action plan to move the YEA learning initiative forward. (Attachment C)

### **Research Journal Subcommittee**

15. Effective January 1, 2017, ASHRAE has launched free member online access to all articles published in Science and Technology for the Built Environment, ASHRAE’s archival research

Journal. There is strategic value in this action because it supports ASHRAE's presence in the academic and research communities with a positive impact on the ability of ASHRAE to reach out to undergraduate and graduate students in engineering.

16. Several marketing efforts have been implemented to assist in increasing the impact factor of the journal. The 2015 Impact Factor (the last available) is 0.871, an increase over the 2014 Impact Factor.

### **Certification Committee**

17. Certification Committee is responding to the following referrals from Members Council:
  - **Region XII (Colombia Chapter) – Motion 13m (11/5/2015):** That the six ASHRAE certification exams have a candidate selectable “voluntary informative appendix option” that is translated into the Spanish language, and attached to the primary current exam format which is in English, beginning January 2016.

Background: The certification of ASHRAE members is very important and needed for our Industry. In keeping with our mission and strategic plan objectives, we need to better serve the needs of our members that speak/read different languages. Spanish is a very important language in the world and we need to start somewhere. Because of the technical nature and time limits of the certification exams, it is unfair to expect non-native English speakers to take these exams at the same speed reading level as native English speakers. In fact, many of the applicants to these certifications exams, taken in English, have failed to pass them in the past years, which calls for a turning point to promote such translations. It would be very helpful to have a reviewer that understands the technical English and Spanish language, to follow the terminology as it is used in these countries. This option would allow the candidate to choose to use the attached translated version of the exam if desired. This optional and voluntary option is intended to attempt to maintain the ANSI credibility of the integrity of the exam. If it does not, then this motion writer would accept the exam given could explicitly advertise that it is an “ASHRAE” only exam, and the ANSI accreditation could be waived by the exam candidate, for consideration of choosing this option.

Fiscal Impact: AMP (exam management company)-consulting \$20K; Translation \$30K; Exam committee(s) meetings \$45K= \$95K.

**Certification Committee does NOT recommend supporting this motion with the following considerations:**

- The ANSI accreditation standard states: “Policies and Procedures for certification of persons shall be fair among all applicants, candidates and certified persons.” The Committee does not believe it would be able to translate its certification exams into all of the languages of all possible candidates, and questions if it would be fair for some non-native English speaker examinees to have exam translations and others not to have such translations.
- Generally, the Certification Committee strives for consistency among all programs, offering the same certification per key, built-environment job to all applicants. At current application rates it would not be sustainable to have multi-language certifications for the same job, some ANSI-accredited and some not. Such an effort

reasonably would require all such ancillary materials – applications, *Candidate Guidebooks*, web-pages, practice exams, reference materials – to be translated, as well.

- After Motion 13m was brought forward, the Certification Committee agreed to provide non-native English speakers with an additional 30 minutes of testing time to ensure they are afforded enough time to demonstrate competency.
  - Offering non-native English speakers a translation of all exam questions would mean they would have twice as much to read as native English speakers, which would negate the benefit of the additional 30 minutes of testing time.
- **Region XIII (Hong Kong Chapter) – Motion 63:** That Society maintain the examination fee of ASHRAE Certification at US\$295 (for ASHRAE members) for the promotion of ASHRAE Certification.

Background: Hong Kong Chapter had established a long-term strategic plan to promote bEQ and ASHRAE Certification since the early stage of year term 2015-16. For promoting ASHRAE Certification, Hong Kong Chapter firstly launched a Mentoring Scheme on being “ASHRAE Certified Professionals” at early 2016 and arranged the on-site pencil examination on 31 March 2016. As a result, there were total 14 members joined this scheme and 5 members of them passed the examinations and have been achieved as ASHRAE Certified Professionals. Hong Kong Chapter has probably to launch the mentoring scheme regularly to increase the number of ASHRAE Certified Professionals in Hong Kong. However, the exam application fee has increased over 33% this year (US\$395 for ASHRAE member) by compared with last year (US\$295 for ASHRAE member) which has discouraged members to apply the ASHRAE Certification exams.

Fiscal Impact: Yes. The income from examination fee of ASHRAE Certification will be lower by US \$100 each. Assume 100 candidates, the estimated reduction of income shall be US\$10,000.00 per year.

Certification Committee does NOT recommend supporting this motion with the following considerations:

- The Certification Committee considered and approved the application fee increase from \$295 to \$395 for members on December 16, 2015.
  - A strict rate of inflation increase from \$295 in 2007 would have been \$345 in 2016, however:
    - For the additional 30 minutes of testing time for non-native English speakers, ASHRAE’s exam delivery partner charges ASHRAE an additional \$25 per international exam candidate.
    - ASHRAE certifications are more valuable in 2016 than they were in 2007. More than 30 local, state and federal entities now recognize ASHRAE certifications, four of which are ANSI-accredited. In the next 6 months, two will be DOE approved.
  - Though all applicants pay the same fee, it costs ASHRAE \$70 more to deliver a computer-based exam to international, non-Canadian examinees, than it does to deliver a CBT in the U.S.
18. Certification Committee conducted its annual review of the certification program management system, including the following evaluations:

- 2016 Certification Body Internal Audit.
  - 2016 2015 2014 Annual Comparison ASHRAE Facility Questionnaire Report.
  - Third-party Contractor Assessment – AMP/PSI.
  - Impartiality Threat Analysis.
19. Certification Committee adopted an exam development and transition timeline with the goal of achieving DOE approval of the BEAP in July, 2017.
20. Certification Committee reported the following exam development activities are underway:
- **BCxP** - New exam form created. Next step: gather exposure data and finalize exam passing score.
  - **BEAP** - Crosswalk completed. Next step: reclassify items in bank against tasks in BBWG Energy Auditor exam blueprint
  - **BEMP** - Updated exam Detailed Content Outline approved. Next step: limited exam development
  - **HBDP** - Next step: Survey on importance of tasks on updated exam Detailed Content Outline to be conducted, followed by exam development.
  - **HFDP** - Survey on continued importance of tasks on exam Detailed Content Outline completed. Next step: Subcommittee to analyze survey data and recommend any updates.
  - **OPMP** - Updated exam Detailed Content Outline approved. Next step: limited exam development
21. Certification Committee 2016-2017 MBOs are shown in Attachment D.

### **Electronic Communications Committee (ECC)**

22. ECC is responding to the following referrals from Members Council:
- **Tennessee Valley Chapter – Motion 4e (10/14/2016):** That ASHRAE Society provide a software program for all Chapters to streamline Chapter Operations (process meeting/event registrations, process transactions, meeting/event check-in, program ratings) and Chapter Administrative tasks (mailing lists, newsletter distribution, website materials) to directly address ASHRAE Strategic Plan, Initiative 1B and 2A.
- ECC's response: A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. After discussion ECC researched estimated cost if Star Chapter was to be provided by Society for use across all chapters and estimates the cost to be \$147,256.20 set up and \$196,560.00 annually. ECC would need to know if this cost would be acceptable to proceed with a recommendation to use.*
- **Hampton Roads Chapter – Motion 7b (10/14/2016):** That Society make the ASHRAE Email Distribution Service available for Chapter and Regional use for official communications to their respective members.



*ECC's response:* After discussion, ECC determined this is not a viable solution for chapter and region use. A survey by ECC indicates that there is no one-size fits all solution for chapter needs, but that the chapters with solutions in place are generally happy with and would recommend the solutions they are using. Although not specifically asked or stated in the survey, it can be inferred that this would hold true for official communications as well. An important item to consider is that an email from a chapter or region is not the same as a mailing from Society. ASHRAE's electronic collaboration tools subcommittee is working on a document based on the survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC can provide a document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

- **West Virginia Chapter – Motion 7c (10/14/2016):** That ASHRAE Society's ECC develop a privacy policy for Regions and Chapters use to allow for consistent use of email addresses. A phased in approach starting with the US would be acceptable.

*ECC's response:* The websites subcommittee reviewed this motion and will draft guidance on protocols regarding the collection, sharing, and opting out of contact information to be submitted to Members Council prior to the Long Beach Annual conference for consideration for placement in the MCO Manual. Due to complexity of international laws ECC will focus the guidance on US laws (CAN SPAM) only, with the suggestion that international chapters should reference their local legislation.

- **Spacecoast Chapter – Motion 7j (10/14/2016):** That Society allows ASHRAE Chapters to utilize its e-mail engine and domain name to transmit mass e-mails to its Chapter memberships, effective July 1, 2017. ASHRAE Society cannot take responsibility for chapter and region email communications. A whitepaper from ECC regarding basic email best practices is forthcoming for the Long Beach Annual Conference and will be made available via the ASHRAE website.

*ECC's response:* The use of ASHRAE's domain for sending emails could blur the line between chapter and Society communications in the eye of Internet Service Providers and could cause Society emails to be blocked, blacklisted, or undelivered depending on what is sent by the chapters and to whom.

In addition, Society has a special and specifically-negotiated contract for its email service provider, RealMagnet, to send emails and provide marketing automation technologies at an enterprise level for Society. Since each chapters needs are different not only in terms of email contacts and email volume, but also technical expertise to use such a solution, it becomes quite complex to begin to estimate both cost and time and resources needed for implementation for all chapters. There is also an additional element of staff infrastructure that would be needed to onboard any chapters that would use the solution.

Lastly, to assist chapters (and regions) with their emailing needs, ASHRAE's electronic collaboration tools subcommittee is working on a document based on survey results intended to provide information to chapters about what tools are currently in use as a basis to decide which tools might be best to consider for their use. Additionally ECC will provide a

document outlining basic email best practices to help chapters and regions improve the delivery rate of all their email communications, including official communications.

23. ECC continues to assign new Basecamp 3 sites to groups that ask for them and will continue to roll Basecamp 3 out with a goal of completing the rollout by the end of the 2016-2017 year. Most Basecamp 2 sites have been transitioned to Basecamp3 and all new Basecamp sites are created only in Basecamp 3.
24. ECC sent an update to RECC, DRC, Chapter President, and Chapter ECC positions advising of activities ECC is working on with an invitation to attend the Winter Meeting in Las Vegas.
25. ECC's Cindy Callaway, along with Handbook Editor Mark Owen, presented *Seminar 30 Electronic Project and Document Management: An Introduction and ASHRAE's Systems* part of a Seminar co-sponsored by TC 7.1. This included a review of ASHRAE's new authoring portal.
26. ECC reported Survey results on what Chapters / Regions are using for planning/website/email/payment were posted to ECC's Basecamp Fall 2016. The subcommittee is working on a white paper based on those results to be posted on the ASHRAE.org website. Overall findings indicate that chapters have varied solutions in place for electronic communications and that chapters are generally satisfied with, and would recommend, the solutions they are using.
27. ECC's social media subcommittee has prepared guidance for submitting material to ASHRAE for posting on Society's YouTube channel, and for ASHRAE group YouTube content. The guidance will be posted to the Electronic Communications Committee page of the ASHRAE.org website.
28. ECC is reviewing app creation by chapters and will continue to monitor and review. At this time the committee believes it most expeditious to consider adding mention in the existing ASHRAE Policy and Procedure for Format, Activity, and Content of Internet Sites for ASHRAE Groups regarding app development by ASHRAE groups (including chapters). The committee will continue to look into this before Long Beach.
29. ECC's 2016-2017 MBOs are shown in Attachment E.

### **Handbook Committee**

30. The committee continued training and promotion of the new ASHRAE Authoring Portal ([authoring.ashrae.org](http://authoring.ashrae.org)), a collaborative authoring site, to TC Handbook Chairs in the Sunday training session. The Portal allows TCs or other authoring groups to store and revise copyrighted intellectual property in a secure, ASHRAE-approved location, with multiple authors able to work on a document simultaneously. Google Analytics data shows 160 users and 2590 page views since launch last June. The portal is also in use by ASHRAE Learning Institute (ALI), and requests to use the portal have been received by authoring groups from Standards and several special publications.
31. The 2017 *ASHRAE Handbook—Fundamentals* is on schedule for publication June 1, 2017.
32. Handbook Committee 2016-2017 MBOs are shown in Attachment F.

### **Historical Committee**

33. Historical Committee discussed the need to provide assistance to chapters for electronic storage of historical and other important documents and recommended establishing a connection with ECC for electronic storage recommendations “a digital file cabinet” to assist chapters.
34. Historical Committee named Tom Phoenix to be interviewed in June 2017 at the Annual Conference.

