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DRAFT

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. 3.4 DATE June 26, 2019

TC/TG/MTG/TRG TITLE Lubrication

DATE OF MEETING June 25, 2019 LOCATION Kansas City, MO

MEMBERS PRESENT	YEAR APPTD ENDS	MEMBERS ABSENT	YEAR APPTD ENDS	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Scott Wujek	2020	Steve Kujak	2022	
Greg Smith	2020	Roberto Urrego	2019	
Joe Nigro	2021	Steve Spletzer	2020	
Sarah Kim	2022	Danny Halel	2021	
Rosine Rohatgi	2022	John Senediak	2020	
Ivan Rydkin	2020			

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: Barbara Minor	SH3@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	Steve Kujak – Research Vinod Gupta – Standards Frederick Betz - Handbook
Mike Vaughn, Manager of Research & Technical Services	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

Minutes – TC 3.4 Lubrication

Call to Order – Scott Wujek

Scott Wujek called TC 3.4 meeting to order at 1:30 pm on June 25, 2019 in Kansas City at the KCCC Room 2215A. Members and guests introduced themselves. A sign-up sheet was circulated. The Chair reviewed the ASHRAE Ethics Statement.

A quorum was established with 6 of 11 members present.

A quick review of the agenda was made.

Approval of 2019 Kansas City Meeting Agenda and 2019 Atlanta Meeting Minutes

A motion was made by Joe Nigro to approve the Kansas City agenda as written, the motion was seconded by Greg Smith, the motion carried 5-0-0(CNV).

A motion was made by Ivan Rydkin to approve the Atlanta minutes as written, the motioned was seconded by Joe Nigro, the motion carried 5-0-0(CNV).

A review of the roster was made.

Voting Members:

Scott Wujek	Rosine Rohatgi
Greg Smith	Ivan Rydkin
Joe Nigro	John Sendiak
Danny Halel	Steve Spletzer
Sarah Kim	Roberto Urrego
Steve Kujak	

Management Team:

Scott Wujek – Chair
Greg Smith – Vice Chair
Joe Karnaz – Secretary
Greg Smith – Research
Joe Nigro – Program
Casey Scruggs - Handbook
Sheli Porter – Standards
Dave Vincent – Webmaster
Joe Karnaz – Low GWP TC Liaison

Roster Change after this meeting:

Roberto Urrego – Rolling Off
Julie Majurin – Rolling On
Ed Hessell – Rolling On
Rob Yost – Rolling On

TC Chair Breakfast – Scott Wujek

- New 2019-2024 Strategic Plan focuses on 4 areas: Resilient buildings and communities, indoor environmental quality, organizational streamlining, and improve chapter engagement, capacity & support
- Emphasis has been made on using Base Camp as a means of distributing data
- Orlando Programs due August 2nd
- Austin Conference Papers Abstracts due August 12th with papers due December 2nd
- Hightower award nominations are due September 1st, please see the chair if you want to nominate someone
- More committees are using the Remote Participation Meeting System particularly if establishing a quorum is an issue
- Master Calendars are available for use through Google
- CEC seeking suggestions for program tracks for future conferences - contact Tony Giometti
- Professional Development Committee seeking ideas for new ASHRAE Learning Institute courses - contact Karen Murray
- Future conferences of interest to our group: ICR August 2019 in Montreal, ASHRAE/AHR Expo February 2020 in Orlando

Liaisons

Barbara Minor – TAC Section 3 Chair

- Barbara outlined ASHRAE's response to feedback that was received regarding the recent reorganization suggestions. From the feedback it was noted that if working groups got too large then it might stifle participation of some members. It was decided that the TC should take the lead and decide what would be best for their TC. Barbara pointed to how TC 3.2 and TC 3.3 has already discussed a synergy with potential merger and have put together a Ad Hoc committee to review.
- It was mentioned that Section 3 was singled out in the chairs breakfast meeting as a good model for how TC's find synergy regarding how this Section 3 has coordinated research and program subcommittee meetings.

Subcommittee Reports

Research – Greg Smith

From the research chair meeting –

- 7 new RTAR and 13 new WS were reviewed by RAC.
- Innovation Research Grants is for out-of-the-box projects not being done by TCs. 15 ideas were reviewed and 4 were invited to submit proposals.
- A new work statement template has been developed that incorporates a plain English 100-word summary.

“Foaming Properties of Low GWP Refrigerant and Oil Mixtures” has been assigned as RTAR 1830. A work statement was written, submitted and returned with suggested changes. Ivan Rydkin is the champion of this work and made the needed changes, the work statement has now been accepted.

RP1721 “Oil Return and Retention in Unitary Split Gas Lines with HFC and HFO Refrigerants”. This is sponsored by TC 8.11 Unitary and Room Air Conditioners and Heat Pumps. The PI is Purdue University and an extension has been given. Chris Seeton is the chair and commented work has begun and estimated completion is end of 2020.

