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MEETING LOG
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Accredited National Standard on Performance and Installation of Gas-Burning Appliances and Related Accessories, Z21

PLACE: Sheraton Washington Hotel, 2660 Woodley Road, Washington, D.C.

MEETING DATE: April 6, 1995 ✓

LOG ENTRY SOURCE: Donald W. Switzer *DWS*

ENTRY DATE: June 12, 1997

COMMISSION ATTENDEES:

Donald W. Switzer ES

NON-COMMISSION ATTENDEES: See attached Minutes

MEETING SUMMARY

The ANSI Z21 Committee sets performance standards for gas-burning appliances and their installation. Membership consists of experts in gas appliance design and natural and LP-gas fuel distribution, government agencies, and consumer representatives. The minutes of the meeting are attached and accurately report the proceedings.



MINUTES

of

One-Hundred-and-Seventh Meeting of

**ACCREDITED STANDARDS COMMITTEE ON
PERFORMANCE AND INSTALLATION OF GAS-BURNING
APPLIANCES AND RELATED ACCESSORIES, Z21**

6 APRIL, 1995

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- APPENDIX E - GRI Funding Program for Standards Test Methods Development (Status Report)**

Action Summary

<u>ITEM</u>	<u>TASK</u>	<u>RESPONSIBILITY</u>
4	The Committee approved the combining and/or restructuring of various subcommittees.	
5	Harmonization is well underway toward completion by year-end 1996. Harmonization of the Z21 and CGA relief valve standards needs to be expedited.	Staff
6	Existing communications channels obviate the need to establish increase lines of communications with GRI and CPSC with regards to flammable vapor activity.	
9	The proposed harmonized ANSI Z21.40.2•CGA 2.92 standard was approved with sections 1.23.1-a7, 1.25.9-c and 1.25.9-d editorially revised.	
11	The proposed harmonized ANSI Z21.66•CGA 6.14 standard was approved with section 6.5 editorially revised.	
16	The "boxed" warning for optional conversion kit coverage was editorially revised. The entire Committee will be letter balloted for final approval of the revised boxed warning.	Staff
	Inform the various subcommittees having responsibility for the standards affected by the above change. Also forward to all other subcommittees supervising standards that already contain coverage for optional conversion kits, requesting that they consider a similar change to the boxed warning.	Staff
	Inform ANSI of the actions taken by the Committee.	Staff
17	Inform Z21/Z83/CGA Joint Ad Hoc Advisory Group on Graphic Symbols and Communications Protocol for Gas Appliances and Accessories of Committee action on the proposed change to its title and scope.	Staff
20	The Committee responded to comments accompanying disapproving and abstaining votes on standards proposals submitted to	

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the Committee under a January 17, 1995 letter ballot.

- | | | |
|-------|---|-------|
| 21 | The Committee agreed the general "Fit-for-Purpose" clause in the standards should not be revised as had been suggested. The CGA Standards Steering Committee is to be informed accordingly. | Staff |
| 23 | Editorially revised the proposed operating procedures for submittal to ANSI for approval. | Staff |
| Other | The Committee approved proposed revisions submitted under Items 7 through 15. Absent members will be letter balloted on approval of the proposed revisions. | Staff |

Minutes of One-Hundred-and-Seventh Meeting

of

**ACCREDITED STANDARDS COMMITTEE ON
PERFORMANCE AND INSTALLATION OF GAS-BURNING
APPLIANCES AND RELATED ACCESSORIES, Z21**

Held at the
Sheraton Washington Hotel
2660 Woodley Road at Connecticut Avenue, N.W.
Washington, D.C.

April 6, 1995

The meeting was called to order at 9:00 A.M., Eastern Daylight Saving Time, Thursday, April 6, 1995. During the course of the meeting, the following were in attendance:

Chairman: Howard I. Forman

Vice Chairman: Jack D. Rea

Members Present:

<u>Member</u>	<u>Representative</u>
American Gas Association	Charles D. Applequist Dan Hansen John R. Peak Jack D. Rea Paul F. Swenson
American Home Economics Association	Frances Gailey
Association of Home Appliance Manufacturers	Earl T. Rhinehart
U. S. Consumer Product Safety Commission	Donald W. Switzer
Factory Mutual System	Armand V. Brandao
Gas Appliance Manufacturers Association	Charles W. Adams Daniel J. Canclini William E. Dalton* Jay R. Katchka

* Departed 11:35 A.M.

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	James Mullen Drew Smith (Represented by Otto Vago) Daniel P. Werner
Individual Member	Howard I. Forman R. Michael Martin
International Association of Plumbing and Mechanical Officials	Jerome Hendrickson
Mechanical Contractors Association of America, Inc.	William C. Abernathy
National Association of Plumbing- Heating Cooling Contractors	Terrell D. Moseley
National Electrical Manufacturers Association	G. E. Willert Alan R. Anderson (Alternate)
National Fire Protection Association	Theodore C. Lemoff
National Propane Gas Association	Bruce J. Swiecicki
National Institute of Standards and Technology	Walter G. Leight
Naval Facilities Engineering Command (U.S. Department of the Navy)	Danny C. Mui
Underwriters Laboratories	Harry Jones
U. S. Consumer Product Safety Commission	Donald W. Switzer

Administrative Staff (Non-voting):

Allen J. Callahan, Administrative Secretary
James H. Gazda

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Guests:

Ken Bales	International Approval Services - Canadian Operations
Paul E. Beach	White-Rodgers Division, Emerson Electric Company
Spencer P. Grieco	International Approval Services - U.S. Operations
Daryl L. Hosler	Southern California Gas Company (<i>Z83 Committee Chairman, and Chairman of the Connector; Automatic Gas Control; and Central Furnace Joint Subcommittees</i>)
John W. Kulma	Crescent Metal Products Incorporated (<i>Chairman - Ad Hoc Advisory Committee on Graphic Symbols and Communication Protocol</i>)
Frank A. Stanonik	Gas Appliance Manufacturers Association, Inc.
Robert St. Louis	CAMCO (<i>Vice-Chairman - Z21/CGA Gas Clothes Dryer Joint Subcommittee</i>)
Wayne E. Miller	Southeastern Michigan Gas Company (<i>Chairman - Z21/CGA Joint Boiler Subcommittee</i>)
J. T. Weizeorick	Association of Home Appliance Manufacturers

Members Absent:

<u>Member</u>	<u>Representative</u>
Air Conditioning Contractors of America	James P. Norris
American Gas Association	Michael E. Griffin Robert A. Hauserman Billy R. Ware
American Public Gas Association	Robert S. Cave
Canadian Gas Association	James M. Jones

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Consumers Union	George A. Papritz
Gas Appliance Manufacturers Association	Albert B. Chamberlain Michael F. Grosso
General Services Administration	Bruce Geren Christopher Pollock (Alternate)
Individual Member	Vail P. Garvin
U.S. Department of Housing and Urban Development	Victor J. Ferrante
U.S. Department of Defense - Office of Assistant Secretary of Defense	Gregory E. Saunders

Introductions

Chairman Forman introduced the members of his Advisory Committee, and the following guests attending the meeting:

- Mr. Daryl L. Hosler, Southern California Gas Company and *Z83 Committee Chairman*
- Mr. Frank A. Stanonik, Gas Appliance Manufacturers Association, the new Director of Technical Services
- Mr. Otto Vago, State Industries, representing Drew Smith.

Committee members, staff and other guests were then requested to introduce themselves and identify their affiliations.

The Chairman informed the Committee members that Dr. Vail P. Garvin (individual member) would not be attending today's meeting due to a recent surgical operation. Best wishes for a speedy recovery were expressed by the Committee.

Opening Remarks

On behalf of the Committee, the Chairman extended his thanks and appreciation for the continued assistance and service provided by the Administrative Secretary and his staff.

Retirement of Mr. William C. Abernathy

Mr. William C. Abernathy informed the Committee that he will soon be retiring and, therefore, will no longer be able to serve on the Z21 Chairman's Advisory Committee and the Z21 Committee. Mr. Abernathy commented that it has been a pleasure, over the years, to have worked with the present and past members of the Z21 Committee and the Advisory Committee. He acknowledged the members' technical background and depth of experience, and staff's support as key factors in the success of the Z21 standards program.

On behalf of the Z21 Committee and its Advisory Committee, the Chairman thanked Mr. Abernathy for his many years of service to the voluntary standards program (23 years on the Z21 Committee and 8 years on the Advisory Committee) and wished him good fortune in his future endeavors. A round of applause was then extended to Mr. Abernathy by all present.

Service Awards

The Chairman announced that ten individuals were being honored this year by the Committee for their service to the Z21 standards program as members of the Z21 subcommittees; five are to receive "long term" service awards and five are to receive "short-term" service awards.

Those awardees receiving long-term service awards are honored at a reception held on the eve of the Z21 Committee's annual meeting with a plaque recognizing their years of service. However, it was reported that none of the recipients was able to attend last night's reception. It was noted that the awards would be mailed to the recipients, shortly.