### **Professional Development Committee (PDC)**

35. PDC reported seven new courses were presented at the 2017 Winter Conference and five additional courses are in the development process. PDC plans for a minimum of four per year in varying stages of development or revision. An increase in the budget of development costs for next Society Year was approved by the PEC Fiscal Subcommittee.
36. PDC approved development of the Consulting Engineering Essentials course, with completion by June 2017.
37. PDC reviewed existing course offerings and approved to sunset nine (9) older courses. An action item was established to contact the authors and TCs of an additional ten (10) courses to determine if they are candidates for revision or should be sunset.
38. PDC will seek input from active TC representatives for development of courses for their discipline. PDC will monitor the development and revisions of ASHRAE standards and guidelines to ensure course offerings exist to cover those products.
39. PDC 2016-17 MBOs are shown in Attachment G.

### **Publications Committee**

40. Publications Committee awarded two winners from submissions to its inaugural Apps Contest and is preparing to announce the 2017 contest, with some adjustments to criteria and schedule based on lessons learned from the first contest.
41. Publications Committee reported the new web app for modeling compliance with Standard 90.1-2010 using the Energy Cost Budget (ECB) Method described in the standard now has 727 users and 473 projects registered.
42. Publications Committee referred to ECC an app from the Qatar/Oryx Chapter (for local chapter management), with the request that ECC review the app as a possible model for chapter apps. The app was recommended to the committee by ASHRAE President Tim Wentz.
43. Liaisons from Publications Committee contacted authoring groups regarding the need for revision or replacement of ASHRAE publications four or more years old (and especially those 10 or more years old).

- 44. Special publications completed from June 2016 through January 2017 are listed in Attachment H.
- 45. A status summary of upcoming publications is shown in Attachment I.
- 46. Publications Committee 2016-2017 MBOs shown in Attachment J.

\_\_\_\_\_

Date

\_\_\_\_\_

Directors

## PEC O&M Ideas to Support ASHRAE's New Strategic Plan

1. Develop an ASHRAE service (for a fee) to generate an O & M video for a specific project and keep it in the ASHRAE cloud. This project specific video, developed by engineers with ASHRAE software, would cover the basis of design, how the building is supposed to operate, the basic functions and operating parameters of the control system. If the building is remodeled, or it's intended use modified, these control strategies would need to be modified. ASHRAE could provide some system templates to help engineers create the videos. User cost needs to be low, like the YouTube model, to prevent others from offering a competing service. Benefits are ASHRAE Brand exposure and potential advertising. **(Propose assign to TC 7.3, ECC)**

Comments from our working group

  - a. "The great shame, maybe disgrace, is that we design buildings that are energy efficient, maintain occupant comfort and they don't work. Many don't work on day 1 much less in 2-3 years. Commissioning helps (certainly on day 1) but the training of the operating personnel especially after turnover is lacking."
  - b. "In this age of computerized everything it seems like if, as a part of the "design package", ASHRAE helped create a video presentation by the engineer that showed the intent of the control sequences in plain language it would help not only the operating personnel but also the commissioning authority to make sure everything operates as intended. An additional fee would be warranted."
  - c. "It is imperative that Temperature Controls and Control Strategies that are included with plans and specs as part of the facility design. The contractor and engineer do their best to see that the operating personnel at the facility understand the "intent" of the written word. Commissioning has come a long way toward the goal of having the facility operating as originally designed and re-commissioning could help in making sure that "new" operating personnel continue to operate the facility as originally intended."
  - d. "Unfortunately, a lot of facilities do not have the luxury of getting so much attention and after a few years the operation barely resembles the original intent and results in low indoor air quality and wasted energy. In my own experience I found that if I sat down with a new operator and explained what we were trying to do, they were willing to use the tools that they were given to make it happen."
  - e. "Having worked for many automatic temperature controls companies (Johnson Controls, Honeywell, Automated Logic and Staefa) one of our biggest frustrations is that we train owner personnel on the operation of our systems and six months later, they have moved on and there is no institutional memory of their building or our systems."
  - f. "We have tried to roll training into service contracts, but it usually gets short shrift and is one of the first things to get cut when O&M budgets get tight."
2. Another item that concerns Operating and Maintenance is the training and management of the facility operating personnel. ASHRAE has not effectively marketed our available educational materials to this audience. We could put together an "O&M Package" that could be used by our Chapters to invite these operating individuals to our meetings and to join our Society and join

our TCs and in so doing make their service to their employers more valuable. This could lead to more formalized training and maybe certification. Approaching BOMA and other related organizations and making them partners in the educational effort would benefit all. **(Propose assign to TC 7.3, Members Council CTTC)**

3. ASHRAE DBOSS (Dynamic Building Optimization Systems and Service) uses software that communicates with "every item" in the building to optimize collective performance, reduce building energy and maintenance costs, and enable predictive maintenance/service. An ASHRAE app to help select DBOSS program features and/or predict savings could be of great interest to the O&M community and generate ASHRAE revenue. ASHRAE could also publish more DBOSS case studies like the ones on ASHRAE HQ. **(Propose assign to TC 1.5, Publications Committee, TC 7.5)**
4. Create practical guides and check lists for effective building operations geared toward operations staff **(Propose assign to TC 7.3)**
  - a. Strategies to utilize fault detection diagnostic tools for building operations, to deal with the large volume of data on alarms and operations monitoring
  - b. Research leading to a publication on best practices in effective building operations, with case studies
  - c. Develop and publish high performance building operations specifications, guidelines for specific building types
5. We are starting to see ASHRAE standardized sequences in consulting engineers' specifications, but it is more the exception than the rule. One possible solution would be to educate consulting/specifying engineering community on our Handbook resources. **(Propose assign to TC 1.4, 7.3)**
  - a. This addresses the many controls companies that simply cut & paste the specified sequences of operation into their programming without much thought as to whether they work or not.
6. Expand the development and use of O&M Terminology by offering a filterable website database application of all terms and definitions tracked by TC 1.6. The cloud sourced database could be hosted in the ASHRAExCHANGE area with accessible read-only for visitors, but also read-write for commenting based access levels using ASHRAE's existing user database and/or ASHRAE Exchange. **(Propose assign to TC 1.6, 7.3)** This effort would help ASHRAE become visible as a source for O&M Terminology.  
Such a database could:
  - a. Allow building owners and maintenance groups to know what ASHRAE's definitions are, reducing confusion.
  - b. Bring more uniformity to ASHRAE consultants, contractors, researchers writing papers, code committees, etc. Position ASHRAE as a more authoritative source – having better definitions for O&M Terms.
  - c. Reduce risk for users of standard terminology and greater harmonization to occur as committees are allowed to see other term definitions in use with the O&M community.
  - d. Allow for expansion, with future efforts in graphical symbols, abbreviations, etc.
  - e. An app to generate inputs for a BEQ operation submission

7. An app to generate a building specific O&M manual **(Propose assign to TC 7.3, Publications Committee)**
8. Promote ideas involving big data usage and BIM.
  - a. BIM does allow us to enter this new world of big data. It seems to allow us to move into the digital age - where most other industries already operate - but not Buildings. The UK is about to press ahead with compulsory BIM for government funded projects. As a large building owner/operator the UK government has a lot of clout and interest in getting this technology adopted. They have said from 2016 all their projects have to use BIM. ASHRAE needs to promote BIM. **(Propose assign to MTG BIM, TC 1.5, TC 7.3)**
9. ASHRAE creates a program to crowdsource the Service Life and Maintenance Cost Database (managed by TC 7.8). This database would allow O&M to more accurately plan and budget their operations. This database should accept spreadsheet information with pull down menu's that mimic the database elements per TRP 1237 and the existing database. The goal is to seed the database adequately so that it becomes the leading open source of building operating cost and service life for the built environment. TC 7.5 and TC 7.9 have indicated they have data to input. **(Propose assign to TC 7.5, TC 7.9, ASHRAE Marketing)**
10. ASHRAE should explore how the new virtual reality programs could be used to support the O&M market. **(Propose assign to TC 1.5 Emerging Technologies)**

	<b>PEC O&amp;M Ideas to Support ASHRAE's New Strategic Plan</b>	<b>Proposed Referral Assignments</b>	<b>POC</b>	<b>MBO 2 Assign</b>	<b>Notes</b>
1	<b>O&amp;M Video</b> - Develop ASHRAE service (fee based) to generate O&M video for specific projects. Store in ASHRAE cloud.	ECC, Tech Council (TC 7.3)	Steve Faulkner, Jim Vallort	Roger Jones	
2	<b>Chapter O&amp;M Resources</b> - Develop O&M package for use by local chapters. Target facilities personnel to join local chapter as benefit/enhance skill sets.	Members Council/CTTC	Bjarne Olesen	Roger Jones	
3	<b>DBOSS App</b> - Develop app for DBOSS: Dynamic Building Optimization Systems & Service	Pubs Committee	Jin Jin Huang	John Nix	DBOSS subcommittee is new and met for first time at AM2015
4	<b>Guides &amp; Checklists</b> - Create practical guides & check lists for effective building operations geared toward operations staff.	Tech Council (TC 7.3)	Jim Vallort	Richard Rooley	
5	<b>Standardized Sequence of Operation</b> - Educate consulting/specifying engineering community on our Handbook resources regarding standard sequences of operation.	Tech Council (TC 1.4; TC 7.3)	Jim Vallort	Richard Rooley	
6	<b>Terminology Database</b> - Offer our O&M Terminology via cloud hosted database as a resource for visitors (read-only) & members (read/write/comment). Benefits include reduced confusion and increased uniformity.	Tech Council (TC 1.6; TC 7.3)	Jim Vallort	Richard Rooley	
7	<b>O&amp;M Manual App</b> - Develop an app to generate a building specific O&M manual	Pubs Committee Tech Council (TC 7.3)	Jin Jin Huang, Jim Vallort	Richard Rooley	
8	<b>BIM</b> - Promote ideas involving big data usage and BIM.	Tech Council (MTG BIM; TC 1.5; TC 7.3)	Jim Vallort	Roger Jones	
9	<b>Service Life and Maintenance Cost Database</b> - Create a program to crowd source the Service Life and Maintenance Cost Database (managed by TC 7.8).	Marketing, Tech Council (TC 7.5; TC 7.9)	Vanita Gupta	Roger Jones	
10	<b>Virtual Reality</b> - Explore how the new virtual reality programs could be used to support the O&M market.	Tech Council (TC 1.5; Emerging Technologies)	Jim Vallort	John Nix	

TC 1.4 Control Theory and Applications  
TC 1.5 Computer Applications  
TC 1.6 Terminology  
TC 7.3 O&M Management  
TC 7.5 Smart Building Systems  
TC 7.9 Building Commissioning  
MTG BIM Multidisciplinary Task Group - Building Information Modeling



**Memorandum**  
**PEC Functional Planning MBO 4A: Just In Time Learning**  
**June 22, 2016**

MBO 4A: Come up with game plan, inclusive of staff and fiscal, SMACNA "In time learning," videos, etc.

**June 16, 2016 Discussion**

**Action Items**

1. Functional Planning Subcommittee: Discuss JIT then (possibly) refer to PEC or ECC
2. Functional Planning Subcommittee: Identify several pilot projects
3. Steve Comstock: What is the distribution channel? ASHRAE website? YouTube? (Keep Learning Portal and Tech Portal alone).

Steve Comstock stated that PubEd will be relaunching the eLearning Platform (in support of Tim Wentz's theme).

Steve further discussed PubEd's main areas of focus:

**1. Learning Portal**

Taking eLearning courses into a newly licensed LMS  
Transitioning existing "older" programs into new HTML5 format  
Personal dashboard - maintain Ed records (eLearning, self-reporting)

**2. Technology Portal**

Repository for all docs that are freely available to members (currently spread throughout the website.

Sell subscriptions?

Conflict with bookstore?

Joslyn is staffer for ECC

**3. ASHRAE University**

Rebranding ALI courses

Make it look like a functioning university

- Job boards
- Financial aid office
- HVAC training registration

We discussed the fact that **Just in Time Learning** could complement each of these areas

- How does it fit in?
- Is this something for PDC?
- Is it an educational product?
- Learning Bursts (8 years ago) not very successful

**JIT Committee Structure**

Chuck Gulledge: We need to develop a roadmap of how the TC's content flows up to a portal

Steve Comstock: Do we need an ad-hoc to review? Invitation should be sent to TCs and SSPCs

Mick Schwedler: Functional Planning Committee (MBO-4A) will still need to set the ground rules and develop the roadmap

Mick Schwedler: JIT Ad-Hoc should include Members Council representation

**JIT Pilot Projects:**

- Legionella
- Flammable Refrigerants
- Certifications

**Further Discussion:**

What are the topics that members demand?

Kahn University/YouTube channel are good examples

Use it to advertise a standard

Suggestion Box - ASHRAE Exchange

Bill McQuade: Consider Camtasia Studio as a tool to produce content

Mick Schwedler: Have each TC, SSPC, etc. create, review, vote, submit up

Chuck Gullede: new collaborative authoring tool have storage?

