



1791 Tullie Circle, N.E./Atlanta, GA 30329
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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 July 12, 2024

TC/TG/MTG/TRG TITLE Lubrication

DATE OF MEETING June 25, 2024 LOCATION Indianapolis and Virtual

MEMBERS PRESENT	YEAR APPTD ENDS	MEMBERS ABSENT	YEAR APPTD ENDS	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Casey Scruggs – Chair/Han	2024			Scott Wujek – Research
Joe Karnaz – MTG Low GWP	2024			Andrea Irias- Programs
Morgan Leehey	2026			Tina Brueckner – Section Head
Chris Seeton	2026			Danny Halel- MTG Low GWP
Sheli Porter - Standards	2025			
Sara Kampfe	2025			
Rashid Zakeri – Vice Chair	2024			
Dave Vincent - Webmaster	2025			
Raymond Drost- Secretary	2026			
Rosine Rohatgi	2026			

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

TAC Section Head: Tina Brueckner	SH3@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	Zheng O’Neil – Research Gerald Kettler – Standards Drake Erbe – Handbook
Mike Vaughn, Manager of Research & Technical Services	MORTS@ashrae.net

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

Minutes – TC 3.4 Lubrication

Call to Order – Casey Scruggs

Casey Scruggs called TC 3.4 meeting to order at 1:30 pm EDT on June 25, 2024. Meeting was held in-person at Indianapolis JW Marriott (302) and via Virtual Zoom Conference. Participates were asked to sign the sign in sheet passed around the room and for those on-line using the Zoom Chat function.

Members and guests introduced themselves.

A quorum was established with 9 of 10 members present.

Joe Karnaz made motion and Sara Kampfe seconded motion to approve minutes.

The Chair reviewed and read the ASHRAE Ethics Statement.

A quick review of the agenda was made.

Approval of 2024 Chicago Meeting Minutes and 2024 Indianapolis Meeting Agenda

A motion was made by Joe Karnaz to approve the 2024 Chicago Meeting minutes as written, the motion was seconded by Sara Kampfe, the motion carried 8-1-1(Chair abstain).

A motion was made by Joe Karnaz to approve the 2024 Indianapolis agenda as written; the motion was seconded by Sara Kampfe motion carried 8-1-1(Chair abstain).

TC Chair Breakfast – Casey Scruggs

TAC Updates and Operations (Over the Last 5 Years). Highlights:

- Equipped FG Chairs with online rostering to empower their committees toward achieving balance and succession planning
- Changed the culture to expect virtual meetings between conferences, support hybrid communication during conferences and to asktac@ashrae.net
- Met our MBOs and approved a TAC Strategic Plan in concert with the ASHRAE SP
- Supported communities throughout ASHRAE with new roles for TAC members: Tech Council, OPSC, ISITF→GTIC, CEBD, DRSC, YEA, CTTC (extra work!)
- Equipped and empowered Section Heads with management training to train their Chairs and to use their authority as required by the TAC MOP
- Developed FG self-evaluation tools, revised the Activity Form including a version for MTGs, and revised the proposed MTG creation form
- Increased women on TAC by 300%
- Resolved controversies related to industrial sector favoritism in FGs

- Created new MTGs, converted MTGs to TCs, converted TRGs and TGs to TCs, and merged TCs together
- Revised TAC MOP, TAC Reference Manual (RM), FG RM, and MTG RM

ISO (International Organization for Standardization)

- Administrative support for TAGs is delegated by ANSI to accredited Secretariats that are usually ANSI SDOs.
- ASHRAE serves as Secretariat for five U.S TAGs

RBC Update (Residential Buildings Committee)

- Charter
 - The Residential Buildings Committee (RBC) is responsible for identifying major residential trends impacting the practice of HVAC&R, informing the ASHRAE leadership and membership of these trends and their potential impacts, and making recommendations on new activities and policies in response to these trends. The committee will identify, recommend and coordinate relationships with societies and organizations that focus on residential buildings.
- Activities of the RBC
 - Residential Issue Briefs
 - Identification of Program topics for ASHRAE Conferences
 - Initiation of Standards, Guidelines, or Guidance Documents
 - Identification of Research topics
 - Initiation of Training Courses
 - Support of Functional Groups (i.e., Technical Committees, Standard Project Committees) as needed
- RBC is looking for speakers to help nominate as DL's on residential topics.
- Nominations for the Residential Building Service Award
 - Due Oct 1

Liaisons

No Liaisons were present.