Appendix A to these minutes lists the awardees, their subcommittee affiliations, and their years of service in the Z21 standards program.

ITEM 1. Approval of Minutes

The minutes of the April 7, 1994 meeting of the Committee were approved as recorded.

ITEM 2. Chairman's Review of Various Standard Activities

Subject

Chairman Forman's verbal remarks on various standards related activities that have transpired since the Z21 Committee's April 7, 1994 meeting.

Discussion

Appeals

Mr. Forman noted that during his 13 year tenure as committee chairman the Committee's appeals process has been used only twice, indicating the effectiveness of the standards program. Under agenda Item 16 the Committee is being asked to address, at today's meeting, comments received on a proposal to the vented heater standards. This would expedite the Committee's consideration of the comments rather than utilizing the much longer "appeals" process.

Proposed Reengineering of the Z21/Z83/CGA Standards Program

The Chairman reminded the members that a presentation was made by Mr. Spencer P. Grieco, International Approval Services - U.S. Operations, at a special meeting of the Z21 Committee in Washington D.C. on November 18, 1994. The presentation examined the current Z21/Z83 standards program, including a proposed process to address issues raised during strategic planning activities dealing with subcommittee participation, the time required to process standards proposals, and funding.

The Chairman assured the members that the function of the Z21 Committee, for now, will remain as it exists today. The members should continue to follow the current committee operating procedures. It was noted that efforts are underway to streamline and improve the activities of the Committee. One possible change would be to consolidate the Z21 and the Z83 Committees, and the CGA Standards Steering Committee into one main committee. The operating procedures of a single committee would likely parallel current committee procedures.

ITEM 3. Status of Standards Proposals and Standards Usage

Subject

A synopsis of the activities of the Z21 standards program which highlighted the activity level of the Z21 standards groups for the years 1990 through 1994.

Included with the synopsis were the number of meetings held, the status of the standards under the Committee's jurisdiction (presented as Attachment I) and the use of these standards for equipment certification (presented as Attachment II).

Discussion

The Administrative Secretary pointed out to the Committee that there has been, since its last

meeting, a significant increase in the number of harmonized documents submitted to ANSI for approval. It was believed that the December 31, 1996 goal for the harmonization of all applicable Z21, Z83 and CGA gas appliance and gas controls standards would be reached.

Several significant changes to the number of manufacturers utilizing the Z21 standards for certification were also brought to the attention of the Committee. These are highlighted below:

- the availability of a new standard for combination gas controls (Z21.78) has made it possible for combination gas control manufacturers to seek certification under the Z21.78 standard rather than under each applicable control device standard. This has resulted in a decrease in the number of manufacturers listed under the individual control device standards.
- new decorative appliance designs as supplemental heat sources (e.g. gas-logs equipped with ODS devices and direct vent decorative appliances), and the increase use of decorative gas logs for installation in solid fuel burning fireplaces, were identified as the reasons for the increased use of the unvented room heater (Z21.11.2), direct vent wall furnace (Z21.44) and vented decorative appliance (Z21.60) standards for certification.

Action

The Committee accepted the above report as informational.

ITEM 4. Proposed Consolidation of Z21 Subcommittees

Subject

Approval of the following:

1. the consolidation of the joint Z21/CGA automatic gas control subcommittee and the joint Z21/CGA thermostat and automatic ignition system subcommittee; and
2. the restructuring of the joint Z21/CGA vented heater, Z21 unvented heater and the joint Z21/CGA decorative appliance subcommittees, as follows:
 - a Z21/CGA joint subcommittee to address vented room heaters, floor furnaces, vented and direct vent wall furnaces, and vented and direct vent decorative gas appliances;
 - a Z21/CGA joint decorative appliance subcommittee to include gas logs for

installation in existing solid-fuel burning fireplaces; and

- a Z21 subcommittee to include vent-free products including ODS equipped unvented room heaters and gas logs.

Background

At its April 6, 1994 meeting, the Z21 Chairman's Advisory Committee concurred with a request that the above subcommittees should be combined and restructured, as indicated. Common membership and issues, duplication of staff efforts to service the subcommittees, enhancement of standards development and administration, and reduction of travel were listed as reasons. However, the Advisory Committee agreed that all persons directly affected by the suggested combining of the subcommittees, i.e., those who have agreed to participate voluntarily on the affected subcommittees, should first have the opportunity to express their views on such a proposal since it directly affects their membership and future opportunities to participate.

At its October 13, 1994 meeting the Advisory Committee reconsidered the above proposal, in light of subcommittee actions. It was reported that the affected subcommittees were in favor of the above proposal. In response, the Advisory Committee recommended to the Z21 Committee and the CGA Standards Steering Committee that they approve the consolidation and restructuring of the subcommittees, as outlined above.

Discussion

Staff informed the Committee that upon approval of the above, each affected subcommittee would be approached with a request to revise its titles and scopes, if necessary, to address the consolidation and restructuring. All recommended revisions would be presented to the Committee for approval.

A comment was made that there now appears to be more of an overlap of space heating equipment and decorative appliances which might justify having only one standard to cover both appliance types. In response, it was pointed out that there are enough differences between space heating appliances and decorative appliances to support maintaining individual standards. The apparent overlap could be a result of (1) the current application, use and installation of space heating equipment and decorative type appliances, (2) new decorative appliance designs intended to provide heat and (3) decorative appliance certification under applicable standards coverage. It was believed the consolidation and restructuring of the space heating equipment and decorative appliance subcommittees should address the overlap and provide a better forum for revising the standards to address new product designs. It was also noted that efforts are underway to better inform the industry and installers of the differences between space heating equipment and decorative type appliances.

Action

The Committee unanimously approved the consolidation of the joint Z21/CGA automatic gas control subcommittee and the joint Z21/CGA thermostat and automatic ignition system subcommittee; and the restructuring of the joint Z21/CGA vented heater subcommittee, the Z21 unvented heater subcommittee and the joint Z21/CGA decorative appliance subcommittee. It was also agreed that the affected subcommittees should review their titles and scopes to determine if revisions are necessary.

ITEM 5. Status Report on Harmonization

Subject

Progress report on harmonization of the Z21/Z83 and CGA standards.

Background

The following information was presented to the Committee:

- Updates (in table form) on the harmonization efforts for the Z21/Z83 and CGA standards.
- A list of Z21 subcommittees (7) and Z83 subcommittees (2) which have published a standard or have comparison documents or harmonized drafts in process.
- A list of Z21 subcommittees (5) and Z83 subcommittees (2) that have assigned working groups, individuals or have taken other steps to prepare comparison documents or harmonization drafts.
- A list of Z21 subcommittees (6) and Z83 subcommittees (1) where mechanisms have not been established to initiate harmonization.

Discussion

As indicated in these minutes under agenda Item 3 it was believed that the December 1996 goal for the harmonization of all applicable Z21, Z83 and CGA gas appliance and gas controls standards should be met.

The discussion then focused on the subcommittees where harmonization needed to be initiated. Of the three remaining Z21 standards, it was agreed that the harmonization of the relief valve standard should be started as soon as possible. The Committee was informed that the Advisory Committee, at its April 5, 1995 meeting, requested that the Administrative

Secretaries, Messrs. Ken Bales and Allen J. Callahan, review possible options which could be used to expedite the development of a comparison document of the U.S. and Canadian relief valve standards for subcommittee consideration.

Action

The Committee accepted the above report as informational.

[**Secretary Note:** An initial comparison document of the Z21.22, CAN1-4.4 and CAN1-4.6 standards has been completed by a member of the Z21 relief valve subcommittee. Staff will be reformatting the initial comparison as a harmonized document. Once completed the document will be forwarded to the members of the joint relief valve subcommittee (yet to be established) by letter ballot for consideration for distribution for review and comment.]

**ITEM 6. Water Heater Flammable Vapor
Working Group Activity**

Subject

1. A status report on the water heater flammable vapor working group activity; and
2. A request to increase communications with GRI and CPSC with regards to the flammable vapor activity.

Background

A copy of each of the following documents, regarding the water heater flammable vapor working group's activity since the Committee's April 1994 meeting, were considered.

1. A January 25, 1995 letter by Mr. Daryl L. Hosler, Chairman of the flammable vapor working group.
2. A September 7, 1994 letter from Mr. Hosler to Ms. Julie Ann Cairns of the Secretariat staff.

Discussion

Mr. Daryl Hosler, Chairman of the Z21/CGA joint water heater subcommittee and the water heater flammable vapor working group, provided a verbal update. The following summarizes Mr. Hosler's report:

- The general consensus has been that current water heater designs are safe. The

problems that have arisen are from the improper use of materials with flammable vapors in the vicinity of the water heater.

- Much time, effort and resources have been expended in addressing the issue. The evaluation process is ongoing as new information becomes available. Under these circumstances, generating a formal report(s) has been premature. Status reports, such as presented herein, have been adequate.
- A Flammable Vapor Technical Advisory Group (TAG) was formed by the Gas Research Institute to develop a test protocol which will evaluate a water heater's resistance to igniting flammable vapors. The summer of 1995 has been targeted for the completion of this activity. It is anticipated that this activity could help in evaluating whether changing the design of the water heater or its installation could effectively satisfy the issue of flammable vapors ignition involving water heaters.