RP1785 “Experimental Validation of Refrigerant Charge Models for Residential Split Systems” This is sponsored by TC 8.4 Air-to-Refrigerant Heat Transfer Equipment. Scott Wujek is part of the PMS but it was noted after the meeting that TC 3.4 is not a co-sponsor, so this will be removed from future discussion.

Proposed RTAR “Tribological interaction data with lubricants and refrigerants”. Elyse Sorenson submitted the RTAR to the committee for vote. There was some discussion and suggestion within the committee to make slight changes on the cost and scope and a vote was taken.

A motion was made by Joe Nigro to approve proposed RTAR with discussed changes of cost to 40K and for white paper only focus, the motion was seconded by Rosine Rohatgi, the motion carried 5-0-0(CNV).

Other research ideas were proposed.

- Preferential solubility of high glide refrigerant blends and lubricants – system effect of fractionation.
- High Stability Lubricants
- Electrical Resistivity of Lubricants and Refrigerants, extension of refrigerant electrical properties work of TC 3.1.

Program – Joe Nigro

TC 3.4 did not sponsor any programs in Kansas City.

Orlando –

The YEA focused seminar original scheduled for Kansas City “Refrigeration Concepts for YEA Members” will be resubmitted for Orlando. Chris Seeton will still chair and organize speakers.

A seminar voted on in Atlanta for the Orlando refrigeration track has been given a title “Lubricants and Lubrication – What is Important for Lower GWP Refrigerants”. Presenters from Shrieve, Lanxess and CPI have committed and a representative for TC 8.1 will be pursued.

Both TC 3.2 and TC 3.3 have proposed seminars for the Orlando refrigeration track and TC 3.4 will vote to co-sponsor each.

A motion was made by Greg Smith to co-sponsor Orlando seminars from TC 3.2 and TC 3.3, the motion was seconded by Joe Nigro, the motion carried 5-0-0(CNV).

A list of future ideas generated from past discussion was listed and discussed.

- Estimating Accelerated Chemical Stability Using Equipment Operation
- Thermal, Chemical and Materials Compatibility of Refrigerants and Lubricants Through the Years
- A future program around Lubricants for Natural Refrigerants was suggested.
- Current State of Lubricant and Refrigerant Properties

Handbook – Casey Scruggs

Casey listed the current Handbook committee that will be working on the 2022-chapter revision (Brad Boggess, Elyse Sorenson, Chris Seeton and Amber Saylor). It was suggested that additional people would be beneficial for chapter review and this was a good opportunity for YEA members to participate and learn the committee, Andrew Somner from CPI volunteered.

Standards – Sheli Porter

Standard 86 “Methods of Testing the Floc Points of Refrigeration Grade Oils” – Standards has told TC 3.4 that this standard cannot be reaffirmed due to lack of mandatory language. After some committee discussion including rolling into SPC 172, removing or revising it was decided that the best approach would be to revise using language in SPC 172 as a guide.

A motion was made by Ivan Rydkin to work on revising the standard with Brad Boggess as the chair, the motion was seconded by Rosine Rohatgi, the motion carried 5-0-0(CNV).

Several individuals volunteered to assist on the committee – Ivan Rydkin, Casey Scruggs, Scott Wujek, Dave Vincent, Chris Seeton and Lydia Dobler.

GPC 40 “Refrigeration Oil Description” – no action required until 2022.

Standard 172 “Method of Test for Insoluble Materials in Synthetic Lubricants and HFC Refrigerant Systems”. Ed Hessel made the committee aware of the latest on the SPC172 situation that was communicated in Atlanta. Based on the options given by Standards it was decided that the best approach would be to do an unscheduled revision. An Ad Hoc group of Ed Hessel, Joe Karnaz, Brad Boggess and Rosine Rohatgi have already started some revision along with looking at other standards (97 and 218) to see if a potential for some harmonization in the future. A committee with balance will be formed to finish the revision.

A motion was made by Greg Smith to work on revising Standard 172 with Ed Hessel as the chair, the motion was seconded by Joe Nigro, the motion carried 5-0-0(CNV).

SPC 218 "Method of Test for Lubricant and Refrigerant Miscibility Determination"—chaired by Brad Boggess. The standard has been published.

MTG Update –Low GWP Lower Alternative Refrigerants – TC 3.4 Represented by Joe Karnaz

Joe commented that three research projects that were sponsored by MTG Low GWP are being presented at this ASHRAE. The committee is still working on other research projects and has recommended other research on HF combustible by-products. Other activities are around standards and codes.

Webmaster – Dave Vincent

The website is current, and the Atlanta meeting minutes will be converted from draft to final and when received the Kansas City draft minutes will be posted.

Old Business – Scott Wujek

A teleconference took place regarding the working group reorganization presented in Atlanta. ASHRAE seemed to take comments to heart on maintaining moderately sized groups and they recognized Section 3 efforts.

New business – Scott Wujek

No new business.

Next meeting

2020 ASHRAE Winter Meeting Orlando, FL February 1-5.

Adjourn – Scott Wujek

The chair closed the meeting at 2:50 pm through a motion by Greg Smith to adjourn.