Tim Wentz: Basecamp might be a better place

**Attendees:**

Tim Wentz, Steve Comstock, Chuck Gullede, Walid Chakroun, Mick Schwedler, Mark Fly, Bill McQuade, Roger Jones

\* \* \*

**May 11, 2016: Tim Wentz's responses to our questions**

With respect to Roger's excellent questions, here are my answers:

1. Have we defined the purpose of the portal? The portal, as with all of the initiatives, was developed by a subcommittee within PEAC. The purpose put forward by the subcommittee is "Create a technology portal to give members immediate access to ASHRAE research, Journal papers and other ASHRAE technology". The portal has been assigned to ECC. Having said that, if there is a recommended purpose or scope that adds clarity to the assignment, I am sure that PEAC would consider it.
2. Do we know what the content of the portal will be? In a very broad sense, the content of the portal is as defined above. Again, I am sure we would be happy to entertain a revised statement of content if it helps ECC accomplish its goal.
3. Do we know what the priority of the content will be? The priority was not set by PEAC. I think that should be one of the tasks of ECC.
4. Who is the audience? The audience was also not identified by PEAC other than it is to benefit members. I think that should be another task assigned to ECC.
5. Has anyone identified any knowledge gaps? Not that I am aware of. This initiative was also discussed in some detail with Steve Comstock, who provided some input to the initiative. He indicated that a technology portal had previously been suggested and some work completed on the task. I am not sure if a gap analysis was done as a part of that development or not, but I am sure he would know.

I hope that helps a little bit. Let me know if you have any other questions.

Tim

\* \* \*

## May 6, 2016 Discussion

Chuck/Walid: We conducted a telecon on Friday regarding MBO 4A (Just in time Learning) and had a few questions for you.

Mick Schwedler mentioned that two of Tim's items in his theme are:

1. Launch ASHRAE University (ALI, eLearning, DLs, Portal)
2. CE Essentials I & II courses

Further, he said that Tim expects to have the Portal launch on September 1<sup>st</sup>.

Here are our questions:

1. Have we defined the purpose of the portal?
2. Do we know what the content of the portal will be?
3. Do we know what the priority of the content will be?
4. Who is the audience?
5. Has anyone identified and knowledge gaps?

We discussed having Staff and the Professional Development Committee help us identify existing content that could be embedded (JIT modules) in the portal, but would like to narrow the focus a little if there is an expectation that some of this JIT would be required for the launch.

Attendees: Darryl Boyce, Frank Mills, John Nix, Mick Schwedler, Roger Jones

**ACTION 1: (Tino Mendez)**

My approach to this was to contact my local Chapter's YEA group, which is very active, and gave them the opportunity to provide input on this question. What follows is the text of an e-mail that was sent to approximately 60 YEA members of the Central Oklahoma Chapter.

*You are receiving this e-mail because ASHRAE wants your input on how publications could best serve the needs of our members. You are the only YEA group being contacted at this time, so your input is very important. Please reply. See below.*

*The Publishing and Education Council has tasked its Functional Subcommittee, of which I am a member, to get input from YEA members on product alignment (format, delivery mechanism, content and context).*

*You could consider how this would affect all of ASHRAE's technical material. Also, consider the fact that not all ASHRAE members live in developed countries and delivery of printed material is a challenge.*

*I need to report prior to the winter meeting in Las Vegas so a prompt reply will be appreciated. This is your opportunity, as an ASHRAE YEA member, to influence how ASHRAE technical material is made available to the General Membership.*

*Think about it and share your views by sending me an e-mail to [tinomendez@cox.net](mailto:tinomendez@cox.net) with your ideas or call me at 405-590-4479 to discuss.*

*THANKS !!*

I have received several replies with recommendations and suggestions that I will itemize below:

1 - I dislike that there is no "update" possibility on standards, e.g. need to buy a new standard once an update is out.

2 - No additional discounts for educators or students (smaller institutions do not have access to all standards through their library).

3 - DRM of pdf's may lead to issues if changing computers for some vendors of pdf documents (no good suggestion to solve the issue, don't recall if that was a major issue for ASHRAE standards).

4 - DRM sometimes prevents comments from being made into the pdf (don't recall which standard was the issue, but I ran into that issue)

5 - It would be great to sign up on a news-list specific to standards that were purchased previously.

6 - It would be good for committees to continually update the electronic version of the handbook rather than fixing that on the regular cycle of several years. If the deadline is not met by authoring committees then ASHRAE will otherwise lose the capability to update chapters until the next revision round.

7 -This sound an awfully lot like trying to get away from physical books. If this is the case, I personally will always want a hardback book and it is the primary motivation behind being an ASHRAE member for myself.

8 -If I had to guess, I would think a lot of people will want both worlds, physical copy and “E-book”, if you will. Going to a single eBook would most likely need to be accompanied by a drastic drop in membership fees.

9 - For ASHRAE Materials, I think an App where you can download chapters of the books to mobile devices would be useful. It would be important that the chapters be easily download-able and delete-able for this to work. There are many places where the handbooks would be useful, but lugging around a laptop with the CD or the physical book is not always the most practical when walking through a plant etc. Many of the areas where we work (inside factories for example) have limited cell service so having the chapters be downloadable so you can take specific sections of the book on your cellphone/tablet with you would be very helpful.

10 - The other thing I think would be useful are video/animation tutorials. The books are extremely useful, but there are times when a quick 1-2 minute video explanation would go a-long way to providing an overview and better initial understanding that we can achieve with just text. There are other places where you can get these types of videos, but as the ASHRAE is the non-biased governing body it would be nice to have ASHRAE produced content linked in the chapters of the book to help illustrate some of the principles that are being discussed in each chapter.

11 - The last comment I have really falls more into IIAR territory and is more specific than I think you are looking for with the question you have but I will pass it along anyway. One of the issues I have recently run across is a lack of standard definition for ammonia refrigeration pipe allowable corrosion. One of the projects we are dealing with is requesting an assessment of piping integrity for ammonia systems. Everything we have found is very loosely defined RAGAGEP information, and there does not seem to be any consensus for how much corrosion of pipe is acceptable before replacement is required. It would be nice if ASHRAE could work with IIAR/ASME to come up with some specific standards for when piping and/or equipment must be replaced that are less subjective than the RAGAGEP everyone is working under now (IE: If pipe wall is 90% of original wall thickness must be replaced with-in 1 year, if pipe wall is 70% of original wall thickness must be replaced with-in 1 month, less than 70% within one week...). I am sure there are liability issues that go along with this that people want to stay away from, so it may be a non-starter. Just something I have run-across recently that ASHRAE technical committees may be able to assist with.

I have explained to them how TCs work and clarified some misconceptions as to how Handbook Chapters are updated but I wanted to include all of their comments for your benefit. As far as recommendations go, I believe that items 1, 5, 9 and 10 are worthy of further consideration. Other items may be of interest to committees and should be forwarded.

#### **ACTION 2: Engage YEA Committee**

- Contacted Erich Binder, YEA ExO who arranged a conference all with YEA Chair Haynes and Vice Chair Jake Kopocis
- Explained the MBO and requested their assistance
- We were invited to attend the YEA Committee meeting in Las Vegas and did so

- YEA Committee assigned a three person ad hoc to develop a survey, send it to YEA members (not just YEA Committee members) and report back
- No specific dates were set, but they generally move forward with tasks quickly
- Jake attended the Functional Subcommittee meeting along with one of their ad hoc members.
- Wednesday the ad hoc will meet to elect a Chair
- They will develop a draft survey and share it with Mick and Tino.

Attachment D  
PEC Report to BOD

Certification Committee  
MBOs Society Year: 2016-2017

Chair: Rich Rose

Date: Nov. 4, 2016

Objective	SP 2014	Comp Date	Fiscal Impact	Responsible Party	Status	Comment
1. Attain 80% recertification rate for the 2016 renewal class, exceeding the industry average of 76%.	1B, 3D, 4B	3/31/17	Currently budgeted.	Chair, Staff	In progress.	Recertification application for 2016 class due Dec. 31. Voice-blast scheduled to go out Nov. 8 from the Certification Committee Chair. Hard copy recertification reminders mailing later in November.
2. Grow the number of applications by 10% over 2015-16.	1B, 2C, 3C, 4A, 4B	6/30/17	None, Staff Time	Staff	In progress. 3% increase Year-To-Date through October. All tactics under Comments section underway.	Tactics Underway: - Make use of Value of Certification results to quantify value for various market / membership segments, and develop marketing messages. - Continue targeting market segments e.g. guidebook downloaders, publication purchasers, ALL course registrants, YEAs.
3. Make ASHRAE certification more relevant to ASHRAE members and the industry in general.	1B, 4A	6/30/17	Volunteer and Staff Time		In progress.	Application for new, BBWG-aligned Building Commissioning Professional (BCxP) certification now available and underway. On track for ANSI accreditation and DOE recognition by end of March, 2017.
4. Manage certification programs against the ANSI/ISO/IEC 17024 accreditation standard.	2C, 4B	6/30/16	Currently budgeted.	Chair, Staff	In progress.	Following the 2016 year 1 assessment, ASHRAE granted continued accreditation under the ISO/IEC/ANSI 17024:2012 standard for the BEAP, BEMP, CPMP and HBDP.
5. Achieve DOE recognition of the CPMP.	1B, 2C, 4B	6/30/17	Currently budgeted.	Chair, Staff	In progress.	CPMP accredited by ANSI in May, 2016. On track for ANSI accreditation and DOE recognition of new BCxP by end of March, 2017.

6. Achieve DOE recognition of the BEAP.	1B, 2C, 4B	6/30/16	Currently budgeted.	Chair, Staff	In progress.	BEAP accredited by ANSI in May. Crosswalk with BBWG Energy Auditor certification requirements underway.
7. Evaluate total cost for each certification exam given to help ASHRAE understand the application fee that should be charged.	1B	12/31/16	None, Volunteer and Staff Time	Chair, Staff		
8. Evaluate total cost for recertification to help ASHRAE understand the application fee that should be charged.	1B	12/31/16	None, Volunteer and Staff Time	Chair, Staff		
9. Develop and publish FAQ summarizing past Committee discussions, decisions and actions regarding the subject of translating certification exam and other materials from English into other languages and otherwise accommodating non-native English speakers.	1B, 2A	12/31/16	None, Staff Time	Chair, Staff	In progress.	

**Recommendations for Strategic Planning:**

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

**1: Market Prioritization – Member Passion and Core Market**

**B.** Only through close communication with its key constituencies can ASHRAE deliver relevant and timely products and services. ASHRAE will research the true impact of its standards and technology and share the results with the world. ASHRAE will actively reach out to its key constituencies to achieve open, two-way dialogue. The dialogue will be used to validate programs and identify new opportunities.

**2: ASHRAE Efficiency – Organizational Assessment**

**A.** ASHRAE must become more agile so that it can deliver products and services in a timely manner while respecting the value of volunteer time. ASHRAE will review all aspects of the organization to identify and remove encumbrances to agility and the respectful use of volunteer time.

**C.** Alignment with other existing organizations may be the fastest way to achieve success. ASHRAE will consider all arrangements on working with other existing organizations, including consolidation, partnerships, and joint ventures.

**3: Applied Product Development**

**C.** The world of prescriptive and performance-based standards is changing. ASHRAE will work with other standards development organizations (SDOs) to map a course through this changing environment that will deliver the most positive impact to the market place.

**D.** Professional development is a keystone of ASHRAE that can be delivered through our grassroots organization. ASHRAE will develop a comprehensive portfolio of practical applications courses intended to be delivered through our grassroots organization.

**4: ASHRAE's Role in the Global Community**

**A.** ASHRAE has already had significant impact in many countries around the world, but there is more that can be done. ASHRAE will conduct a detailed analysis of the needs of its global members and opportunities to work with organizations outside North America. ASHRAE will develop a strategy to serve its international members and participate in international markets. These strategies will be added to this strategic plan once approved by the Board of Directors

**B.** ASHRAE can learn from others about how to be effective in the global community. ASHRAE will work with consultants and other organizations to discover best practices and develop an approach to serve its members in the global community.