In conjunction with this item the Committee was informed that, at its October 13, 1994 meeting, the Chairman's Advisory Committee was informed of correspondence between the Z21 Committee Chairman and Mr. Brandao. Mr. Brandao had commented that he had not been adequately kept informed of activities addressing the use of materials with flammable vapors in the vicinity of gas-fired water heaters. Chairman Forman informed the Committee that he has assured Mr. Brandao that as pertinent information develops it is available to the members of the Committee. The Chairman also invited Mr. Brandao to become a member of the water heater subcommittee, but he had not been able to accept.

Regarding increasing communications with GRI and CPSC, at its September 22-23, 1994 meeting, the water heater subcommittee concurred with a working group recommendation to increase liaison between the Gas Research Institute (GRI), U.S. Consumer Product Safety Commission (CPSC) and the voluntary standards group, where the various parties are involved in related activities. The subcommittee requested that the Z21 Committee consider the need to increase communications with GRI and CPSC.

In response to the above request a motion was made and seconded to increase lines of communications as suggested by the water heater subcommittee. The following points were made during discussion:

1. Adequate lines of communication already exist under the current Z21 program. Historically, the technical subcommittees have provided information to the Committee and interested individuals when it was available and warranted. Minutes of all subcommittee and working groups meetings are also available.

Other than meeting minutes no formal reports have been issued. The Committee members were assured that they would continue to be informed when information was available. In the interim, Mr. Hosler offered to answer any questions or

respond to any requests for an update on subcommittee activities addressing the ignition of flammable vapors.

2. It was questioned whether status and final reports addressing gas appliance issues and Z21 standards proposals should come directly from the Z21 Committee's technical subcommittees.
3. There already exists a strong liaison between the technical subcommittee, GRI and CPSC. This cooperative communications channel has been effective with periodic updates from the subcommittee. The Committee considered this to be an appropriate means of communication among the involved parties and saw no need to establish more complex communications mechanisms at this time.

Action

In light of the discussion the above motion was tabled at this time. A new motion stated that the technical subcommittees currently have, in place, adequate lines of communication. Therefore the request to increase communications with GRI and CPSC was unnecessary. This new motion was approved with a disapproving vote cast by Mr. Brandao and an abstention cast by Mr. Lemoff. Mr. Brandao commented that information on the flammable vapor issue seemed to be more readily available to him outside of the Z21 standards program. He did agree it was important to utilize the technical subcommittees.

Again it was suggested that Mr. Brandao seek membership on the joint water heater subcommittee, communicate directly with the chairman of the subcommittee for updates and attend the subcommittee meetings. The Chairman concurred that a formal report was unnecessary at this time since study efforts were still ongoing.

In closing Mr. Hosler again reassured the Committee that a final report, once available, would be communicated to all affected groups.

SUMMARY OF RECOMMENDED STANDARDS REVISIONS (Items 7 through 15)

The Committee reviewed six proposed harmonized standards, proposed revisions to an existing standard and proposed revisions to a proposed harmonized standard, as recommended by the supervising subcommittees under agenda Items 7 through 15. All eight proposals were adopted by the Committee for submittal to the American National Standards Institute for consideration of approval.

A premeeting ballot had accompanied the distribution of agenda Items 8 through 11, and Items 13 and 14 requesting votes from each member on the approval of each of the standards

proposals.

The purpose of the premeeting ballot was to register the votes of those members and alternates who may be unable to attend the meeting. Each member was requested to return the ballot with the understanding that members attending the meeting could change their votes at the meeting following consideration of each of the proposals. A copy of a summary of the premeeting ballot, including comments accompanying votes, was distributed at the meeting to each committee member (comments are shown in Appendix B to these minutes). The Committee was informed that two more approving ballots were received after the closing date of the premeeting letter ballot. The total vote count identified in the premeeting ballot summary was adjusted accordingly.

As a result of the premeeting ballot and the vote at the meeting, Items 8, 9 and 11 were approved with minor editorial modifications; Items 10, 13 and 14 were approved unchanged. Comments accompanying disapproving votes cast on Items 9, 13 and 14 are addressed below.

Items 7, 12 and 15, which were not processed in time to be included on the premeeting ballot, were also approved as noted below.

Absent member votes will be requested on Items 7 through 9, 11, 12 and 15 for those members not in attendance and not represented at the meeting. Messrs. Ferrante, Norris and Switzer are liaison members without vote. Mr. Martin is an individual member without vote.

**ITEM 7. Revision to Proposed Third Draft Harmonized
American National Standard/National Standard of Canada for
Vented Gas Fireplaces (Z21.50•CGA 2.22)**

Subject

A revision to the proposed Third Draft of Harmonized American National Standard/National Standard of Canada for Vented Gas Fireplaces, ANSI Z21.50•CGA 2.22, as adopted by the Z21/CGA joint decorative appliance subcommittee at its October 20-21, 1994 meeting. The revision specified that electronic ignition modules complying with the provisions of the Standard for Automatic Gas Ignition Systems and Components (Z21.20) shall be considered as complying with proposed 2.18.3 of the third draft. It was intended to address concerns expressed by two control manufacturers at the Committee's April 1994 meeting and the October 1994 meeting of the Z21 Chairman's Advisory Committee.

Action

The proposed revision and rationale statement was unanimously approved as recommended. It will be submitted to ANSI in conjunction with the proposed Third Draft Harmonized

American National Standard/National Standard of Canada for Vented Gas Fireplaces, dated December 1993 (corrected January 1994), and proposed revisions adopted under letter ballot dated August 5, 1994. A single harmonized document would be printed.

**ITEM 8. Proposed First Draft of Harmonized American National Standard/
Canadian Gas Association Standard for Gas-Fired, Heat Activated
Air Conditioning and Heat Pump Appliances (Z21.40.1•CGA 2.91)**

Subject

Approval of a proposed first draft of harmonized American National Standard/Canadian Gas Association Standard for Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances, ANSI Z21.40.1•CGA 2.91, and related rationale statements.

Discussion

The Committee was informed that Mr. Willert had not been aware that the air-conditioning subcommittee already addressed the comments submitted in conjunction with his approving vote. His comments were withdrawn accordingly.

It was also noted that the harmonized standard, if approved, would replace the current Standard for Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances, ANSI Z21.40.1-1993.

Action

The proposed harmonized draft standard and accompanying rationale statements were approved as recommended. Staff was instructed to editorially correct the misspelling of the word "manual" under 1.7.1.

**ITEM 9. Proposed First Draft of Harmonized American National Standard/
Canadian Gas Association Standard for Gas-Fired Work
Activated Air-Conditioning and Heat Pump Appliances
(Internal Combustion), Z21.40.2•CGA 2.92**

Subject

Approval of a proposed first draft of a harmonized American National Standard/Canadian Gas Association Standard for Gas-Fired Work Activated Air-Conditioning and Heat Pump Appliances (Internal Combustion), ANSI Z21.40.2•CGA 2.92, and related rationale statements.

Discussion

Mr. Swiecicki explained his reasons for casting a disapproving vote on the premeeting ballot. He noted that the reference under proposed 1.23.1-a7 to the Uniform Building Code (UBC) for roof covering material was inappropriate since it was only used in the United States in those areas west of the Mississippi River. He recommended that a reference to ASTM E108, Method of Fire Tests of Roof Coverings, was more applicable. He also noted that ASTM E108 was currently referenced in the UBC. In closing, Mr. Swiecicki was receptive to changing his disapproving vote to approve if the reference was revised as suggested.

In response a member of the air-conditioning subcommittee indicated that the subcommittee was unaware that the reference was incorrect. He was receptive to revising the reference as suggested.

It was then noted that the comments submitted by Mr. Willert, in conjunction with his approving vote on the premeeting ballot, had been addressed by the joint subcommittee. It resulted in proposed revisions being distributed for industry review. In light of this subcommittee action, Mr. Willert withdrew his comments.

Action

The proposed harmonized draft standard and accompanying rationale statements were unanimously approved with an editorial revision to 1.23.1-a7, 1.25.9-c and 1.25.9-d, as suggested by Mr. Swiecicki. (See Appendix B to these minutes.)

**ITEM 10. Proposed First Draft Harmonized American National Standard/
Canadian Gas Association Standard for Performance Testing and
Rating of Gas-Fired, Air-Conditioning and Heat Pumping Appliances
(Z21.40.4•CGA-2.94)**

Subject

Approval of a proposed First Draft of a Harmonized American National Standard/Canadian Gas Association Standard for Performance Testing and Rating of Gas-Fired, Air-Conditioning and Heating Pumping Appliances, Z21.40.4•CGA-2.94, and related rationale statements.

Discussion

It was noted that the harmonized standard, if approved, would replace the current Standard for Performance Testing and Rating of Gas-Fired, Air-Conditioning and Heat Pump Appliances, Z21.40.4-1994.

