

ASHRAE SSPC161P Meeting Minutes (APPROVED)

January 23, 2024 -- 1:00 – 3:00 pm CST

Chicago, IL (with virtual option)

1. Call to order and introductions

Chair, Richard Fox, welcomed people in attendance in-person (IP) and virtually (V). He also read the [ASHRAE Code of Ethics](#) and the Antitrust Policy as stated in *ANSI Essential Requirements* and described in [an online presentation](#).

- Voting members (12 of 14 attended)

Name	Affiliation/voting category	Attendance type (IP, V, or absent)
Richard Fox, Chair	AeroParts (manufacturer)	IP
Ben Thiesse, Vice-Chair	American Airlines (airline)	IP
Judith Anderson, Secretary	Assoc. Flight Attendants-CWA (crew)	IP
Allison Glaser	American Airlines pilot (crew)	V
Byron Jones	Kansas State Univ. (retired) (general)	V
Catherine Thibaud	Airbus (manufacturer)	IP
Daniel Tandoi	Vereinigung Cockpit (crew)	V
Frank Brehany	passenger advocate (passenger)	V
Joshua Kelton	Textron Aviation (manufacturer)	V
Karen Reilly	Spirit/Airline Pilots' Association (crew)	V
Lubos Forejt	Honeywell	IP
Michael Massoni	Transport Workers Union Local 556 (crew)	V
Aaron Engel	Fresh-Aire UV (manufacturer)	absent
Troy Winters	Canadian Union of Public Employees (crew)	absent

- Non-voting members (three of nine attended)

Name	Affiliation/category	Attendance type (IP, V, or absent)
Andreas Bezold	Airbus (manufacturer)	IP
Gwelen Paliaga	SPLS Liaison	IP
Tristan Loraine	Former pilot (flight personnel)	V
Allen Johnston	GreenTech Environmental (manufacturer)	absent
Annette Uda	Aerapy, LLC (general)	absent
Chris Witkowski	AFA-CWA (organizational) (flight personnel)	absent
Mark Weber	ASHRAE Manager of Standards	absent
Susan Michaelis	Global Cabin Air Quality Exec. (flt. personnel)	absent
Tim Ahn	Clean & Science Co. Ltd. (manufacturer)	absent

- Two guests attended

Name	Affiliation
Chloe Shen Morosetti	United Airlines
Phil Arnold	Safe Traces

2. Membership and quorum determination

- Judith Anderson confirmed that we have a quorum (12 of 14 voting members in attendance).
- Richard Fox reviewed the membership roster:
 - Pending/recent membership changes which impact voting balance: Stephen Trent resigned; Don Largent rolled off and did not reapply; Shelby Taylor was removed with cause; Joshua Kelton is a new voting member; Chloe Shen Morosetti will start her term as a voting member on Feb. 1, 2024; Tim Ahn will change status from non-voting to voting, effective Feb. 1, 2024; and Allen Johnston will change from non-voting to voting, effective Feb. 1, 2024.
 - Pending/recent membership changes which impact non-voting membership: Stephanie Licht, and Jerome Johnston resigned; Tristan Loraine and Susan Michaelis became new non-voting members; Annette Uda moved from non-voting manufacturer to non-voting general.
 - Pending/recent changes in voting category: Richard Fox changed from general to manufacturer; Annette Uda changed from manufacturer to general; and Allen Johnston changed from manufacturer to general.
 - As a result of these changes, as of Feb. 1, 2024, the committee will have 17 voting members (Ahn, Anderson, Brehany, Engel, Forejt, Fox, Glaser, Johnston, Jones, Kelton, Massoni, Morosetti-Shen, Reilly, Tandoi, Thibaud, Thiesse, and Winters). Also, the committee will have seven non-voting members (Bezold, Loraine, Michaelis, Paliaga, Uda, Weber, and Witkowski).

3. Approval of meeting minutes

Our previous meeting was hybrid format on June 26, 2023 (Tampa, FL with option to participate virtually). The meeting minutes were voted on and approved in September 2023. Of 16 voting members, 10 members voted yes (Anderson, Brehany, Fox, Engel, Glaser, Jones, Largent, Massoni, Thiesse, Winters), two abstained (Trent, Forejt), and four did not vote (Engel, Reilly, Taylor, Thibaud).

4. Guidance when proposing changes to ASHRAE documents

Gwelen Paliaga described his administrative role as a liaison between our committee and the SPLS committee. He clarified that, if we want to propose language that is beyond the current scope, then we must first propose and modifications to the title, purpose, and scope (TPS) and have the revisions approved. For language about thermal conditions, Gwelen could coordinate a liaison between our committee and the committees that manage Standard 55 and Standard 170, if desired.

Richard Fox reminded the committee that official working drafts of documents intended for public review shall include these statements: *"This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document. This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such. The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such."*

Also, Richard F. reminded members of ASHRAE policy that, for any Publication Public Review motions, all project committee members must be given the opportunity to vote. If all members are not present, then a continuation letter ballot shall be sent to ballot the absent members. All project committee voting members voting no with comment will be offered a right to appeal upon Board approval of publication. All project committee voting members voting no without comment will not be offered the right to appeal.

5. Continuous maintenance proposals

Richard F. proposed changes to the language that refers to carbon monoxide in Standard 161. Ben T. requested that the proposed edits to Section 8 also explain why the carbon monoxide text is being revised.

Judith A. proposed that interested committee members form a working group to address and edit those references. Michael M. seconded. Motion was passed 12:0:0.

Ben T. described multiple sections of Standard 161 which he thinks need to be updated. These include Section 5.2 (reference to multiple thermal complaints being remedied), Section 6.2 (explicitly state that ventilation requirements apply to each seating density section, not just economy and explain why ground cart air flow requirements are higher than APU requirements), Section 6.3.1 (consider requiring filter for volatile organic compounds (VOC) on recirculated air), expand parts of Section 8, including hydraulic fluid (Section 8.6) and oil (Section 8.7) to reflect what has been learned about preventing bleed air contamination, update Section 8.9 (bacteria/virus) based on what was learned during the COVID pandemic, expand Section 8.10 (disinsection) with language on thermal methods; add language to Section 9 to give operators guidance on how to measure air flow, revise Section 10 (documentation) to recommend that

operators use the aircraft maintenance log as the primary source of reporting fume events (including phase of flight, odor descriptors, and location(s) in cabin and flight deck), and recommend training for pilots and maintenance to document those details. In addition, Ben T. recommended that we reconsider some of the language in Section 7.2 (bleed air contaminant monitoring) to improve the ability of operators to comply and to identify which aircraft and sensor types should be prioritized.

Richard F. proposed that the committee define indoor air quality limits for recirculated air quality. Ben suggested that we define VOC filtration efficiency minima. There was no consensus on this approach.

Judith A. proposed additions to Section 5.2 (temperature) and an informative appendix to provide operators with means to meet the temperature limits in Table 5-1.

11. Next meetings and actions

Richard F. confirmed that we will have a virtual meeting in June 2024 (specific date TBD).

Richard announced that we will have interim meetings via zoom every six weeks going forward to address proposed revisions, starting with temperature.

The winter 2025 (Las Vegas) meeting will officially only have the option to attend in-person, but Richard F. will circulate a link for those members who are only able to attend virtually.

Action item: Richard Fox will schedule interim virtual meetings for all committee members who are interested in working on the revisions.

Meeting adjourned.