Attachment E  
PEC Report to BOD

**Electronic Communications Committee**  
MBOs for Society Year 2016-17  
Chair:Steven Faulkner    Date:30 June 2016

<b>Objective</b>	<b>SP 2014</b>	<b>Compl by</b>	<b>Fiscal Impact</b>	<b>Resp. Party</b>	<b>Comment/Status</b>
1. Determine membership of subcommittees prior to Long Beach meeting (including new member welcome phone calls & mentor assignments).	2A	Jun 2017	None	Steven Faulkner, Heather Schopplein	Ongoing
2. Initial implementation/ training of Basecamp3 at Board, Council, Regions, Chapters and Committees levels.	2A	Jun 2017	None	ECT	Working with BOD and Councils on training plan for their members. Updating rollout plan report for PEC Functional in Las Vegas.
3. Develop and increase social media user base & expand usage by 20% among ASHRAE TAC and PEC voting members.	2A	Jun 2017	None	SMS	Ongoing
4. Create webinar for Social Media Best Practices.		June 2017	None	SMS	In Progress
5. Create a guidance/policy for producing content on ASHRAE YouTube, PowerPoint webinar		Jun 2017	None	SMS	In Progress
6. Develop ECC cross committee/council/staff relationships		June 2017	None	Steven Faulkner	On Going
7. Create webinar for ASHRAE membership: Best practices for a Region Website.		Jun 2017	None	WS	In Progress
8. Research and create white paper for ASHRAE membership on LaTeX software, licensing, free?		June 2017	None	ECT	In Progress
9. Develop a survey to Chapters/ Regions to see what they are using for event planning/ website/ email/ payment with goal of creating a white paper to be posted on the ASHRAE.org website.		June 2017	None	ECT	In Progress
<b>Additional Recommendations for Strategic Planning:</b> None at this time					

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

**ECT** = Electronic Collaboration Tools Subcommittee

**SMS** = Social Media Subcommittee

**WS** = Web Sites Subcommittee

**Handbook Committee**  
MBOs for Society Year 2016-2017  
Chair: Forrest Yount                      Date: 31 January 2017

Objective	SP Init.	Compl. Date	Fiscal Impact	Responsible Party	Status	Comment
1. Achieve 10 percent improvement in each volume revision score over previous volume score.	3	6/20	None	Chair, liaisons	Staff provided revision history. 2017F revisions in edit; results pending. 2018R, 2019A, 2020S review/revision in progress.	To remain relevant, Handbook chapters must be kept up to date. <i>Measure:</i> TCs regularly updating content as recorded in revision history reported by liaisons, staff.
2. Identify opportunities and risks in Handbook content areas.	3	6/17	None	Volume Subcoms; liaisons; Chair; staff	Staff provided revision history. Data under evaluation by liaisons; communicating to TCs.	To remain relevant, Handbook must meet users' needs. This objective is to identify those needs and the steps needed to meet them. <i>Measure:</i> areas needing attention identified.
3. Improve recognition of contributors to Handbook content.	2A	6/17	None	ExCom	Contributors list available from staff.	Volunteer recognition is important for supporting Handbook development. <i>Measure:</i> recognition given to contributors.
4. Pilot annual revision cycle with selected TC(s) to update ASHRAE Handbook Online.	2A	6/20	None	ExCom	TC 7.9 to pilot early revisions to their Ch 43 in 2019A. To present lessons learned 6/17.	Agile methodology--small sprints vs. 4-year cycle. Gain lessons learned, to help TCs better use volunteer time. <i>Measure:</i> TC(s) participate and report experience.
5. Solicit and receive feedback on new ASHRAE Authoring Portal.	2A	1/17	None	Training Subcom	Portal launched 6/17. Now 160 users, with requests to use by others.	Action to improve use of TC volunteer time. <i>Measure:</i> feedback received.

**Additional Recommendations for Strategic Planning:** None.

**SP Init.** = Strategic Plan 2014 Initiative addressed by objective  
FY: mso 31 January 2017

Attachment G  
PEC Report to BOD

**Professional Development Committee**

MBOs for Society Year 2016-17

Chair: Jim Bochat Date: June 27, 2016

Objective	SP 2014	Comp by	Fiscal Impact	Responsible Party	Comment/Status
1. Develop a 5-year plan on developing young engineer training products that can reach a wider audience than just our design class	1C	June 2017	None	Full Committee	In Progress
2. Develop a standard guideline on the method to develop and produce courses.	2A	January or June 2017?	None	Planning Subcommittee	Complete
3. Develop outlines for additional practical applications courses to 'fill the gaps' in our current offerings.	3D	June 2017	None	Planning Subcommittee	Process outline complete Subcommittee members have an ongoing responsibility to submit new course topics
4. Develop a standard guideline on the method to develop, translate and produce courses to an international market	4?	January 2017	None	Full Committee	Not started
5. Develop and launch two residential courses. <ul style="list-style-type: none"> <li>• Course 1</li> <li>• Course 2</li> </ul>	5A	January or June 2017?	None	Planning Subcommittee	Negotiating development costs. Received one proposal from posted RFP. Proposal in review.
6. Develop training for use in university curriculum. <ul style="list-style-type: none"> <li>• bEQ Task Force Prototype</li> <li>• Develop second course</li> </ul>	1C	June 2017	TBD	TBD	PDC to develop additional courses once Building EQ course is complete. Survey indicated HVAC design fundamentals was desired Ad hoc led by Michael Brandemuehl is developing the Building EQ prototype for rollout in Fall 2017.
ASHRAE Strategic Plan 2014 Initiatives addressed by Objective.					

PUBLISHED PROJECTS  
July 2016 to date

**July 2016**

- Standard 41.8-2016
- Standard 20-1997 (RA 2016)

**August 2016**

- St. Louis Seminars DVD
- Fundamentals of Psychrometrics SI
- Standard 90.4-2016
- Standard 154-2016
- Standard 126-2016

**September 2016**

- ASHRAE IAQ 2016 papers download
- Spanish Standard 188-2015
- *Second International Conference on Efficient Building Design: Materials and HVAC Equipment Technologies* (Beirut flash drive contents)
- *Standard 55 User's Manual*

**November 2016**

- Fundamentals of Refrigeration (SI), 2<sup>nd</sup> ed. (SDL)
- *Standard 62.1 User's Manual*
- Standard 90.1-2016 (I-P)
- Standard 90.1-2016 (SI)
- *ASHRAE Transactions* Vol. 122 Pt. 2 (St. Louis)
- Duct Size Calculator

**December 2016**

- UFAD O&M Guide/Bundle
- Buildings Conference 2016 Papers
- Standard 130-2016
- Standard 145.2-2016
- Standard 86-2013 (RA 2016)
- Standard 124-2007 (RA 2016)
- Standard 138-2013 (RA 2016)
- Standard 160-2016
- Guideline 33-2013 (RA 2016)
- Standard 15-2016
- Standard 34-2016
- Standard 184-2016
- Standard 16-2016

**January 2017**

- Energy Efficiency in Buildings and Communities—ERDC Published Research 2006–2016 [CD]
- *Standard 62.2 User's Manual*
- Standard 62.1-2016, Spanish

MSO 24 Jan 2017

Attachment I  
PEC Report to BOD

SPECIAL PUBLICATIONS PROJECTS : January 24,2017					
Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
<b>Books</b>					
ASHRAE Design Guide for Cleanrooms	TC 9.11	[Apr 28, 2016]	Proofs to authors	Feb 2017	Contact: Wei Sun
ASHRAE Design Guide for Dedicated Outdoor Air Systems	TC 8.10; RP-15651712	[Dec 28, 2016]	Editing	Apr 2017	PI: Svein Morner
ASHRAE Design Guide for Sustainable Refrigeration Facilities and Systems	SP 131; AHRI/IIAR UNEP; RP-1634	<del>2014 Aug 31,</del> 2016 Feb 1, 2017	Writing	TBD	per M Vaughn
ASHRAE Design Guide for Air Terminal Units	TCs 5.3, 7.7	<del>Jan 2015 Jul 2016</del> Feb 2017	Writing	<del>Oct 2016</del> Jun 2017	Authors: David John, Gus Faris
ASHRAE Design Guide for Duct Systems	TC 5.2; RP-1180	<del>Jun 2010 Jul 2011 Aug 2011 Feb 2013 Jun 2013 Jan 2014 Sep 2014 Nov 2014 Jan 2015 Jul 2015 Jan 2016 Jul 2016 Feb 2017</del>	Approving?	<del>Jun 2004 Sep 2004 Nov 2010 Oct 2011 Apr 2013 Nov 2013 Jan 2015 Feb 2015 Jun 2015 Dec 2015 Oct 2016 Jun 2017</del>	TC 5.2 contact: Pat Brooks As of Jan 2016: Contractor Farnsworth defaulted; TC 5.2 will finish the rest
ASHRAE GreenGuide, 5 <sup>th</sup> ed.	TC 2.8	Jun 2017	Writing	Fall 2017	
PHVAC and PHVAC Solutions Manual revisions	N/A	PHVAC: Jul Sol Man: Aug	Revising	PHVAC: Nov Sol Man: Dec	Every four years (2017, 2021, 2025)
Pocket Guide revision	N/A	I-P: Aug SI: Sep	Revising	I-P: Dec SI: Jan	Every four years (2017, 2021, 2025)
Proclaiming the Truth, 2 <sup>nd</sup> ed.	SComstock	2019	Planning	2019	8/25/2016 per SComstock; part of ASHRAE 125 <sup>th</sup> Anniversary
HVAC&R Pioneers	Staff; TBD	2019	Planning	2019	8/25/2016 per SComstock; part of ASHRAE 125 <sup>th</sup> Anniversary

**SPECIAL PUBLICATIONS PROJECTS : January 24,2017**

Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
What to Expect from the Commissioning Process (w/supplemental files)	Gerald Kettler	<del>Jul 2016</del> <del>Winter 2016</del> Summer 2017	Compiling/Writing	TBD	BCA to co-sponsor or hold joint copyright
Member's Survival Guide: Design/Build section	Mitchell Swann	TBD	Revising	TBD	Aims to have draft for TC in January 2016
District Cooling Guide, 2 <sup>nd</sup> ed.	TC 6.2; SP-XXX	TBD	In discussion	June 2018	With funding from Empower (UAE)
District Cooling Guide Operations Manual	TC 6.2; SP-XXX	TBD	In discussion	June 2018	With funding from Empower (UAE)
Structural and Vibration Guidelines, 2 <sup>nd</sup> ed (Datacom Series)	TC 9.9	<del>Jun 2015</del> TBD	Revising	<del>Oct 2015</del> TBD	Still valuable in current form. TC will update as time allows but not in 2016 per DBeaty 6/26/16.
Datacom Equipment Power Trends and Cooling Applications, 3 <sup>rd</sup> ed (Datacom Series)	TC 9.9	<del>Jan 2015</del> 2017	Revising	<del>Apr 2015</del> TBD	Major rewrite per DBeaty 6/26/16
Particulate and Gaseous Contamination, 2 <sup>nd</sup> ed (Datacom Series)	TC 9.9	<del>2015</del> TBD	Revising	TBD	per Don Beaty, 1/25/15
ASHRAE Design Guide for Hazardous Spaces	TCs 5.8, 9.2	TBD	Writing	TBD	Author: Mike Baucom Draft to be complete mid Jun per 6/2/16 email from MBaucom
Economizers for Datacom Facilities (Datacom Series)	TC 9.9	<del>Jul 2010</del> <del>Jun 2011</del> <del>Oct 2011</del> Sep 19, 2013 TBD	Planning	<del>Jan 2011</del> <del>Oct 2011</del> TBD	per DBeaty, Aug 2013 email to Steve C.
IT Equipment Cooling book (Datacom Series)	TC 9.9	<del>Jun 2011?</del> <del>Nov 2011</del> TBD	Writing	<del>Oct 2011?</del> TBD	per DBeaty 9/8/11; white paper first
Engineering Concepts in Supporting Community Containment Measures During Public Health Incidents	TC 9.6	TBD	Planning	TBD	
Integrated Building Design Applications Manual	TC 7.1	<del>Jan 2009</del> <del>Jun 2010</del> TBD	Writing	<del>January 2008</del> <del>Jun 2008</del> <del>Sep 2010</del> <del>Jan 2015</del> TBD	MOwen queried CGulledge 6/2/16 email

**SPECIAL PUBLICATIONS PROJECTS : January 24,2017**

Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
Heat Load Estimating Guide for Electrical Equipment (a Design Guide)	RP-1395; RP-1104	TBD		TBD	May be better to simply incorporate the data into the Handbook (keep selling RP reports, too).
ASHRAE Design Guide for Hot-Climate Buildings	MTG.HCDG	TBD	Planning	TBD	MTG Ch Frank Mills
Residential IAQ Guide	EHC; RP-1663	TBD	Writing	TBD	
ASHRAE Design Guide for Cool Thermal Storage	TC 6.9; RTAR-1719	TBD	Proposed	TBD	TC working on work statement
A Comprehensive HVAC Design Guide for Justice Facilities	TC 9.4	TBD	Writing	TBD	
Advanced Control Sequences for HVAC Systems: Phase I, Air Distribution and Terminal Systems	TC 1.4; RP-1455	TBD	RP in progress	TBD	
(Report listing and reviewing international standards and guidelines related to IEQ.)	IEQ-GA	Summer 2017	Planning	Fall 2017	Bjarne Olesen initiative for 2017-18
<b>Standards and Guidelines and User's Manuals</b>					
Standard 90.1-2016 User's Manual	Contractor	Aug 2017	Writing	TBD	Contact: LPratt
Standard 90.4	SSPC 90.4	Jun 2016	Editing	Jul 2016	
Standards/addenda to be published after approval at Annual Conference	Varies	Jul/Aug 2016		Aug/Sep 2016	Every 6 mos.
Revision of Standard 90.1	SSPC 90.1	Aug/Sep 2016		Oct 2, 2016 (electc)	Every three years (2016, 2019, 2022)
Standards/addenda drafts going for approval at Winter Conference	Varies	mid Oct 2016		Nov 30, 2016	Every 6 mos; publish = ready for review at conf
Revision of Standard 52.2	SSPC 52.2	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Revision of Standard 90.2	SSPC 90.2	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Revision of Standard 140	SSPC 140	Winter 2016		Mar	Every three years (2016, 2019, 2022)
Standards/addenda to be published after approval at Winter Conference	Varies	Feb/Mar 2017		Mar/Apr 2017	Every 6 mos.
Standards/addenda drafts going for approval at Annual Conference	Varies	Mid-Apr 2017		Jun 1, 2017	Every 6 mos; publish = ready for review at conf