Action

The proposed harmonized draft standard and accompanying rationale statements, as recommended, were approved with two abstentions. The abstentions were cast by Messrs. Moseley and Hendrickson. Both indicated that they were unable to adequately review the proposed document.

**ITEM 11. Proposed First Draft of Harmonized American National Standard/
Canadian Gas Association Standard for Automatic Vent Damper Devices
for Use With Gas-Fired Appliances (Z21.66•CGA 6.14)**

Subject

Approval of a proposed first draft of a harmonized American National Standard/Canadian Gas Association Standard for Automatic Vent Damper Devices for Use with Gas-Fired Appliances, ANSI Z21.66•CGA 6.14, and related rationale statements.

Discussion

In conjunction with his approving vote on the premeeting letter ballot, Mr. George Papritz commented that there were no rationale statements with the proposed draft standard.

[Secretary Note: The subcommittee felt that rationale statements for the proposed harmonized standard were unnecessary since the coverage in the document was based on comparable U.S. and Canadian standards. Rationales were provided for those changes which were made in response to comments received on the proposed harmonized standard.]

It was noted that the harmonized standard, if approved, would replace the current Standard for Automatic Vent Damper Devices for Use with Gas-Fired Appliances, ANSI Z21.66.

Action

The proposed harmonized draft standard and accompanying rationale statements were approved with two abstentions. The last sentence of 6.5 was corrected as suggested by Mr. Willert. (See Appendix B to these minutes.)

The abstentions were cast by Messrs. Moseley and Hendrickson. Both indicated that they were unable to adequately review the proposed document.

**ITEM 12. Proposed First Draft of Harmonized American National Standard/
Canadian Gas Association Standard for Gas Hose Connectors for
Portable Outdoor Gas-Fired Appliances (Z21.54•CGA 8.4)**

Subject

Approval of a proposed first draft of a harmonized American National Standard/Canadian Gas Association Standard for Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances, ANSI Z21.54•CGA 8.4, and related rationale statements.

Discussion

It was noted that the harmonized standard, if approved, would replace the current Standard for Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances, ANSI Z21.54-1987 and Addenda Z21.54a-1992.

Action

The proposed harmonized draft standard and accompanying rationale statements, as recommended, were unanimously approved.

**ITEM 13. Revision to Proposed Harmonized American National
Standard/National Standard of Canada for Domestic Gas
Clothes Dryers Volume I, Type 1 Clothes Dryers (Z21.5.1•CGA 7.1)**

Subject

Approval of a revision to the proposed harmonized Standard for Domestic Gas Clothes Dryers Volume I, Type 1, ANSI Z21.5.1•CGA 7.1, and related rationale statement.

Discussion

In light of the action taken under agenda Item 16 Mr. Hendrickson changed his disapproving vote on the premeeting letter ballot to "approve" at this time.

Action

The proposed harmonized draft standard and accompanying rationale statements, as recommended, were approved with two abstentions. The abstentions were cast by Messrs. Moseley and Hendrickson. Both indicated that they were unable to adequately review the proposed document.

The Committee also agreed that the above proposed revisions should be submitted to ANSI rather than being held in abeyance until additional revisions, currently under industry review, are forwarded to the Committee for approval.

**ITEM 14. Proposed Revision to American National Standard for
Domestic Gas Clothes Dryers Volume II, Type 2 Clothes Dryers (Z21.5.2)**

Subject

Approval of a proposed revision to the Standard for Domestic Gas Clothes Dryers, Volume II, Type 2, ANSI Z21.5.2, and related rationale statement.

Discussion

In light of the action taken under agenda Item 16 Mr. Hendrickson changed his disapproving vote on the premeeting letter ballot to "approve" at this time.

It was then pointed out that the proposed revisions under consideration do not contain the proposed boxed warning statement for optional conversion kits which was the basis for Mr. Hendrickson disapproving vote. It was recommended that the Committee vote only on the proposals being presented under this agenda item.

Action

The proposed revisions to the volume II clothes dryer standard (Z21.5.2), and accompanying rationale statements, were approved with two abstentions. The abstentions were cast by Messrs. Moseley and Hendrickson. Both indicated that they were unable to adequately review the proposed document.

The Committee also agreed that the above proposed revisions should be submitted to ANSI rather than being held in abeyance until additional revisions, currently under industry review, are forwarded to the Committee for approval.

Mr. Dalton departed at this time.

**ITEM 15. Proposed Harmonized American National Standard/
Canadian Gas Association Standard for
Combination Gas Controls for Gas Appliances (Z21.78•CGA 6.20)**

Subject

Approval of a Proposed Harmonized American National Standard/Canadian Gas Association Standard for Combination Gas Controls for Gas Appliances, Z21.78•CGA 6.20.

Discussion

It was noted that the harmonized standard, if approved, would replace ANSI Z21.78-1992 and addenda Z21.78a-1993 and Z21.78b-1994.

Action

The proposed harmonized standard for combination gas control for gas appliances (Z21.78•CGA 6.20, and accompanying rationale statements, were unanimously approved.

**ITEM 16. Comments on Proposed Boxed Warning for
Optional Conversion Kit Coverage**

Subject

Objections to the approval of language contained in a proposed "boxed" warning for optional conversion kit coverage.

Background

The following documents were presented for consideration:

1. A copy of the proposed boxed warning and text for optional conversion kits coverage, which was approved by the Committee as a result of its April 1994 meeting and a June 10, 1994 absent member letter ballot.
2. A February 14, 1995 letter from Mr. Terrell D. Moseley, Terrell E. Moseley, Inc.
3. A February 13, 1995 letter from Mr. Jerome O. Hendrickson, representing International Association of Plumbing and Mechanical Officials.
4. A March 20, 1995 follow-up letter from Mr. Moseley which contained a summary of the boxed warning issue and the following two recommendations:

- The last sentence of the boxed warning be revised by deleting the word "conversion" and clarifying that the service agency performing the work assumes responsibility for the proper installation of the conversion kit only.
 - The last sentence be relocated under a more appropriate section of the standard, e.g., instructions.
5. Editorial revisions to the boxed warning statement as recommended by the Z21 Chairman's Advisory Committee, at its April 5, 1995 meeting.

Messrs. Moseley and Hendrickson were objecting to the approval of the proposed revisions to the vented heater standards for the reasons stated in their correspondences listed under "1" through "4" above. They were in disagreement with the last sentence of a proposed boxed warning for optional conversion kit coverage. After reviewing the comments submitted by Messrs. Moseley and Hendrickson, the American National Standards institute (ANSI) determined that they had not exhausted the appeals process of Accredited Standards Committee Z21.

Although a formal letter of objection or appeal was not forwarded to ANSI, Mr. William C. Abernathy (representing Mechanical Contractors Association of America, Inc.) had expressed, at the Z21 Committee's last meeting, similar concerns as those expressed by Messrs. Moseley and Hendrickson. He also participated in the development of Mr. Moseley's March 20, 1995 summary of the boxed warning issue and the recommendations included in that summary.

Under letter dated March 13, 1995, the Z21 Administrative Secretary informed ANSI that Messrs. Hendrickson's and Moseley's concerns would be presented to Accredited Standards Committee Z21 for consideration at its April 6, 1995 meeting. In addition, the Administrative Secretary informed ANSI that the printing of the vented heater proposals was being postponed until the concerns were addressed.

History

Refer to the minutes of the April 7, 1994 meeting of the Z21 Committee regarding actions taken on several agenda items addressing standards proposals (Z21.44, Z21.11.1, Z21.48, Z21.49, Z21.50•CGA 2.22, Z21.60•CGA 2.26, Z21.5.1 and Z21.5.2), under which the boxed warning statement for optional conversion coverage was discussed. An outline of the actions taken on each of the agenda items was provided.

Discussion

Comments Submitted by Moseley, Hendrickson and Abernathy

The Chairman noted that Messrs. Moseley and Hendrickson felt that not all of their concerns

regarding the proposed "boxed" warning for optional conversion kits had been accurately conveyed to the affected joint subcommittees, the Z21 Committee members not attending the April 1994 meeting, and ANSI. It was agreed to try and resolve the comments at this meeting, rather than under the Z21 Committee's "Appeals" process, which could take much longer.

The Administrative Secretary indicated that the objections and reasons provided by Messrs. Moseley, Hendrickson and Abernathy were properly transmitted to all interested parties. A slight variation did exist between a June 1994 absent member letter ballot and a clarification to the minutes of the April 1994 meeting of the Z21 Committee issued following the closing of the letter ballot.

It was then clarified that the commentator's expressed concern was with the last sentence of the proposed boxed warning and the words "proper conversion." It was noted that it would be difficult for an installer to comply with that statement since he would have no control over whether the parts of the kit were properly packaged and in working order, and the instructions included with the kit contained no inadvertent errors. It was also felt that a statement of responsibility should not be a part of a warning statement.