Subcommittee Reports

Program – Andrea Irias

Andrea Irias was not present, therefore Casey Scruggs proposed committee to discuss ideas for Orlando seminar/program sessions (Due August 2nd):

- Lubricants and their Effects on System Efficiency (Chair: Casey Scruggs)
Refrigerants/Refrigeration, seminar (TC 3.4, possibly 3.2)
 - Compressor- Kristin
 - Lubricants- Ramesh N.
 - OEM/Systems-
- Challenges associated with district and process heating HTHP (Chair: Ramesh N.)
 - TC 8.1 for co-sponsored session
 - Compressor
 - Lubricants- CPI
 - Refrigerant Honeywell
 - 8.1 Speaker

Motion to accept presentation title for seminar session Lubricants and their Effects on System Efficiency (Chair: Casey Scruggs) by Joe Karnaz and seconded by David Vincent 8-1-1 (chair abstain)

Motion to accept presentation title for seminar session “Challenges associated with district and process heating HTHP” (Chair: Ramesh N.) by Raymond Drost and seconded by Rashid Zakeri. 8-1-1 (chair abstain)

No other ideas for future conferences beyond Orlando (Winter 2025).

Handbook – Casey Scruggs

Casey Scruggs setup authoring portal in Basecamp and will send out invites on authoring portal for Chapter 12 revisions.

Standards – Sheli Porter

GPC 40 “Refrigeration Oil Description” – Scott Wujek is the chair. Complete and just need to take a vote.

Standard 86 “Methods of Testing the Floc Points of Refrigeration Grade Oils” – This standard is being revised by the committee being chaired by Brad Boggess. 3 questions came out of public review and

no progress. Brad pulling team together to address comments and will then go back for public review.

Standard 172 “Method of Test for Insoluble Materials in Lubricant and Refrigerant Systems”. A committee has been established; Ed Hessel (Chair). Name change to widen scope to affirm title to “Method of Test for Insoluble Materials in Synthetic Lubricants and HFC Refrigerant Systems. Ed Hessel sent out for public review (Sheli confirming with Ed).

SPC 218 “Method of Test for Lubricant and Refrigerant Miscibility Determination” – this is being chaired by Casey Scruggs and was decided to revise the standard. Minor edits made to include preparation of metal test cell verbiage from GPC 38. Casey working to submit draft to ASHRAE for review.

Ideas for new standards: Volumetric resistivity for refrigerant/lubricant systems; ASTM standards are outside scope (RP 1851- TC 3.1).

No other discussion for new Standards

Research – Scott Wujek

The combined Section 3 research subcommittee meeting took place on January 9th, 2024 via a Zoom conference call. Ideas generated at that meeting will be discussed in the individual TC meetings.

Projects –

RP 1879 “Foaming Properties of Low GWP Refrigerant and Oil Mixtures” – Chris Seeton Chair; the project is underway with Oklahoma State University as the PI. Foaming tests in progress for baseline pairs with POE/R-134a.

RP 1721 “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; TC 3.4 is a co-sponsor with Chris Seeton as our representative and Purdue University is the PI. Project concluded- listed as active project on website but is complete. In ASHRAE’s hand to finalize.

RTAR 1891 “Tribological Interaction Data with Lubricants and Refrigerants”. Scott Wujek Chair; got dropped but reaching out to ASHRAE for RTAR and revamp project.

Some ideas from subcommittee meeting

- Preferential solubility of high glide refrigerants – some discussion in the meeting on this topic and was decided still should remain as an idea for potential future research.
- Electrical properties extension of TC 3.1 work, this would be with lubricants. TC 3.1 RTAR is 1851 and the work statement is in progress so will still hold this as an idea.
- Research on how lubricants effect some of the current refrigerant leak sensors based on oil spray; not sure if TC 3.4 is correct venue for this; will table (based on Std 15 work). Will leave on new ideas for now.
- End of Life discussion on lubricants and environmental effect; after some discussion in the room this sounds more like a standard or guideline and not research, though the idea of a PTAR was suggested. Will table for further discussion in Chicago.

No other research ideas were communicated, and further discussion was tabled until the next subcommittee and TC meeting in Orlando.

Webmaster – Dave Vincent

The website is up to date with active meeting link to video conference for future meetings. Dave to put in link on TC website for sustainable lubricants.

Old Business – Casey Scruggs

No old business.

New business – Casey Scruggs

The new membership voting committee and management team will change after this meeting. Rashid Zakeri will become chair after this meeting (Indianapolis, June 2024).

Next meeting: Orlando, February 2025

Adjourn – Casey Scruggs

The chair closed the meeting at 3:21 pm through a motion to adjourn.