SPECIAL PUBLICATIONS PROJECTS : January 24,2017					
Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
Revision of Standard 135.1	SSPC 135	2017		2017	Per Stephanie R phone 7/7/14
Revision of Standard 189.1	SSPC 189	Sep 2017		Oct 2017	Every three years (2014, 2017, 2020)
18-month Addenda Supplements to Code-Intended Standards	Varies	Spring 2018		Sep/Oct	Every three years (2015, 2018, 2021)
Revision of Standard 62.1	SSPC 62	Spring 2019		Summer 2016	Every three years (2016, 2019, 2022)
Revision of Standard 62.2	SSPC 62	Spring 2019		Summer 2016	Every three years (2016, 2019, 2022)
Revision of Standards 15 and 34	SSPCs 15, 34	Jul 2019		Oct 2019	Every three years (2019, 2022, 2025)
<b>Specialty Conferences</b>					
Sustainable Management of Refrigeration Technologies in Marine and Off-Shore Fisheries Sectors (Bangkok)	Tony Giometti			Conf is April 6-8, 2017	
Thermal Performance of the Exterior Envelopes of Whole Buildings XIII[flash drive]	Andre Desjarlais (ORNL)	Jun 2019		Nov 2016	Every three years (2019, 2022, 2025)
IAQ Conference [flash drive]	Tony Giometti	Aug 2019		Conf is Sep 12-14, 2016	Every three years (2019, 2022, 2025)
<b>Self-Directed Learning (SDL) Textbooks</b>					
Fundamentals of Heating Systems (I-P)	Mark Hegberg	<del>Mar 16, 2012</del> <del>Mar 31, 2012</del> <del>Jun 15, 2015</del> <del>Dec 15, 2015</del> <del>Dec 31, 2015</del> <del>late Jan 2016</del> <del>Mar 25, 2016</del> [May 5, 2016]		Sep 2016	Awaiting query responses from author
Fundamentals of Heating Systems (SI)	Mark Hegberg	<del>Mar 16, 2012</del> <del>Mar 31, 2012</del> [May 5, 2016]		Sep 2016	Awaiting query responses from author
Fundamentals of Design and Control of Central Chilled-Water Plants (I-P) [supplemental files]	<del>Mark Hydeman (2009)</del> Steve Taylor (2010)	<del>Nov 2009</del> <del>Mar 15, 2012</del> <del>Fall 2012?</del> 2014 Chs 1-6: Dec 7, 2015 Chs 7-8: Jan 2016 May 11 and 23, 2016		<del>Jul 2012</del> March 2017	We only have the text; we have not yet received the figures



**SPECIAL PUBLICATIONS PROJECTS : January 24,2017**

Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
Fundamentals of Heating and Cooling Loads (I-P)	Jeff Spitler (2009) Laura Southard (2015)	Aug-2009 Spring-2010 Aug-2012 Jan-2013? Aug-2016 Dec-2016 TBD		Dec-2012 TBD	
Fundamentals of Heating and Cooling Loads (SI)	Jeff Spitler (2009) Laura Southard (2015)	Aug-2009 Spring-2010 Aug-2012 Jan-2013? Aug-2016 Dec-2016 TBD		Dec-2012 TBD	
Fundamentals of Water System Design (SI) [conversions only]	Dick Hegberg Mark Hegberg (2009; 2015)	Aug-2009 Jun-15, 2011 Mar-19, 2012 Apr-20, 2012 May-21, 2012 Dec-2015 late Jan-2016 Apr-4, 2016 Mid-June, 2016 TBD		Jan-2016 TBD	Final I-P files supplied for conversion Nov 2, 2015
Fundamentals of Design and Control of Central Chilled-Water Plants (SI)	Mark Hydeman (2009) Steve Taylor (2010)	Nov-2009 Fall-2012? 2014 [August 2016]		March 2017	
<b>Position Documents</b>					
PD on Climate Change	Steve Hammerling	Spring-2016 Early July 2016 Fall-2016 Feb 2017	In TC Review	TBD	
PD on Ammonia as Refrigerant	Steve Hammerling	Spring-2016 Early July 2016 Fall-2016 Feb 2017	Under Review	TBD	
PD on Environmental Tobacco Smoke	Steve Hammerling	July-2016 Feb 2017	Revising	TBD	Current version was reaffirmed in Jul 2016 to keep it posted online until revision is complete
PD on IAQ	Steve Hammerling	Early July 2016 Feb 2017	In progress	TBD	

SPECIAL PUBLICATIONS PROJECTS : January 24,2017					
Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
PD on <del>Unvented</del> Combustion of Solid Fuels and IAQ-Indoor Air Quality in Primarily Developing Countries	Steve Hammerling	<del>Oct-2015</del> Jan-2016 <del>Spring-2016</del> July 2016		<del>Nov-2015</del> Feb-2016 TBD	
PD on Energy Efficiency in Buildings	Steve Hammerling	<del>Nov-2015</del> Spring-2016 Feb 2017	In progress	<del>Dec-2015</del> TBD	Per Steve H: New PD, so full editorial review needed
PD on Legionellosis	Steve Hammerling	<del>Dec-2015</del> Jan-2016 <del>Spring-2016</del> Late-2016 Feb 2017	In progress	Jan-2016 <del>Feb-2016</del> TBD	
<b>Translations</b>					
Standard 15-2013 (Spanish)	A TEAAR	<del>2015</del> TBD	Contracted	TBD	
Standard 100-2015	Argentina Chap.	TBD	Contracted	TBD	
Water System Design SDL (Spanish)	Mexico Chapter	TBD		TBD	
IAQ Guide (Spanish)	Miami Chapter	<del>May-2014</del> TBD	Contracted	TBD	
Thermal Guidelines for Data Processing Environments, 2nd edition (Spanish)	A TEAAR	<del>May-2011</del> TBD	Contracted	TBD	
Standard 34-2007 or -2010 (Spanish)	ACAIRE	<del>Dec-2010</del> TBD	Contracted	TBD	
Standard 90.1-2007 (Spanish)	Mexico City Chapter (AMERIC)	<del>2009</del> TBD	Contracted	TBD	
Fundamentals of HVAC Control Systems SDL, 2001 edition (Spanish)	ASHRAE Monterrey Chapter (MX)	<del>2010</del> TBD	Contract sent; unsure if signed	TBD	
Standard 188-2015	Spain Chapter	TBD		TBD	
189.1-2009 User's Manual (Spanish)	A TEAAR	<del>2011</del> TBD	Contracted	TBD	
Standard 90.1-2010 (Spanish)	Argentina Chapter	TBD	Contracted	TBD	
Standard 41.3-1989 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Standard 41.1-1986 (RA 2006) (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	

SPECIAL PUBLICATIONS PROJECTS : January 24,2017					
Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
Standard 90.1-2016 (SI)	Spain Chapter	TBD	Waiting on Signed Contract	TBD	
Guideline 2-2010 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Guideline 22-2008 (Spanish)	Mexico City Chapter (AMERIC)	<del>2012</del> TBD	Contracted	TBD	
Standard 111-2008 (Spanish)	Mexico City Chapter (AMERIC)	<del>2013</del> TBD	Contracted	TBD	
HVAC Design Manual for Hospitals and Clinics, 2 <sup>nd</sup> Ed (Spanish)	ATEAAR	TBD	Waiting on Signed Contract	TBD	
Standard 52.2-2012 (Spanish)	Mexico City Chapter (AMERIC)	TBD	Waiting on Signed Contract	TBD	
Standard 90.1-2013 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Standard 189.1-2009 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Guideline 0-2013 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
Guideline 1.1-2008 (Chinese)	Taiwan Chapter	TBD	Contracted	TBD	
<b>CDs/DVDs</b>					
Weather Data Viewer DVD	Michael Roth	[Dec 2016]		Feb 2017	Every four years (2017, 2021, 2025)
<b>Online Products</b>					
ASHRAE Terminology	TC 1.6	Ongoing		Ongoing	Contact: Art Hallstrom
Cold Climate website		Ongoing	Gathering content	Ongoing	
Thermal Comfort Tool, Ver 3	SSPC 55	<del>Summer 2014?</del> <del>April 2015</del> TBD		TBD	Contact: Abhijeet Pande; might be published with Std. 55 UM instead
<b>Recurring Conference-Related Projects</b>					
Annual Conference Seminars DVD	Tony Giometti	Request spreadsheet first week in Jul; submit art Jul 22		Proof content Aug 5–9; approve by Aug 12	Needed in inventory by Sep 1
Annual Conference Transactions (Part 2)	Staff	Aug/Sep		Oct	
Winter Technical Papers	N/A	Sep–Nov		Nov	

**SPECIAL PUBLICATIONS PROJECTS : January 24,2017**

Title	Responsible Entity	Date Exp Receive [Recd]	Current Status	Expected Publish Date	Comments
Winter Papers Download	N/A	Nov		Submit content Nov 27, art Dec 9	
Winter Conference Seminars DVD	Tony Giometti	Request spreadsheet first week in Feb; submit art Feb 25		Proof content Mar 4-8; approve by Mar 11	Needed in inventory by Apr 1
Winter Conference Transactions (Part 1)	Staff	Feb/Mar		May	
Annual Technical Papers	N/A	Mar-Apr		mid-Apr	
Annual Papers Download	N/A	Apr		Submit content Apr 23, art May 6	

MSO 24 Jan 2017

**Publications Committee**  
 MBOs for Society Year 2016-17  
**Chair:** Jin Jin Huang **Date:** 31 January 2017

**SP 2014** = Strategic Plan 2014 Initiative addressed by objective

<b>Objective</b>	<b>SP 2014</b>	<b>Compl. by</b>	<b>Fiscal Impact</b>	<b>Resp. Party*</b>	<b>Comment/Status</b>
1. Continue the development of 'infographic' to show interrelationships of ASHRAE publications, technical topics, and development groups.	1	6/17	None	<b>Ferguson,</b> Bansal, Lacharite, Tome	Aim is to enable clearer understanding and application of the wide range of ASHRAE publications. Strengthen communication collaboration with at least two other ASHRAE committees. <i>Status:</i> Second draft completed; in refinement phase.
2. Expand on ASHRAE apps competition with lessons learned and develop new apps competition.	3	6/17	TBD	<b>Beaty,</b> Ow, Vallort, Correa	Builds on 2015-16 MBO #2. Contest launched at 2016 Winter Conference. <i>Status:</i> Results from first contest complete; lessons learned. 2017 contest announcement pending.
3. Strengthen communication with TCs and improve special publications refresh rate.	2	6/17	TBD	<b>Huang,</b> ALL	Assign a liaison to each TAC Section. Focus on special publications in the top sales list and work with TCs specifically to update those 10 yrs or older. <i>Status:</i> Liaisons contacted TAC Sections at Winter Conference.
4. Conduct and monitor mentoring program for new members.	2	6/17	None	<b>Lacharite,</b> Kourakos, Ferguson	Continuation of MBO#5 from 2015-2016. <i>Status:</i> Process revision recommendations identified.
<b>Additional Recommendations for Strategic Planning:</b> None at this time					

\*Lead for each MBO is shown in **boldface**.

JJH: mso 31 January 2017

TO: Tony Giometti, CEC Staff Liaison  
FROM: Steve Comstock, PEC Staff Liaison  
DATE: April 4, 2017  
SUBJECT: PEC Referral  
**Rename Research Track to reference STBE**

The Publishing and Education Council is investigating ways to encourage more research paper authors to consider STBE to publish their papers. For example, Research Projects require a technical paper be developed and STBE can be a place for ASHRAE members to publish these papers. Also, STBE is introducing Open Access enabling some STBE articles to be made widely available to the industry drawing attention to STBE and ASHRAE.

At its January meeting, PEC passed a motion asking that **CEC consider renaming the research track at ASHRAE conferences to reference Science and Technology for the Built Environment (STBE), ASHRAE's archival research Journal.** The council approved the following motion 10-0-0 CNV and action item (5) was assigned to staff to send the motion to CEC as a request for consideration.