The Committee was then informed that the Advisory Committee considered the above comments at its April 5, 1995 meeting. It was the consensus of the Advisory Committee that the following changes to the last sentence of the proposed boxed warning, if endorsed by Messrs. Moseley, Hendrickson and Abernathy, should be considered by the Z21 Committee as a means for resolving their concerns regarding responsibility for making a proper conversion. The Advisory Committee agreed that the suggested changes clarified the intent of the original coverage and did not need further industry review.

"The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit."

It was also reported that the Advisory Committee postponed discussion of the second recommendation to relocate the last sentence until the above modifications to the boxed warning were reviewed and accepted by Messrs. Moseley, Hendrickson and Abernathy.

Following the above summary of information, Mr. Lemoff questioned the need for the proposed new wording since it appeared to reiterate what was already specified in the installation codes. He also questioned whether coverage addressing responsibility should be specified in the standard.

The Committee was informed that the intent of the boxed warning was that someone take the responsibility that the appliance operates properly after the installation of the conversion kit. The water heater subcommittee considered deleting the last sentence of the boxed warning,

however; after lengthy discussions and review of industry comments, the coverage was adopted as originally proposed.

Location of the Boxed Warning

Mr. Moseley felt that the last sentence of the "boxed" warning, would be better addressed under the instruction section of the standard. There was also some question as to whether the boxed warning might become an actual label on the appliance. In response it was clarified that the boxed warning was part of the instructions that are to be provided with the optional conversion kit; the coverage was not intended to require that the manufacturer put such a warning statement on the appliance. It was also commented that the issue of relocating the boxed warning could be considered as an item of new business.

Action

The following actions were taken in response to the above:

1. The Z21 Committee agreed, with one abstention, with the Advisory Committee's recommendation to editorially revise the boxed warning, as shown in Appendix C to these minutes. The abstention was cast by Mr. Lemoff for the following reasons:

"I abstain from voting as I do not agree with the revised warning, as it relates to responsibility. I am not sure that this belongs in the standard and therefore abstain. I agree with the other proposed changes."

2. It was agreed that the entire voting membership of the Z21 Committee be requested, by letter ballot, for their expression on editorially revising the boxed warning proposed for inclusion in the Z21.11.1, Z21.44, Z21.48, Z21.49, Z21.60, Z21.5.1 and Z21.5.2 standards. If in agreement the revised boxed warning would be forwarded to ANSI for approval.
3. The Committee unanimously agreed that the various subcommittees, which are responsible for the standards affected by the above change, be properly informed. Also all other subcommittees, whose standards under their supervision already contain coverage for optional conversion kits, should be requested to consider a similar change to the boxed warning. Those subcommittees not adopting the same revisions should provide reasons.

The Administrative Secretary indicated that ANSI will be informed of the actions taken by the Z21 Committee.

Messrs. Moseley, Hendrickson and Abernathy thanked the Committee for addressing their concerns. They were receptive to the above actions taken by the Committee.

**ITEM 17. Z21/Z83/CGA Joint Ad Hoc Advisory Group on
Graphic Symbols and Communications Protocol for Gas
Appliances and Accessories**

Subject

Approval of a proposed change to the title and scope of the Joint Ad Hoc Advisory Group.

History

At its October 13, 1994 meeting, the Z21 Chairman's Advisory Committee, recommended to the Z21 Committee that a "Joint Ad Hoc Advisory Group on Graphics Symbols and Communication Protocol" be established, as suggested by the Z21/CGA joint central furnace subcommittee. The Z83 Committee, at its October 21, 1993 meeting, endorsed the establishment of the joint ad hoc advisory group.

In an effort to expedite its establishment, the Chairman of the Z21 Committee subsequently endorsed, on behalf of the Z21 Committee, the establishment of the ad hoc advisory group on graphic symbols and communications protocol.

Background

A copy of the original approved title and scope of the Joint Ad Hoc Advisory Group.

It was then reported that the first meeting of the group was held on November 9, 1994 in Toronto, Canada. After reviewing its title and scope the group agreed that the following would more adequately describe its intended work. It was also agreed that the proposed new title and scope should be forwarded to the Z21, Z83 and CGA Standards Steering Committees for approval.

"TITLE: Z21/Z83/CGA Advisory Group on Safety Communications

"SCOPE (MANDATE): Develop guidelines to assist gas appliance and accessories standards developers to address the means of communication, and to recommend standards coverage for marking materials, formats, colors, etc., used for safety labels and instructions. The Advisory Group will serve as a bridge between the ANSI Z535 standards and the gas appliances/equipments standards."

Discussion

Mr. John Kulma, the Chairperson of the Joint Ad Hoc Advisory Group, recapped the

discussion that took place at the April 5, 1995 meeting of the Z21 Chairman's Advisory Committee, on this agenda item. The Advisory Committee recommended to the Z21 Committee that (1) the original title and scope of the ad hoc advisory group on graphic symbols and communication protocol be reaffirmed and (2) each Z21 technical subcommittee be given the title and scopes of the Z535 standards to determine if the principles and concepts of those standards should be reflected in the Z21 appliance and control device standards.

The initial task of the Ad Hoc Advisory Group was to develop graphic symbols that could replace written text for markings and instructions. The long term goal was to address communications protocol for gas appliances and accessories. The Chairman's Advisory Committee had agreed the proposed new title and scope significantly altered these original goals.

Following Mr. Kulma's summary, Mr. Stanonik then restated his concerns expressed at the April 5, 1995 meeting of the Chairman's Advisory Committee meeting. He pointed out that the new title and scope was a significant change from the original title and scope for the advisory group, and that the working group, only after one meeting, had redefined its original task which was the result of a lot of discussion, thought and effort by the central furnace communications working group. Also, the proposed scope assumes that all the principles and concepts of the Z535 standards are applicable to the Z21 and Z83 gas appliance and controls standards. Mr. Stanonik recommended that the Z21 Committee reaffirm the original title and scope for the ad hoc advisory group.

Action

The Committee agreed, with one abstaining vote, with the recommendation of the Advisory Committee, and reaffirmed the original title and scope of the Ad Hoc Advisory Group on Graphic Symbols and Communication Protocol. The Committee also instructed staff to present to each Z21 technical subcommittee a copy of the title and scopes of the Z535 standards to determine if the principles and concepts of these standards should be reflected in the Z21 appliance and control device standards.

The abstention was cast by Mr. Paul Swenson for the reasons identified below:

"I am of the persuasion that the terms "Ad Hoc" are inappropriate for inclusion in the referenced advisory group's title, considering the length of time that is contemplated for completion of the advisory group's charge. Further, these terms have not been used elsewhere in the lexicon of the Z-21 Committee group titles."

**ITEM 18. Final Review of Suggested Guidelines and/or Rules for
the Handling of Requests for Presentations at
Technical Subcommittee Meetings**

Subject

Final guidelines for handling of requests for presentations at technical subcommittee meetings.

Background

The draft guidelines had been developed in light of increasing requests by non-committee/subcommittee members to make formal presentations. Since there was no policy regarding presentations made at technical subcommittee meetings, it was believed such guidelines should be developed.

The guidelines were intended to provide Subcommittee Chairmen guidance on how to handle requests for formal, preplanned presentations at subcommittee meetings.

Discussion

The Committee was informed that the suggested guidelines, which have undergone several reviews of the Advisory Committee, were unanimously approved by the Z83 Committee, at its October 12, 1994 meeting. It was also noted that the proposed guidelines would be considered by the CGA Standards Steering Committee for approval at its April 27, 1995 meeting.

Action

The Committee unanimously approved the guidelines for handling of requests for presentations at technical subcommittee meetings, as shown in Appendix D to these minutes.

Messrs. Katchka and Rhinehart departed at this time.

**ITEM 19. GRI Funding Program for Standards
Test Methods Development**

Subject

Status of current test method investigation projects, for recommendation to the Gas Research Institute (GRI) for funding.

Background

A summary of all Research and Development support activities carried out since the inception of the program. A status report of each project was presented in a letter dated February 17, 1995 from Mr. Craig Farnsworth, Project Manager, GATC, as shown in Appendix E to these minutes.

Update

Based on further input from Mr. Farnsworth, additional information on several projects was provided by the administrative secretary, as noted below:

Approved Projects

Develop a Test Method Investigation Project on the Effects of "High Altitude" on the Operation of Gas Appliances. (Project I)

Analytical work completed. Final report containing many of the comments from the reviewers was printed and distributed.

Further Develop a Standardized and Universally Accepted Wind Test Procedure (Project II)

As reported at the October 1994 meeting of the Chairman's Advisory Committee, the work was scheduled to begin in July 1994 under GRI's Venting Project has been postponed. Based on input from GRI's Venting Project Technical Advisory Committee (TAG), at a meeting held in May 1994, funding was reallocated to address field problems with high temperature plastic vent pipe. The wind test work may be initiated at some future date if priorities, as established by GRI's Venting Program Manager and TAG, permit.

- and -

Evaluate Proposed Categorization Coverage for Water Heating Appliances (Project II)

Interim results were reported to GRI's Venting TAG at a March 3, 1995 meeting. Battelle - Columbus, Ohio, at the direction of GRI's Venting Program Manager, was conducting additional analysis as suggested by the TAG. They expect to have a draft report available for the June Z21 Water Heater Subcommittee meeting.

