

**MEETING OF THE
TECHNICAL COMMITTEE ON
RESPIRATORY PROTECTION EQUIPMENT**

December 13-14, 2011

Fort Lauderdale, FL

AGENDA

Tuesday, December 13, 2011

(9:00 a.m. ET, continuing to NLT than 2:00 p.m. ET, Wednesday, December 14)

1. Self-introduction of members and guests
2. NFPA Staff Liaison Report – Dave Trebisacci
3. Chairman's Remarks – Chair Dan Rossos
4. Approval of the Minutes of the July 19-21, 2011 meeting in Missoula, MT
5. NIOSH Update – Jon Szalajda
6. Discussion - facepiece lenses – committee proposal to NFPA 1981
7. Discussion – communications – committee proposal to NFPA 1981
8. Discussion – buddy breathers – committee proposal to NFPA 1981
9. Discussion – proposed division of NFPA 1981 (structural fire vs emergency services)
10. Discussion - flat-pack - committee proposal to NFPA 1981
11. Other issues/proposals
12. Old business
13. New business – next meeting March 26-28, 2012, San Antonio, TX
14. Adjourn NLT 2:00 p.m., Wednesday, December 14, 2011

MINUTES OF THE MEETING
TECHNICAL COMMITTEE ON
RESPIRATORY PROTECTION EQUIPMENT

19-21 JULY 2011
MISSOULA, MT

AGENDA ITEMS 1-2; SELF-INTRODUCTION OF MEMBERS AND GUESTS, NFPA COMMITTEE PROCEDURAL STATEMENT AND STAFF LIAISON REPORT

Chairman Rossos called the Committee to order at 09:05 on 19 July 2011. Chairman Rossos welcomed Committee members and guests and asked them to introduce themselves. Staff Liaison David Trebisacci read the NFPA Committee Procedural Statement and asked attendees to sign in on the appropriate Member or Guest sign-in sheet. He reviewed the following: Committee balance, status of Committee documents, Fall 2012 cycle dates, available ROP actions, NFPA Travel Files, and the TC document info pages on the NFPA web site.

Members Present:

Dan Rossos, Chairman
Steven H. Weinstein, Secretary
David Trebisacci, Staff Liaison

Portland (OR) Fire & Rescue
Honeywell Safety Products (rep. ISEA)
NFPA

Chris Anaya
David Bernzweig
Rodney V. Colbert
Brian H. Cox
Deborah Crisher
William Mundy
John Kuhn
David Hodson
Robert Sell
Jerry Phifer
Beverly Gullledge
Stephen T. Miles
Clint Kaller
Stephen Sanders
Ian Maxwell
Nick Luzie
David Haston
Craig Martin
Ira Harkness
Jason Allen

California State Firefighters Association
Columbus (OH) Firefighters
Fairfax County Fire & Rescue Department
Clovis Fire Department
Virginia Beach Fire Department
FDNY
MSA
Draeger Safety UK Ltd
Draeger Safety
Scott Health & Safety
Scott Health & Safety
NIOSH FFFIPP
L.A. County Fire Department
Safety Equipment Institute
Interspiro
Sperian Respiratory Protection (rep. ISEA)
U.S. Forest Service
ISI
U.S. Navy
Intertek

Ed Golla
W. Lee Birch
Robin Gainey
John Jarboe
Dennis Davis
Jonathan Szalajda

TRI Air Testing
Luxfer Gas Cylinders
International Association of Fire Fighters
Grace Industries, Inc.
U.S. Department of Agriculture
NIOSH/NPPTL

The following guests were present:

Nelson Bryner
Judge Morgan III
John Dinning
Tony Topf
Angus Donaldson
Stuart Blenkiron
Henry Fonzi
Paul DeMond
Ken Pietrzycki
Luke Hollmann
Steve Mills
Craig Colton
Clint Mayhue
Joseph Domitrovich
Orion Goe
Bill Rieth
Girish Srinivas

National Institute of Standards & Technology
Scott Health & Safety
Scott Health & Safety
Scott Health & Safety
Draeger Safety
Draeger Safety
MSA
Ultra Electronics—USSI
Ultra Electronics—USSI
Ultra Electronics—USSI
Ultra Electronics—USSI
3M
ISI
U.S. Forest Service
Luxfer Gas Cylinders
Honeywell First Responder Products
TDA Research

AGENDA ITEM 3; CHAIRMAN'S REMARKS

Chairman Rossos emphasized that the Committee must validate and verify any new test procedures proposed for the standards.