It is hoped including STBE in the track's title would increase awareness of STBE within the ASHRAE membership.

For the information of CEC, the link to the site is here: [www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment](http://www.ashrae.org/resources--publications/science-and-technology-for-the-built-environment).

Also, PEC thanks CEC for approving its workshop on how to assist ASHRAE authors to increase the impact of their published research works. This workshop will be presented by editors from Taylor & Francis, the publisher of STBE.

Cc: Walid Chakroun

## Harr, Julie

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**From:** Harr, Julie  
**Sent:** Wednesday, April 05, 2017 11:17 AM  
**To:** Giometti, Tony  
**Subject:** PEC referral to CEC - from January 31, 2017 Las Vegas Winter Meeting  
**Attachments:** CEC referral2 (2).docx

Hi Tony,

Please see that attached referral from PEC from the January 2017 Winter meeting in Las Vegas. Let me know if you have any questions.

Thanks,  
Julie



# ASHRAE Science and Technology for the Built Environment

*Reinhard Radermacher*

*Editor-in-Chief*

[Current Status of STBE Submissions](#)

[STBE Original Manuscripts by Type](#)

[Papers Processed](#)

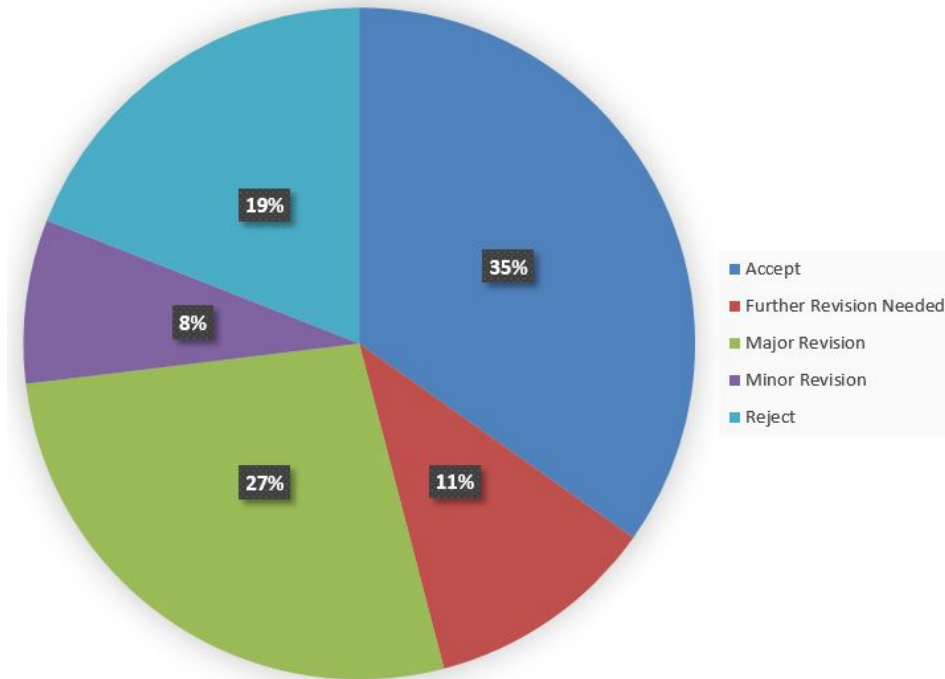
[Manuscript Task Report](#)

[Issue Lineup](#)

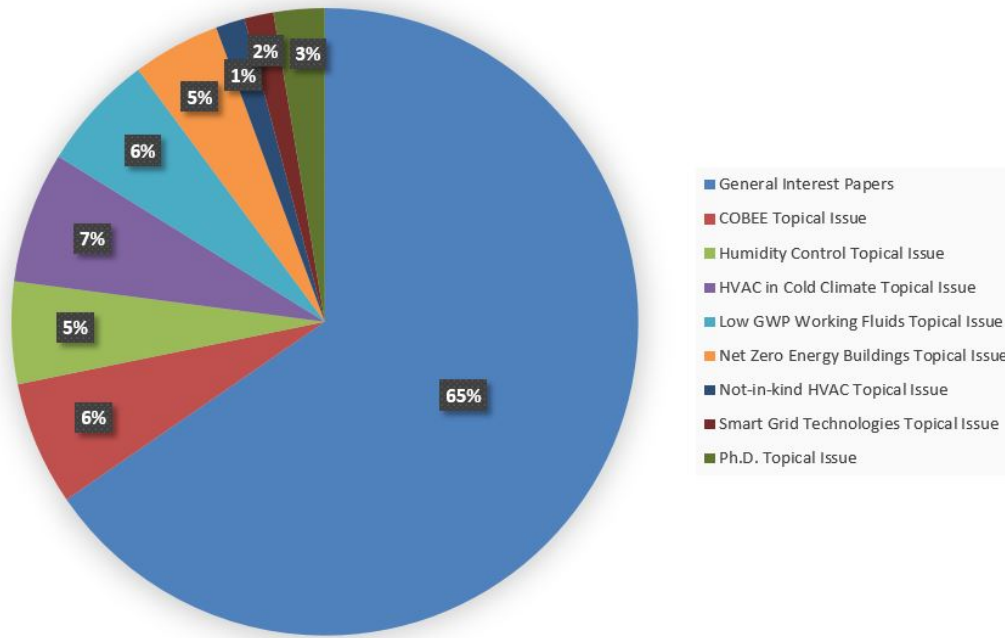
ASHRAE Winter Conference  
January 30, 2017  
Las Vegas, Nevada



### Current Status of STBE Submissions from the last 12 months.



### STBE Original Manuscripts Received by Type



Consistently exceed 100 new submissions every six months since January 2015.

										12 Month Revolving Update June 2016 to January 2017*														Action						
2004/5		2005/6		2006/7		2007/8		2008/9		2009/10		2010/11		2011/12		2012/13		2013/2014		2014/2015		2015/2016		2016/2017		2017/2018				
Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	Jan	June	
48	59	86	62	107	103	83	84	68	69	76	73	76	56	128	79	115	44	109	87	74	93	132	113	112	141	114		Newly Submitted		
39	34	31	30	58	64	58	54	48	52	27	10	3	42	49	108	31	12	30	73	91	33	59	67	69	62	76		Accepted		
26	29	27	32	58	67	53	57	30	32	31	31	33	28	39	41	42	41	59	36	53	45	48	46	61	39	82		Published		
29	26	32	33	40	36	39	27	14	11	18	7	10	14	7	42	14	13	40	42	34	16	31	27	46	27	45		Rejected		
								24	26	24	25	61	20	81	48	66	62	39	45	43	54	56	24	59	80	110		In Progress <sup>1</sup>		

\* Papers that are in progress no matter when initially submitted.

Total Papers Published by Issue											
Year	JAN	FEB	APR	MAY	JUNE	JULY	AUG	OCT	NOV	DEC	TOTAL
2017	19	15	14								
Year	JAN	FEB	APR	MAY	JUNE	JULY	AUG	OCT	NOV	DEC	TOTAL
2016	10	9	10	10	39	14	18	15	16	63	102
Year	JAN	FEB	APR	MAY	JUNE	JULY	AUG	OCT	NOV	DEC	TOTAL
2015	10	12	11	10	43	22	14	14	11	61	104
Year	JAN	FEB	APR	MAY	JUNE	JULY	AUG	OCT	NOV	DEC	TOTAL
2014	15	10	10	8	42	8	9	8	13	38	81
Year	JAN	FEB	APR	MAY	JUNE	JULY	AUG	OCT	NOV	DEC	TOTAL
2013	8	8	11	9	36	15	10	13	16	54	90
Year	FEB	MAY	AUG	OCT	N/A	N/A	N/A	N/A		DEC	TOTAL
2012	22	19	22	19						10	82
Year	FEB	APR	JUNE	AUG	N/A	OCT				DEC	TOTAL
2011	8	7	10	16		17				16	74
Year	JAN	MAR	MAY	JULY	N/A	SEPT	SEPT	NOV		N/A	TOTAL
2010	6	7	7	8	0	9		11			48
2009	8	12	11	9	0	8		10			58
2008	9	10	7	6	0	10		8			50
2007	5	11	7	9	0	10		8			50
2006	8			9	0	9		11			37

Virtual Topical Issues
Personalized Ventilation
June 2015, Editor: Chandra Sekhar
18 Papers

## Science and Technology for the Built Environment

Guest editors listed in green.

Manuscript Task Status Report STBE							
January 1, 2016 to January 1, 2017							
Associate Editors	Manuscripts Currently Assigned	RA Manuscripts No. Assigned Last 12 Months (includes revisions)	Average Turnaround in Days	Accept	Reject	Accept %	Reject %
Bansal, Pradeep	0	40	22	16	7	70%	30%
Brown, Steve	1	32	36	13	3	81%	19%
Cook, Malcolm	5	36	37	7	9	44%	56%
de Dear, Richard	0	16	43	5	5	50%	50%
Kim, Yongchan	2	21	52	7	4	64%	36%
Lamberts, Roberto	3	24	40	5	6	45%	55%
Nellis, Gregory	0	6	34	2	2	50%	50%
Radermacher, Reinhard	0	12	33	4	0	100%	0%
Sekhar, Chandra	3	16	94	5	4	55%	45%
Toftum, Jørn	2	30	31	12	1	93%	7%
Wang, Shengwei	3	28	33	11	1	92%	8%
Zhang, Jianshun	1	17	65	5	8	38%	62%
Zilio, Claudio	1	22	30	9	1	90%	10%
Akasaka, Ryo	0	10	33	4	0	100%	0%
Cao, Gangyu	1	13	96	4	0	100%	0%
Cremaschi, Lorenzo	4	11	42	0	1	0%	100%
Higashi, Yukihiro	0	6	57	3	0	100%	0%
Li, Xiangli	1	17	42	7	2	78%	22%
Moghaddam, Saeed	7	6	23	0	0	0%	0%
Sun, Hejiang	1	18	32	5	2	71%	29%
Xiao, Fu	0	28	35	13	1	93%	7%
Yu, Philip	7	18	70	0	1	0%	100%
Zhang, Tengfei	0	14	37	6	1	86%	14%
<b>Total</b>	<b>42</b>	<b>441</b>	<b>44.2</b>	<b>143</b>	<b>59</b>	<b>65%</b>	<b>30%</b>
<i>Radermacher, R. as MP</i>	44	510					
<i>Baughner, M. as MP</i>	0	4					

**Harr, Julie**

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**From:** Harr, Julie  
**Sent:** Thursday, April 06, 2017 12:08 PM  
**To:** Grant, Vickie  
**Subject:** FW: PEC Referred Motions - Reminder  
**Attachments:** Response to Members Council referrals - las vegas Jan 2017.docx

Vickie,

Please see the attached response to the highlighted open referrals from Members Council on attached. This will all then be closed. ☺

Thanks  
Julie

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**From:** Grant, Vickie  
**Sent:** Tuesday, March 07, 2017 2:27 PM  
**To:** Harr, Julie  
**Cc:** Comstock, Steve; Abrams, Joyce  
**Subject:** PEC Referred Motions - Reminder

Hi Julie – please include the attached referred motions on the Publishing and Education Council agenda for Long Beach so that Members Council can report back to the chapters after the meeting (see notes below). Let me know if you have any questions or need more information. Many thanks for your help with this.

Vickie

All are complete except those indicated as “Open.”

- Cleveland Chapter, Motion 11 11/5/2015 **(Complete)**
- London Chapter, Motion 13c 11/5/2015 **(Complete)**
- Quebec Chapter, Motion 13d 11/5/2015 **(Open)**
- Mobile Chapter, Motion 13g 11/5/2015 **(Complete)**
- Argentina Chapter, Motion 13k 11/5/2015 **(Complete)**
- Colombia Chapter, Motion 13m 11/5/2015 **(Open)** – also referred to Certification Committee
- Colombia Chapter, Motion 13n (11/5/2015) **(Complete)**
- Halifax Chapter, Motion 29c 11/5/2015 **(Complete)**
- Cleveland Chapter, Motion 29g 11/5/2015 **(Complete)**
- West Virginia Chapter, Motion 29h 11/5/2015 **(Complete)**
- Southern Piedmont Chapter, Motion 31 11/5/2015 **(Complete)**
- San Diego Chapter, Motion 4i 10/14/2016 **(Open)**
- Hong Kong Chapter, Motion 4s (10/14/2016) **(Open)** – formerly CRC Motion 63
- Hong Kong Chapter, Motion 4t (10/14/2016) **(Open)** – formerly CRC Motion 64
- Chile Chapter, Motion 7g 10/14/2016 **(Open)**

Vickie Grant | Manager of Region Activities  
Extension:1156

TO: Bjarne W. Olesen, Members Council Chair  
Joyce Abrams, Members Council Staff Liaison  
FROM: Steve Comstock, PEC Staff Liaison  
DATE: April 6, 2017  
SUBJECT: PEC Responses to Members Council referrals from Las Vegas Jan 2017

\*\*\*\*\*

Region II (Quebec Chapter) – Motion 13d (11/5/2015): That Society review the actual membership benefits to allow the members to get multiple options of technical documents (guidelines, design guides, standards, etc.) included in the membership, rather than the obligation of the selection the current handbook.