Makeup Air Heater Ventilation (Project III)

Prospectus was submitted to the GRI Team Leader for Space Heating. His request for additional funds to address the issues raised in the prospectus was not accepted by GRI Strategy and Goals Committee at the end of February. Discussions are underway with GRI's team Leader for Environmental and Safety Issues.

Discussion

It was noted that the preliminary report on Project II (High Altitude) had generated several questions and concerns, many of which were raised at a September 1994 meeting of the Z21/CGA joint central furnace subcommittee. It was asked whether those questions, concerns and areas, which were expressed by manufacturers (e.g. effects on propane appliances), were to be studied under this project. It was also expected that the resultant work would have identified the preferred method (Canadian or U.S.) which should be specified in the harmonized standards to address effects of high altitude on gas appliances. It was noted that the current Standard for Gas-Fired Central Furnaces contains an Exhibit that identifies, by country, which method of test should be used to address the effects of high altitude. Ideally one test, for both U.S. and Canada, was preferred.

In response it was verified GRI had indicated that the project was completed and no additional funds were available for any further study. It was also pointed out that the title and scope of the project only addressed natural gas appliances. It was suggested that any unresolved issues be sent back to the appropriate subcommittee and, if necessary, have that group develop a new work statement(s) to address unresolved issues.

Response

The Committee accepted the above report as informational.

ITEM 20. Comments on Proposed Standards Revisions

Subject

Comments accompanying votes submitted by members of the Z21 Committee on standards proposals considered under a January 17, 1995 letter ballot.

Background

Under letter ballot dated January 17, 1995, the Z21 Committee considered proposals addressing four harmonized Z21/CGA control device standards, revisions to an existing harmonized Z21/CGA appliance standard, and revisions to six existing Z21 standards.

Discussion

The Committee was informed that an additional vote approving Attachments 1 through 11 was received after the letter ballot was closed and summarized.

As noted in the closing paragraph of the letter ballot summary, the Committee was asked to consider the comments (reproduced in the summary) accompanying "disapproving" on Attachments 1 and 8 through 10; and "abstaining" votes on Attachments 1 through 7 and 9, respectively, of the January 17, 1995 letter ballot.

The comments accompanying "disapproving" votes and "abstentions" were addressed by the Committee as noted below:

Attachment Standard

1. Proposed Appendix A to the Standard for Performance Testing and Rating of Gas-Fired Air Conditioners (Z21.40.4)

In response to Messrs. Adams, Katchka, Brandao, Mullen and Werner, it was clarified that the proposed Appendix A provides methods of determining efficiency rating and operating costs of gas-fired heat pumps for space heating equipment which are currently not covered under the National Appliance Energy Act. It was then noted that comments, similar to those submitted by Messrs. Adams, Brandao, Mullen and Werner, had been considered by the joint air-conditioning subcommittee. The joint subcommittee had agreed that the proposed coverage, which has undergone several years of development, was needed by the gas industry and should not be delayed until the Department of Energy finalized its position on a "non-source energy descriptor," which to date has changed several times. It was also felt that the proposed coverage was appropriate for gas-fired heat pumps which are unique appliances. If necessary, the coverage could always be revised in the future to correlate with DOE's final proposal.

Following discussion, Mr. Adams indicated that he was not advocating waiting until DOE reached a final decision but was still not supportive of using source energy terminology. Mr. Brandao preferred appliance site operational efficiencies to be calculated and specified, with a footnote discussing source energy. No additional comments were made by Messrs. Katchka, Mullen and Werner.

The Committee supported the position of its joint subcommittee.

Mr. Hansen departed at this time.

8. Gas-Fired Water Heaters, Volume I, Storage Water Heaters With Input Ratings of 75,000 Btu Per Hour or Less, Z21.10.1

Mr. James Jones and Mr. Terrell Moseley had cast disapproving votes on the proposed revisions. Mr. Jones was concerned with the wind test coverage for this standard and the other water heater standard (Z21.10.3), and suggested that a reference should be made to the wind tests undertaken by the joint central furnace subcommittee. In response it was noted that Mr. Jones' concerns have already been addressed by the water heater technical subcommittee. Also, his comments pertained to present text of the standard rather than the proposed coverage.

Mr. Moseley changed his disapproving vote to an approving vote since no other committee member submitted similar comments and/or concerns regarding the use of the term "excessive" in the Method of Test for 2.29.2, and elsewhere in the standard.

9. Gas-Fired Water Heaters, Volume I, Storage Water Heaters With Input Ratings of 75,000 Btu Per Hour or Less, Z21.10.1

See discussion under Attachment 8 above regarding disapproving votes cast by Messrs. Jones and Moseley.

The Committee did not agree with Mr. Papritz's comments on Attachments 1 through 7 that the letter ballot did not provide adequate time to review the various standard proposals and submit votes on each proposals.

Those comments on Attachment 1, 3, 6 and 7 through 11, which accompanied approving votes, will be presented to the supervising subcommittees for consideration. Editorial corrections will be made by staff at the time of final printing.

Mr. Werner departed at this time.

**ITEM 21. Request from CGA Standards Steering Committee to Expand
the General "Fit for Purpose" Clause in the Z21 and CGA to
Correlate with European Standards**

Subject

Respond to the recommendation of the CGA Standards Steering Committee to expand the general "fit for purpose" clause contained in CGA and Z21 gas appliance standards.

Background

A copy of the following material was provided with this agenda item:

1. A copy of an International Approval Services (IAS) Interoffice Memorandum dated 28 June, 1994 from Mr. Ken Bales to Mr. Allen Callahan.

In his memorandum, Mr. Bales reported that at the April 1994 meeting of the CGA Standards Steering Committee on Gas Appliances and Related Accessories, during consideration of a letter ballot for the proposed bi-national standard for vented gas fireplaces, the subject of a general "fit for purpose" clause was discussed in length. A suggestion was made to expand the "fit for purpose" clause to correlate with that specified in European standards. Mr. Bales further reported that the CGA Standards Steering Committee requested that the Z21 Chairman's Advisory Committee be made aware of its suggestion.

Suggested coverage was provided in Mr. Bales' memorandum.

2. A copy of the applicable coverage addressing appliance construction, as excerpted from the 1993 edition of the Z21/CGA harmonized central furnace standard, ANSI Z21.47 • CAN/CGA-2.3 - 1993.

Discussion

At its October 13, 1994 meeting, the Advisory Committee recommended that the general "Fit for Purpose" clause contained in CGA and Z21 gas appliance standards should not be expanded as suggested. It was agreed the suggested coverage did not provide adequate guidance for determining compliance, plus it would not improve the standards.

Mr. Anderson informed the Committee that he was unable to locate in the European standards the coverage referred to in Mr. Bales' memorandum. He also stated he was not aware of any reason to revise the "fit for purpose" clause as suggested.

Action

The Committee unanimously agreed that the general "Fit for Purpose" clause contained in CGA and Z21 gas appliance standards should not be expanded as suggested.

**ITEM 23. Comments on Proposed Revisions to
Committee Operating Procedures**

Subject

Comments submitted by members of the Z21 Committee in response to a January 30, 1995 letter ballot on revisions to the Z21 Committee Operating Procedures.

Background

Under letter ballot dated January 30, 1995, the Z21 Committee was asked to consider, for submittal to the American National Standards Institute (ANSI), revisions to the Committee's Operating Procedures which (1) expand subcommittee membership qualifications and categories, (2) establish new criteria for quorums at subcommittee meetings, (3) address attendance of subcommittee members at meetings, (4) clarify procedure on "designated representative" for subcommittee members, (4) add new procedures to address alternate processes for standards proposals and (6) expand "Interpretations Procedure".

A copy of the summary of the January 30, 1995 letter ballot was provided.

Discussion

Staff reported that approving votes were received from two Z21 Committee members after the closing of the letter ballot.

At its April 5, 1995 meeting, the Z21 Advisory Committee was asked to consider the comments (reproduced in the summary) which accompanied a "disapproving" vote and "abstention" on Revision 6; and the comments on Revisions 2, 4 and 6, which accompanied approving votes. In addition, the Advisory Committee addressed comments which were submitted to staff for consideration by the Z21 Committee. The Advisory Committee made the following recommendations:

1. The phrase "alternates or" as specified under proposed 5.4 pertained only to joint subcommittees (i.e. section 6.0) and therefore should be deleted;
2. The word "can" in 10.1.2, 10.1.3 and 10.2.1 be replaced with the appropriate word "may;"

3. The phrase "as of the date the interpretation request was made" be deleted from proposed Interpretation procedure 7(b);
4. No action was necessary on a comment submitted by Mr. Walter Leight, which was received in conjunction with his abstention on the expansion of the Interpretations procedure; and
5. The revisions to the Z21 Committee's operating procedures should be modified as noted above and forwarded to the American National Standards Institute for approval.

Action

The Committee concurred with the above recommendations of the Z21 Chairman's Advisory Committee. Staff was instructed to revise the proposed operating procedures, accordingly, prior to their submittal to ANSI for approval.

ITEM 22. Time and Place of Future Meetings

Subject

Following are the tentatively scheduled 1995 and 1996 meetings of the Z21 Committee and Z21 Chairman's Advisory Committee.

<u>Date</u>	<u>Group</u>	<u>Location</u>
October 26, 1995	Advisory Committee	Ritz-Carlton Pentagon City Hotel Arlington, Virginia (Washington D.C.)
April 10, 1996	Advisory Committee	(Hotel has not been selected.)
April 11, 1996	Z21 Committee	(Hotel has not been selected.)
October 24, 1996	Advisory Committee	(Hotel has not been selected.)

Discussion

Mr. Lemoff offered the NFPA Headquarters as a possible location for the next committee meeting.

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6 April 1995

Action

The Committee accepted this item as informational.

There being no further business before the Committee, Chairman Forman thanked the members and guests for their cooperation, and adjourned the meeting at 3:33 PM.

ALLEN J. CALLAHAN
Administrative Secretary

APPENDIX A

to the Minutes of the April 6, 1995 Meeting of
ACCREDITED STANDARDS COMMITTEE Z21

AWARD RECIPIENTS FOR 1995

LONG-TERM SERVICE AWARD (5)

<u>Name</u>	<u>Group</u>	<u>Appointed</u>	<u>Off</u>
James T. Anderson	Water Heaters	8/84	-
Fred Hyman	Connectors	1/84	-
Melvin J. Myers	Conversion Burners	8/85	-
	Damper Devices	10/84	-
Arlynn H. Sanders	Clothes Dryers	1/84	-
Alan Zimmerman	Furnaces	8/84	-

SERVICE AWARDS (5)

<u>Name</u>	<u>Group</u>	<u>Appointed</u>	<u>Off</u>
Kurt J. Haeger	Decorative Appliances	4/90	6/94
Rita F. Paleschuck	Damper Devices	10/87	5/94
M. H. Pentecost	Clothes Dryers	12/85	5/94
Ronald T. Pitko	Clothes Dryers	12/85	6/94
	Chairman:	11/88	
R. W. Richardson	Clothes Dryers	12/85	7/94

APPENDIX B

to the Minutes of the April 6, 1995 Meeting of

ACCREDITED STANDARDS COMMITTEE Z21

Note: This is a summary of the comments submitted in response to the premeeting letter ballot of February 17, 1995 on seven standards proposals.

See discussion in these minutes under Items 8 through 11, 13 and 14.

Item 8. Proposed First Draft Harmonized American National Standard/Canadian Gas Association Standard for Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances, Z21.40.1•CGA-2.91

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Leight	Approve	"Note §1.7.1 Typo: <u>Manual</u> ."
Papritz	Abstain	"Not in area of interest at this time."
Willert	Approve	"Most appliance standards have removed the ignition tests below 85% rated voltage (see 2.6.13 and 2.7.4) and agree to have ANSI Z21.20 develop appropriate coverage. Suggest this below 85% coverage be eliminated."

Item 9. Proposed First Draft Harmonized American National Standard/Canadian Gas Association Standard for Gas-Fired, Work Activated Air-Conditioning and Heat Pump Appliances, (Internal Combustion) Z21.40.2•CGA 2.92.

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Papritz	Abstain	"Not in area of interest at this time."
Swiecicki	Disapprove	See attached comments dated March 23, 1995.
Willert	Approve	"The mis-wiring test appears in clause 2.18, however, the construction portion is missing from Exhibit B (unique to USA). Suggest the addition of language similar to Z21.47 clause 1.18.8."

10. **Proposed First Draft Harmonized American National Standard/Canadian Gas Association Standard for Performance Testing and Rating of Gas-Fired, Air Conditioning and Heat Pumping Appliances, Z21.40.4•CGA 2.94**

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Papritz	Abstain	"Not in area of interest at this time."

11. **Proposed First Draft Harmonized American National Standard/National Standard of Canada Standard for Automatic Vent Damper Devices for Use With Gas-Fired Appliances, Z21.66•CAN1-2.28/6.14**

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Papritz	Approve	"No rationale with June '94 draft."
Willert	Approve	"The last sentence of 6.5 method of test is incorrect. It should read: 'Following the above test, the device shall comply with 6.2 and 6.3.'"

13. **Revisions to the Proposed First Draft of Harmonized American National Standard/National Standard of Canada for Domestic Gas Clothes Dryers, Volume I, Type I, Z21.5.1•CAN1-7.1**

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Hendrickson	Disapprove	See Attached letter dated May 4, 1994.

14. **Proposed Revisions to American National Standard for Gas Clothes Dryers, Volume II, Type 2 Clothes Dryers, Z21.5.2**

<u>Member</u>	<u>Vote</u>	<u>Comment</u>
Hendrickson	Disapprove	See Attached letter dated May 4, 1994. These comments were also submitted on the proposed revisions to Z21.5.2.



Comments on 221.40.2

Bruce Swiecicki, National Propane Gas Association

Section 1.23, #7.

Change to read: "Class A, Class B, or Class C roof covering material, as specified in the Uniform Building Code ~~or~~ ~~ASTM E108, as the basis for determining the classification of roof covering materials.~~

Reason:

The Uniform Building Code is only one of the major building codes in this country. At least two-thirds of the nation does not adopt the UBC, so referencing this publication does them no good. Conversely, all of the model building codes, including the UBC, refer to ASTM E108 as the basis for determining the classification of roof covering materials. Let's just reference the testing procedure in the standard.

Section 1.25.9 c. and d.

Change to read: "For installation on combustible flooring, or, in the U.S., Class A, Class B, or Class C Roof covering material ~~as specified in the Uniform Building Code or~~ ~~ASTM E108, as the basis for determining the classification of roof covering materials.~~

Reason:

Refer to ASTM E108 as the standard for determining the classification of roof covering materials for consistency with proposed change to Section 1.23 above.

May 4, 1994

SUBJECT: Vote against approval of standard for Gas Clothes Dryers
Vol I. Type 1 Clothes Dryers, Z21.5.1/CAN1-7.1-M85

FROM: Jerome O. Hendrickson

REASON: The subject standard includes the following warning statement
which is not acceptable to me.

"This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. The information in these instructions must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death. The qualified service agency performing this work assumes responsibility for the proper conversion of this clothes dryer with this kit."

Terrell Moseley's motion, which I seconded, to change the last sentence of the statement to read, "The qualified service agency performing this work assumes responsibility for the proper installation of this conversion kit." was defeated. Thus, I voted against adopting the standard.

RATIONALE:

Sufficient responsibility for the qualified service agency is placed by the first two sentences of the "Warning," that is quoted above. The last sentence of the "Warning" places the responsibility upon the "qualified service agency" even if an incident resulted from a manufacturing defect or error by some other person in the manufacturing and supply chain. The qualified servicing agency should be responsible for only properly installing and checking out the kit as instructed by the supplied instructions from the manufacturer.

To assume that no error and/or omission can occur with preparing the instructions, manufacturing the parts, packaging the parts, properly marking the parts and container, and delivering them is ridiculous. That the service agency should be responsible for items over which it has no control and may have no knowledge of how to verify that they are proper is discriminatory against the qualified service agency and creates an undue burden of hardship upon the agency. Therefore, the last sentence of this "Warning" contains unfair provisions in this proposed standard.

The American National Standards Institute (ANSI) in its *Procedures for Development and Coordination of American National Standards* in Section 1.3.4 *Criteria for approval*, states that its Board of Standards Review (BSR) *shall consider any evidence provided to it that the proposed American National Standard is contrary to the public interest, contains unfair provisions, is unsuitable for national use, or is technically inadequate.*

RATIONALE (continued):

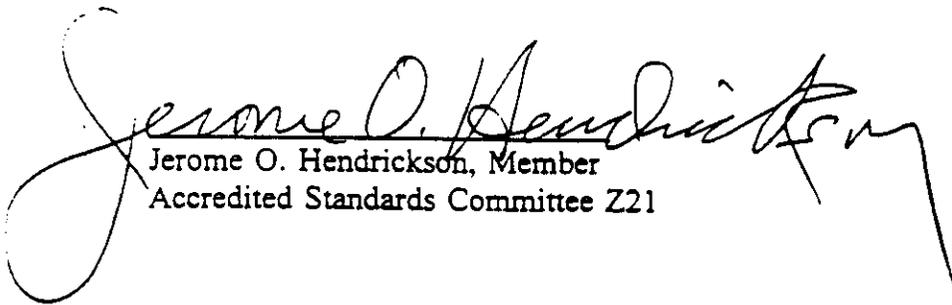
The ANSI procedures in Section 1.3.7,d),2) *Criteria for withdrawal (for cause)*, also, states in the case of a proposal to withdraw approval of an American National Standard for cause, the Board of Standards Review (BSR) shall consider evidence that:

The American National Standard:

- 2) *Contains unfair provisions;*

Deleting the entire last sentence from the "Warning" statement, so that unfair provisions are eliminated may guarantee ANSI approval of this proposed standard.