Background: Considering ASHRAE encourages employers to pay the membership fees for their employees, and considering also that the number of members from consulting firms is dropping, this flexibility would encourage consulting firms to support more employees to become members. Presently if a firm supports five employees, they get the five same technical documents (current handbook).

Fiscal Impact: Positive, considering this motion could bring more

### PEC Response

PEC assigned an action item to Fiscal Planning Subcommittee to review this referral and the subcommittee reported back their recommendations below. PEC agreed and would not approve this motion.

With regard to the fiscal impact, the Subcommittee reviewed information showing the fiscal impact could range from \$200,000 to \$350,000. This would result from both loss of revenue and increased cost due to reduced Handbook print runs, as well as, a higher level of uncertainty concerning how many Handbooks need to be printed each year, increasing likelihood of unused inventory at end of life or even more expensive unit costs due to reprints. Other issues to consider include if value of the Handbook to the industry would be diminished with fewer Handbooks in circulation and it was not a reference shared by all members.

PEC Consideration Assumptions:

- Selection by members will be made with annual dues payment.
- Members choosing the alternative publication benefit will receive books immediately upon selection, not wait for Handbook publication.
- Existing fulfillment practices will be used for Alternative Publication processing.
- There will be a set selection of publications from which the alternative publication benefit selection can be made. Publications will be available hard copy only. The choices will be roughly equivalent in price to 50% of Handbook nonmember price. Example choices:
  - Standard 90.1
  - Load Calculation Manual
  - Geothermal Heat Pump Guide
  - Hospital Design Guide
  - Laboratory Design Guide
  - Cold Climate Design Guide
  - Understanding Psychrometrics

PEC Fiscal Impact Considerations:

- Handbook Unit Cost -Currently a range of 40,000 to 50,000 Handbooks are printed each year depending on volume. Unit cost is approximately \$10 per book. The unit cost would increase depending on the number of members choosing an alternative publication option. For example, if 10% of members choose an alternative, Handbook unit cost would increase by about \$7,500. If 25% chose an alternative, impact would be about \$43,750.
- Handbook Print Run - Estimating print needs is already complex with Handbook online, CD, SI and I-P selections. Adding more options would further cloud the ability to predict print run needs. This would result either in over-estimating needs so as to not have a small print run or having a small print run at unit costs that could equal \$35 per unit. This impact factor could range from \$50,000 to \$75,000.
- Handbook Advertising - Reduced Handbook circulation would decrease advertising by \$5,000 to \$10,000 due to the smaller advertising exposure that could be offered.
- Loss of Sales - Some percentage of those making an alternative publication selection would have otherwise purchased the selected publication. If 10% make a selection and half of them would have otherwise bought the publication, the loss of revenue could be \$175,000.
- Other Fiscal Impacts - There would also be costs for an increase in bulk shipping costs (due to smaller bulk shipments). This could be \$5,000 to \$7,000. There would also be additional programming costs.

\*\*\*\*\*

**Region XII (Colombia Chapter) – Motion 13m (11/5/2015):** That the six ASHRAE certification exams have a candidate selectable “voluntary informative appendix option” that is translated into the Spanish language, and attached to the primary current exam format which is in English, beginning January 2016.

Background: The certification of ASHRAE members is very important and needed for our Industry. In keeping with our mission and strategic plan objectives, we need to better serve the needs of our members that speak/read different languages. Spanish is a very important language in the world and we need to start somewhere. Because of the technical nature and time limits of the certification exams, it is unfair to expect non-native English speakers to take these exams at the same speed reading level as native English speakers. In fact, many of the applicants to these certifications exams, taken in English, have failed to pass them in the past years, which calls for a turning point to promote such translations. It would be very helpful to have a reviewer that understands the technical English and Spanish language, to follow the terminology as it is used in these countries. This option would allow the candidate to choose to use the attached translated version of the exam if desired. This optional and voluntary option is intended to attempt to maintain the ANSI credibility of the integrity of the exam. If it does not, then this motion writer would accept the exam given could explicitly advertise that it is an “ASHRAE” only exam, and the ANSI accreditation could be waived by the exam candidate, for consideration of choosing this option. Fiscal Impact: AMP (exam management company)-consulting \$20K; Translation \$30K; Exam committee(s) meetings \$45K= \$95K.

PEC Response

The policy reasons why PEC will not approve this motion are listed below:

- The ANSI accreditation standard states: “Policies and Procedures for certification of persons shall be fair among all applicants, candidates and certified persons.” The Committee does not

believe it would be able to translate its certification exams into all of the languages of all possible candidates, and questions if it would be fair for some non-native English speaker examinees to have exam translations and others not to have such translations.

- Generally, the Certification Committee strives for consistency among all programs, offering the same certification per key, built-environment job to all applicants. At current application rates it would not be sustainable to have multi-language certifications for the same job, some ANSI-accredited and some not. Such an effort reasonably would require all such ancillary materials – applications, *Candidate Guidebooks*, web-pages, practice exams, reference materials – to be translated, as well.
- After Motion 13m was brought forward, the Certification Committee agreed to provide non-native English speakers with an additional 30 minutes of testing time to ensure they are afforded enough time to demonstrate competency.
- Offering non-native English speakers a translation of all exam questions would mean they would have twice as much to read as native English speakers, which would negate the benefit of the additional 30 minutes of testing time.

\*\*\*\*\*

**Region X (San Diego Chapter) – Motion 27:** That ASHRAE provides for sale on the website basic tools such as a duct sizer, pipe sizer, psychrometric chart and expansion calculator.

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

**PEC approved the following response 10-0-0 CNV**

Tools such as a duct sizer, psych charts, and apps are available in the ASHRAE bookstore. Additional tools are regularly added to the bookstore and the membership’s desire to have such tools is noted. Thank you for the feedback.

\*\*\*\*\*

**Region XIII (Hong Kong Chapter) – Motion 63:** That Society maintain the examination fee of ASHRAE Certification at US\$295 (for ASHRAE members) for the promotion of ASHRAE Certification.

Background: Hong Kong Chapter had established a long-term strategic plan to promote bEQ and ASHRAE Certification since the early stage of year term 2015-16. For promoting ASHRAE Certification, Hong Kong Chapter firstly launched a Mentoring Scheme on being “ASHRAE Certified Professionals” at early 2016 and arranged the on-site pencil examination on 31 March 2016. As a result, there were total 14 members joined this scheme and 5 members of them passed the examinations and have been achieved as ASHRAE Certified Professionals. Hong Kong Chapter has probably to launch the mentoring scheme regularly to increase the number of ASHRAE Certified Professionals in Hong Kong. However, the exam application fee has increased over 33% this year (US\$395 for ASHRAE member) by compared with last year (US\$295 for ASHRAE member) which has discouraged members to apply the ASHRAE Certification exams.

Fiscal Impact: Yes. The income from examination fee of ASHRAE Certification will be lower by US \$100 each. Assume 100 candidates, the estimated reduction of income shall be US\$10,000.00 per year.

**PEC Reponse:**

PEC referred this motion to Certification Committee. The committee reported the following fical information to PEC and PEC agreed that the fee will not be maintain at \$295.

- The Certification Committee considered and approved the application fee increase from \$295 to \$395 for members on December 16, 2015.
- A strict rate of inflation increase from \$295 in 2007 would have been \$345 in 2016, however:
  - For the additional 30 minutes of testing time for non-native English speakers, ASHRAE’s exam delivery partner charges ASHRAE an additional \$25 per international exam candidate.
  - ASHRAE certifications are more valuable in 2016 than they were in 2007. More than 30 local, state and federal entities now recognize ASHRAE certifications, four of which are ANSI-accredited. In the next 6 months, two will be DOE approved.
- Though all applicants pay the same fee, it costs ASHRAE \$70 more to deliver a computer-based exam

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**Region XIII (Hong Kong Chapter) – Motion 64:** That Society launch a pilot voluntary scheme of “ASHRAE Publication Care Program” for local chapters to handle undelivered ASHRAE handbooks and journals.

Background: Few members complain that they didn’t receive ASHRAE handbooks and journals regularly. Those undelivered publications would then be returned back to the ASHRAE HQ that cost huge amount of postage charges as well as a lot of administrative works to handle the delivery problems. Moreover, this problem would let members be disappointed and reduced their intentions to renew their membership. Local chapters may also be suffered by receiving the complaints from members and sometimes difficult to promote ASHRAE. “ASHRAE Publication Care Program” is proposed in order to handle undelivered ASHRAE handbooks and journals. If the local chapter joins this scheme, the agent of postal service will send those undelivered items to local chapters for follow up. Local chapter will then report to the HQ and contact those members to clarify postal address. Local chapters will distribute those items to members directly after receiving confirmation of reimbursement of related postage charges by HQ.

Fiscal Impact: Positive.

**PEC approved the following response 10-0-0 CNV**

Because of the expense, ASHRAE does not pay for return of undeliverable Journals and Handbooks to members outside of US or Canada. Also additional costs are incurred for a return to an address other than the shipping address, increasing costs still further. Also major problems for delivery success are theft in the postal stream and postal inefficiencies, rather than delivery failure.



PEC is currently investigating Handbook delivery methods, including the membership benefit package and Handbook formats as part of addressing this issue. PEC agrees it is a top priority for resolution. This solution, however, is not economically feasible. PEC continues to explore improvements of publication delivery service to members outside the US and Canada. For example, a new Journal mailing service is being used.

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**Region XII (Chile Chapter) – Motion 40:** That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

[PEC approved the following response 10-0-0 CNV](#)

ASHRAE’s most demanded standards (such as 90.1, 62.1, and 189.1) are available (English language only) in read only format on the ASHRAE website. If Student Activities wishes standards not currently available as read only to be made available for such access, they should advise Director of Publishing and Education (Steve Comstock). It should be noted a cost is incurred based on the number of views for read only standards. Also, Spanish language translations of many ASHRAE documents are not available and translations into other languages have even less availability. Many ASHRAE chapters support students in design competitions by purchasing standards for student use. It is recommended this solution be considered.

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**Region XIII (Philippines Chapter) – Motion 67:** That Society furnish Region 13 with a list of members per Chapter who are unable to received their annual membership package such as ID’s, Membership Certificate and Handbooks whether electronic CD or Hard Bound. This way, each chapter can provide better services to both the new and regular members.

Background: There were recurring complaints coming from our members the non-receipt of their packages which results to disappointments and thus delayed and even non-renewal of their annual membership. By giving chapters advice from society on return to sender package problems, we can trace the origin of the problem and help members be aware that society and the chapter are concern of their membership and welfare.

Fiscal Impact: No fiscal impact, only time spent for info dissemination.

**PEC approved the following response 10-0-0 CNV**

A new Journal mailing service for international mailing has been implanted with improved delivery success and time reduction. A new plan for PDF delivery of Handbook has been developed reducing the need for mailing. The process for distributing membership packages to new members is at the discretion of Members Council PEC staff will provide cost information as requested. Also, it is recommended by PEC that the ability be provided online for members to print out certificates and membership cards upon renewal such as is typically available with medical insurance companies in the US.

**TO:** Walid Chakroun, Publishing and Education Council Chair  
Steve Comstock, Publishing and Education Staff Liaison

**FROM:** Joyce Abrams

**DATE:** November 11, 2016

**SUBJECT:** Members Council Referral – Website Tools

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During the Members Council October 2016 meeting in Atlanta, the council referred the motions below to Publishing and Education Council for consideration. I appreciate your keeping me advised of your actions. Let me know if you have any questions. Thank you.

**San Diego Chapter – Motion 4i (10/14/2016):**

That ASHRAE provides for sale on the website basic tools such as a duct sizer (ductulator), pipe sizer, psychrometric chart and expansion calculator.

Background: A great way to provide one central location for the basics to be purchased as well as spread the ASHRAE word would be to put the ASHRAE logo on. The psychrometric chart is currently available and a great example of everyday engineering tools that is available for sale on the ASHRAE website.

Fiscal Impact: Unknown development cost to begin, however there is an opportunity for income.

**Chile Chapter – Motion 7g (10/14/2016):**

That the ASHRAE standards and guidelines identified as being required to be used in the Student Design Competition be provided for use, during the course of the competition, in both English and Spanish (if available) language, at no cost to the chapter or student branch, beginning January 2017.