Respectfully submitted,



Jerome O. Hendrickson, Member
Accredited Standards Committee Z21

APPENDIX C

to the Minutes of the April 6, 1995 Meeting of ACCREDITED STANDARDS COMMITTEE Z21

Note: The Committee adopted the following editorial revisions to the proposed boxed warning for optional conversion kit coverage, as discussed in these minutes under Item 16.

A copy of the following changes, and the discussion recorded under Item 16, will be forwarded to each member of the Z21 Committee for their expression on recommending the changes to ANSI for approval.

EXHIBIT __ - (OPTIONAL)

PROVISIONS FOR LISTED GAS APPLIANCE CONVERSION KITS

_.III. INSTRUCTIONS

b. The following boxed warning in boldfaced type:

"This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, an explosion, or production of carbon monoxide may result causing property damage, personal injury or loss of life. ~~The qualified service agency performing this work assumes responsibility for the proper conversion of this appliance with this kit.~~

The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit."

APPENDIX D

to the Minutes of the April 6, 1995 Meeting

of

ACCREDITED STANDARDS COMMITTEE Z21

Note: Attached is a copy of "Guidelines for Formal Presentations to Subcommittees."

See discussion in these minutes under Item 18.

GUIDELINES FOR FORMAL PRESENTATIONS
TO SUBCOMMITTEES

ACCREDITED STANDARDS COMMITTEE Z21

CGA STANDARDS STEERING COMMITTEE

ACCREDITED STANDARDS COMMITTEE Z83

1. As a general rule, only members of joint subcommittees may make formal presentations at subcommittee meetings. Formal presentations are defined as presentations developed prior to a particular meeting for the express purpose of conveying information of direct and material relevance to the normal scope of the subcommittee, and preferably to the prescribed agenda for a particular meeting. They shall be limited in time, as deemed appropriate by the responsible subcommittee chair.

2. For subcommittee members, permission to make formal presentations should be obtained from the Administrative Secretary and/or the subcommittee chair prior to a particular meeting, preferably in writing, and before the initial agenda is circulated to the subcommittee members, but in any event, at least two weeks (14 calendar days) before the meeting.

The request for, and the granting of permission for a formal presentation can be done verbally or through the appropriate secretariat staff liaison, with the subcommittee chair's approval. The chair should make the facts concerning the request a matter of record at the time of the meeting and direct the secretariat staff to record those facts in the minutes of the meeting.

3. When non-subcommittee members request permission to make a formal presentation at a subcommittee meeting, such persons should be notified by the secretariat staff that they must make a written request to the Administrative Secretary at least thirty (30) calendar days before the particular subcommittee meeting where they wish to make their presentation.

The request should explain who they are or represent, the purpose of the request, the nature of the proposed presentation, and the time they would require to make the presentation (apart from any question and answer period which may be expected to follow). The requestor should explain how and why the proposed presentation would constructively advance the work of the subcommittee.

Whether or not permission to make a formal presentation by a non-subcommittee member is granted by the Administrative Secretary and/or subcommittee chair, the requestor shall be notified in writing of that fact no later than the expiration of the thirty (30) day period by the Administrative Secretary.

The Administrative Secretary shall provide any relevant instructions or explanation and copy the subcommittee chair and chair of the appropriate parent committee. In addition, whether or not the request for a formal presentation by a non-subcommittee member is granted, the written expression of same, together with the written granting or refusal of the request, shall be incorporated in the minutes of the particular meeting at which the requestor desires to make a presentation.

4. The subcommittee chair has the sole responsibility and authority to control the manner in which a formal presentation is made. It is at his or her discretion to provide for a question and answer period following the presentation, as well as determining the appropriate time for termination of the presentation and discussion. The secretariat staff should record the essence

of the presentation and discussion, but need not record the entire proceedings. **NOTE:** When a formal presentation is made, verbatim transcriptions made by tape recorders, stenotype machines, video camera, or other means, shall not be permitted unless authorized by the chairman.

ADDITIONAL INFORMATION

Since meetings of joint subcommittees are open to the public, persons other than members of the subcommittees, e.g., members of the respective parent committee, invited guests, and others having a direct and material interest in the subjects which the subcommittee intends to discuss at a stated meeting, are welcome to attend and audit the proceedings. They are also welcome to ask questions and make comments during the meeting, but only after being recognized by the subcommittee chair.

Such questions or comments raised during the course of discussion at a subcommittee meeting shall not be deemed "Formal" presentations as defined in item 1. Questions and comments shall be limited to remarks intended to add to the knowledge of the subcommittee members concerning the subjects under discussion, including any opinions which the person speaking may care to offer.

Howard I. Forman, Chairperson
Z21 Committee

James M. Jones, Chairperson
CGA Standards Steering Committee

Daryl L. Hosler
Chairperson, Z83 Committee

APPENDIX E

to the Minutes of the April 6, 1995 Meeting of

of

ACCREDITED STANDARDS COMMITTEE Z21

GRI FUNDING PROGRAM FOR STANDARDS TEST METHODS DEVELOPMENT

Note: The current status of each project is included in the attached letter, dated February 17, 1995, from Mr. Craig Farnsworth, Program Manager, GATC, to Dr. Howard I. Forman, Chairman Accredited Standards Committee Z21.

Also see discussion in these minutes under Item 19.



RESEARCH AND DEVELOPMENT DIVISION

February 17, 1995

Dr. Howard I. Forman
Chairman, Accredited Z21 Standards Committee
American Gas Association Laboratories
Standards Secretariat

Subject: Residential Gas Appliance Technology Center
(RGATC): Quarterly Update of GRI Funding Program
for Z21 Chairman's Advisory Committee (CAC)

Dear Dr. Forman;

The following is the status of the Approved Projects per
the ongoing Agenda Item:

High Altitude

Requested by: Joint working group of various Z-21 and Z-83
subcommittees

Background: Field experience with certain new technology gas
equipment has indicated that the current standards coverage is
inappropriate. This has resulted in equipment that does not
operate properly or in some cases at all and with unacceptable
performance. GRI was requested to develop the technical basis
for modifying the standards coverage to appropriately address
new technology gas equipment.

Status: Work has been completed under GRI's RGATC Program.
Topical report has been revised based on comments from
Technical Advisory Group (TAG).

Next Expected Action: Publication of Topical report. We
expect this study to provide the technical basis for revisions
to many of the ANSI standards.

Wind Test

Requested by: Central Furnace Subcommittee

Background: Field experience has indicated that the current
coverage for wind testing may not be adequate. GRI was
requested to address the matter and provide the technical
basis for modifying the standards coverage if appropriate.

Status: Work was scheduled to begin July 1994 under GRI's Venting Project but has been postponed until 1995. Based on input from the Venting Project Technical Advisory Group at a meeting held in May, available funding was reallocated to address field problems with high temperature plastic vent pipe. Field reports of failures of the high temperature plastic vent material used to horizontally vent Category III furnaces was identified as a more pressing concern.

Next Expected Action: At this time, priority is being given to the plastic vent research. The wind test work may be initiated at some later date if priorities and funding allow it.

Water Heater Categorization

Requested by: Water Heater Subcommittee

Background: GRI's Venting Project previously developed a method for categorizing appliances to define the appropriate type of vent system. The furnace and boiler subcommittees have adopted coverage accordingly. The water heater subcommittee is considering similar action but has raised technical questions pertinent to the application. GRI has been requested to address the questions.

Status: Work is essentially complete and will be presented to the Venting Technical Advisory Group.

Next Expected Action: Provide input to the subcommittee after the March 2-3 TAG meeting.

Direct Fired Air Heater Ventilation

Requested by: Heavy Duty Heater Subcommittee

Background: Direct fired air heaters are applied using various degrees of room air recirculation. A concern was raised regarding the effect of high levels of room air recirculation on indoor air quality. GRI was requested to verify preliminary calculations provided by a manufacturer through GAMA.

Status: Z83 Heavy Duty Heater Subcommittee requested experimental validation of calculations reported during 1994. This request was approved at Oct. 1994 CAC meeting. Prospectus was submitted to GRI manager for Space Heating. GRI manager recommendation to fund this project is to be considered by GRI Strategy and Goals committee at the end of February.

Next Expected Action: Submit proposal if GRI manager recommendation is affirmed.

Infrared Heater Radiant Heat Output

Requested by: IR Heater Subcommittee

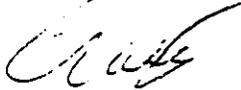
Background: The subcommittee requested GRI assistance with developing a reasonable, reliable, and low-cost test method for quantifying the radiant heat output of infrared tube type heaters.

Status: Work has been completed and topical report printed and distributed

Next Expected Action: No further action planned.

Table I is an update regarding all of the GRI funded projects in support of the the ANSI subcommittees.

Very truly yours,



CRAIG A. FARNWORTH
Program Manager

cc: K. Kazmer, GRI
R. Hemphill, GRI
L. Brand, GRI
R. Rinholm, GRI
C. Applequist, Minnegasco