Background: Students competing in the Student Design competition are required to use ASHRAE standards and guidelines as a part of the rules of the Student Design competition. It is an unfair burden to disadvantage poorer country schools that cannot afford these costs over more affluent country schools that can, or that have resources that can provide for these high costs to compete. Most schools do not have the additional funds to be able to afford to buy these materials, so it limits competition to “more affluent and more wealthy” schools. ASHRAE shall provide these materials electronically, in both English or Spanish languages, in such a way whereby they can print them one time for use in their project. This will promote the ASHRAE Strategic plan and objectives and increase competition in the Student Design.

Fiscal Impact: None (downloads are electronic).

Note from Staff: Determine if this motion is feasible and if the intellectual property can be in read only format.

**TO:** Charles E. Gullede, Publishing and Education Council Chair  
Steve Comstock, Publishing and Education Council Staff Liaison

**FROM:** Joyce Abrams

**DATE:** November 13, 2015

**SUBJECT:** Members Council Referrals

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During the fall Members Council meeting in November, the council referred the motions below to Publishing and Education Council. I appreciate your keeping me advised of your actions and letting me know whether each motion has been approved or defeated.

Let me know if you have any questions. Thank you.

**Motion 11 (11/5/2015):**

That ASHRAE strengthen the local chapter value in developing programs and promotions that enable ASHRAE chapters to educate a wider range of audiences, the society shall provide ASHRAE endorsed webinars, including manufacturer sponsored webinars, with financial incentives to local chapter for marketing and promoting the webinar to the chapter's membership.

Background: The above motion is a substitute motion that was presented to Members Council to replace the CRC motion. The original CRC motion is listed below this background. Based on past experience in Membership Promotion, each chapter is provided a list of non-members who purchase products and services from Tech Street. Purchases of products and services from members are already tracked. Therefore the process described in the original CRC motion is partially or mostly exists in the current operating structure. Additionally this maybe able to assist with the current society webinar process as attendance at these group events are poorly tracked. This also aligns with the Strategic Plan goals 1A and 2B.

**Original CRC Motion: Region V (Cleveland Chapter) – Motion 22:**

That ASHRAE provide marketing incentives for ASHRAE hosted, manufacturer sponsored webinars.

**CRC Background:** ASHRAE Chapters and Sections are prohibited from sponsoring manufacturer sponsored digital events (like webinars) but ASHRAE Society is not. In fact, ASHRAE recently started offering manufacturer sponsored webinars directly to all ASHRAE members without involving the Chapters or Regions. This is part of a digital trend that is “flattening” communications, allowing content to go directly to those that want it. ASHRAE needs to do this or be left behind by others that will do it (e.g. magazines, societies, government, Facebook). This trend may reduce the value of a chapter (educational) meeting and the related loss of contact and revenue. Solution: ASHRAE inform Chapters who in their chapter/section/branch has attended a company sponsored webinar and provide them 15% of the net per person income as a marketing inducement to support the event.

**CRC Fiscal Impact:** Likely positive because the Chapters will now have a financial incentive to tell members about these products. Currently the cost is \$10,000 per sponsored webinar and the demand is good. Increased attendance allows ASHRAE to charge more. So, raise the price to pay for the Chapter marketing cost to get more viewers. Appears to be a win-win situation.

**CRC Vote:** 3-1-8, CNV

**Region II (London Chapter) – Motion 13c (11/5/2015):**

That Society allow a member to choose how they receive the ASHRAE Journal and associated items. Options would be as an electronic version only or electronic and mailed version.

Background: The ASHRAE Journal is currently available in a printed version and in an electronic version. There is no option to only receive the electronic version in place of the printed version. Receiving the Journal just as an electronic version could reduce printing and mailing costs and be more “green.”

Fiscal Impact: None.

**Region II (Quebec Chapter) – Motion 13d (11/5/2015):**

That Society review the actual membership benefits to allow the members to get multiple options of technical documents (guidelines, design guides, standards, etc.) included in the membership, rather than the obligation of the selection the current handbook.

Background: Considering ASHRAE encourages employers to pay the membership fees for their employees, and considering also that the number of members from consulting firms is dropping, this flexibility would encourage consulting firms to support more employees to become members. Presently if a firm supports five employees, they get the five same technical documents (current handbook).

Fiscal Impact: Positive, considering this motion could bring more members paying dues. Actual amount to be determined by the Membership Promotion Committee.

**Region VII (Mobile Chapter) – Motion 13g (11/5/2015):**

That ASHRAE create an ad-hoc committee to review alignment of ashrae.org website content with ASHRAE’s commercialism policies.

Background: There was a screenshot taken directly from the homepage of ashrae.org today (7/25/15 11:00 CST), that demonstrates that the promotion of the Emerson webinar is on par with Standard 188, proposed addenda to 189.1-2014, and other technical activities of ASHRAE. The webinar is elsewhere clearly identified as not an endorsed activity, but the way it is listed on the homepage below would imply it is an endorsed webinar of ASHRAE, which we interpret as a direct violation of the Rules of the Board commercialism policy. Other sponsored material on the website, such as the advertiser-sponsored white papers, are clearly identified and do not conflict with the Rules of the Board commercialism guidelines. As these anomalies were identified during the Region CRC business meetings and all that would be required is adherence to the guidelines already in place, an ad-hoc committee would be an appropriate action to ensure there is alignment with the existing policies.

Fiscal Impact: \$0.

**Region XII (Argentina Chapter) – Motion 13k (11/5/2015):**

That the Handbook Committee offer the online version of the “handbook of the year,” as the member benefit annually, starting 1/1/16.

Background: Many countries outside the US have in-country postal problems that delays or disallows hardcopies or CDs to be imported through their customs office. Oftentimes, the members are not notified and the books/CDs are returned to sender. Providing this annual online subscription to the member would allow the member to get their handbook in a timely manner. It would also reduce postage costs to ASHRAE.

Note from Steve Comstock, ASHRAE staff: All members now have the membership option to receive an annual subscription to the 4 volume Handbook online as option instead of the print volume of that year's Handbook. Both the print edition and the online option also include the annual Handbook's CD – for print as an insert and for online the CD is sent separately. All members need to pick the option when they renew. And this was implemented specifically as a way to offer an option which alleviates mailing challenges for the print book.

Lastly, the reason the CD is included with the online option is because after the membership lapses, the online access subscription ends. The CD is a permanent possession. The online Handbook can be printed and copied/pasted but it is not PDF so it cannot be saved to a hard drive. The format is HTML which is much preferred web viewing format with search across all volumes. With PDF format search would be limited.

Fiscal Impact:None, with a possible reduction in postage costs to ASHRAE.

**Secretary's Note:** Investigate the options and possibilities of finding other ways to do this.

**Region XII (Colombia Chapter) – Motion 13m (11/5/2015):**

Recommends to Members Council and the Certification Committee that the six ASHRAE certification exams have a candidate selectable “voluntary informative appendix option” that is translated into the Spanish language, and attached to the primary current exam format which is in English, beginning January 2016.

Background: The certification of ASHRAE members is very important and needed for our Industry. In keeping with our mission and strategic plan objectives, we need to better serve the needs of our members that speak/read different languages. Spanish is a very important language in the world and we need to start somewhere. Because of the technical nature and time limits of the certification exams, it is unfair to expect non-native English speakers to take these exams at the same speed reading level as native English speakers. In fact, many of the applicants to these certifications exams, taken in English, have failed to pass them in the past years, which calls for a turning point to promote such translations. It would be very helpful to have a reviewer that understands the technical English and Spanish language, to follow the terminology as it is used in these countries. This option would allow the candidate to choose to use the attached translated version of the exam if desired. This optional and voluntary option is intended to attempt to maintain the ANSI credibility of the integrity of the exam. If it does not, then this motion writer would accept the exam given could explicitly advertise that it is an “ASHRAE” only exam, and the ANSI accreditation could be waived by the exam candidate, for consideration of choosing this option.

Fiscal Impact: AMP (exam management company)-consulting \$20K; Translation \$30K; Exam committee(s) meetings \$45K= \$95K.

**Region XII (Colombia Chapter) – Motion 13n (11/5/2015):**

That Members Council and the Certification Committee extend by an extra 45 minutes the assigned time limit to complete by applicants the six ASHRAE certification exams, for those candidates whose native language is not English, beginning January 2016.

Background: The certification of ASHRAE members is very important and needed by our Industry. In keeping with our mission and strategic plan objectives, we need to better serve the market by having more certified professionals, yet treating all people fairly. Because of the technical nature and actual

time limits of the certification exams, extending time to complete the certification exams will help applicants to review and further complete their answers based on knowledge and experience, reducing the time pressure that has been commented by many applicants in the past. More time is needed in order to fill out the paper answer form (over a computer based exam), read and understand questions not in their native language, and to understand construction language and jargon not in their native customs or practice. We have asked that the exams be translated to native languages and that has been not granted in the past. This time extension request has been asked before and not granted, but it is so important that we need to continue to ask. If ANSI rules are a concern, perhaps a non-ANSI exam and certification can be established; the applicant can choose that version of exam if they want; I suspect that will be acceptable to most applicants. The extra time should not be considered as a detriment to their "body of knowledge," but only to the fact that it is fair treatment to members who native language is not English. This motion does not preclude that if the committee wants to add the same extra time for all exam candidates to be "consistent," that is also acceptable to this motion. This time extension should increase the amount of approved applicants compared to actual results.

Fiscal Impact: None.

**Secretary's Note:** Determine how the extra 45 minutes affect those who speak and read English vs. those who do not; does it affect the outcome of those under pressure to complete the exam.

**Region II (Halifax Chapter) – Motion 29c (11/6/2015):**

That Society make the ASHRAE.org website mobile friendly.

Background: More than 50% of web traffic is now on mobile phones or tablets and ASHRAE.org is not currently responsive to these devices. Making the website responsive would make viewing the society website easier for the majority of web users and encourage more current and potential members to use it when not on their computers.

Fiscal Impact: Unknown, it will depend on the design of the website.

**Region V (Cleveland Chapter) – Motion 29g (11/6/2015):**

That ASHRAE PEC notify chapters monthly of everyone in their chapter area who has signed up for an ASHRAE product.

Background: ASHRAE provides webinars and educational products of all types directly to interested parties. ASHRAE Chapters need to know who is taking or watching these products in order to more effectively recruit new members. The products of interest are ASHRAE sponsored webinars (i.e. the Company sponsored event in April) and educational courses (ALI, etc.) not hosted by the Chapter. Providing this information to the grassroots side of ASHRAE should increase membership. The linkage is postal codes. All postal codes are assigned to chapters and sections.

Fiscal Impact: Positive since it will increase the number of members. Implementation requires a program to divide up and send out the registration list contact data by Chapters.

**Region VII (West Virginia Chapter) – Motion 29h (11/6/2015):**

That ASHRAE notify chapters monthly of individuals in their chapter area that have signed up for an ASHRAE sponsored webinar or educational training.

Background: ASHRAE provides webinars and educational products of all types directly to interested parties. ASHRAE chapters need to know who is taking or watching these selected products in order to more effectively recruit new members. The educational products of interest are ASHRAE sponsored webinars (April, company sponsored) and educational courses (ALI, etc.) not hosted by the Chapter. Providing this information to the grassroots side of ASHRAE should increase membership. The linkage is postal codes. All postal codes are assigned to chapters and sections. ASHRAE would send the attendee's contact data to the chapter MP Chair with that person's postal code.

Fiscal Impact: Positive since it should increase the number of ASHRAE members. Implementation requires a program to divide up and send out the registration list contact data by Chapter. Programming cost is estimated at 1-2 days.

**Region IV (Southern Piedmont Chapter) – Motion 31 (11/6/2015):**

That ASHRAE MC and/or PEC undertake a project for ASHRAE to share ASHRAE provided attendee training and income with ASHRAE Chapters in order to expand use of ASHRAE provided member education.

Background: The recent MC/PEC working group on ASHRAE Educational Support to Chapters identified a need. Chapters do not know which chapter members take ASHRAE sponsored training, and further, some Chapters see it as a potential loss of chapter training revenue or reduced meeting attendance. Bluntly stated, they are out of the loop and some view ASHRAE training as competition to their local training. To improve this situation and actually make all Chapters/Sections a partner in ASHRAE PEC provided education, ASHRAE should advise the Chapters monthly of who in their chapter has attended an ASHRAE course, seminar, webinar, etc. In addition, ASHRAE will provide the attendees Chapter with 15% of the training educational net income as a marketing inducement to promote and encourage their members to take ASHRAE Society provided training. (They have some skin in the game.)

Fiscal Impact: Provide the attendee lists to each chapter needs to be programmed by ASHRAE IT. Needs a defined project and then the time/cost estimate. On the income sharing for marketing support, need the attendee and net income numbers.

**Secretary's Note:** This motion was also referred to the Chapter Technology Transfer Committee and the ad hoc committee on Effective ASHRAE Materials Delivery To and Through Chapters.



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