Chairman Rossos asked several people to speak. Dave Haston explained the U.S. Forest Service tour on Thursday afternoon. Jon Szalajda from NIOSH spoke about NIOSH'S position on buddy breathing. John reported that the public meeting in Pittsburgh was critical in influencing NIOSH's decision. Additionally the results of the open docket were: 67 in favor of allowing buddy breathing and 5 against. NIOSH thus has amended the existing policy to allow NIOSH evaluation and certification of SCBAs with buddy breathing devices for firefighting applications, to go into effect at the end of August, 2011.

John Szalajda also reported on the expansion of NIOSH's testing of equipment involved in field incidents to include firefighter protective clothing.

Chairman Rossos related to the Committee the discussion at the last TCC meeting regarding replacing the term "CBRN" with "All Hazards."

AGENDA ITEM 4; APPROVAL OF THE MEETING MINUTES, ORLANDO, FL; JANUARY, 2011

Chairman Rossos asked the TC to review the Minutes of the Orlando meeting.

MOTION BY CLINT KALLER, SECOND BY DAVE BERNZWEIG

To approve the Minutes of the 25-27 January 2011 meeting in Orlando, FL.

MOTION CARRIED.

AGENDA ITEM 5; NEW TECHNOLOGY (FLAT PACK)

Chairman Rossos asked Jeff Stull of International Personal Protection (via conference call) to report on the latest status of the "Flat Pack." Jeff showed a PowerPoint presentation giving the background of the unit and the results of recent testing. Jeff also addressed the following concerns of the TC, which were raised at the January Orlando meeting (Jeff's comments are in boldface inside brackets).

1. Multiple high pressure connections—the concern is maintaining the integrity of the connection in fire use—perhaps a vibration test necessary [**Increase severity of current vibration test (Section 8.3).**]
2. Durability of flexible area between arrays, both under pressure and unpressurized; perhaps a flex cycle test necessary [**Introduce specific test for flexing array along horizontal axis.**]
3. Off-gassing of the materials, externally (creating products of combustion) and internally (affecting air quality) [**Apply oven test with collection of gases and subsequently analyze.**]
4. Air quality in cylinder at STP over storage time [**Create residence test for air quality inside SCBA cylinders.**]
5. Breathing air temperature in high heat environment [**Instrument facepiece with thermocouple in heat/flame test (Section 8.11).**]
6. Ingress of materials through thermoplastic liner [**Adapt CBRN chemical agent testing to pressure vessel.**]
7. Ability of thermoplastic liner to hold pressure over storage time [**Accounted for through ISO 11119-3 requirement (Clause 8.5.12).**]
8. Thermal performance of thermoplastic liner [**Ascertain through overall heat and flame test (Section 8.11); also accounted for through ISO 11119-3 requirement (Clause 8.5.11).**]
9. Thermal performance of resin in outer wrap [**Ascertain through Heat and Flame Test (Section 8.11); also accounted for through ISO 11119-3 requirement (Clause 8.5.11).**]
10. Elevated temperature during a rapid fill (RIC UAC fitting) [**Add temperature monitoring requirement to RIC UAC System Fill Rate Test (Section 8.21).**]

11. Failure mode of pressure vessel during thermal exposure, at the flex points, during filling, following abrasion and under direct projectile impact **[Devise test to mimic multiple cycles of use.]**
12. Strength and integrity of the joints between stainless steel end caps and the plastic liner **[Accounted for through ISO 11119-3 requirement (Clause 8.5.3).]**
13. Conformance of manifold to CGA V1 standard **[Modify interpretation requirements in 6.4.3, if warranted.]**
14. Decon concerns regarding the protective cover and the pressure vessels **[Establish new tests for cover textiles, including decon.]**
15. Vibration test box will not accommodate vessels **[Permit flexibility for redesign of box (Section 8.3.)]**
16. Impossible to perform cylinder retention test **[Exempt SCBA that do not use back frame from test (Section 8.22).]**

The last two issues were ones that Jeff Stull added. They were not in the original list the Committee developed.

Jeff also gave an overview of information regarding the “All Hazards” term Rich Duffy submitted to the Committee for consideration as a Committee Proposal.

AGENDA ITEM 6; TIA TO NFPA 1981

The Committee looked at the proposed TIA (submitted by James Zeigler) increasing the preheating temperature in the Heat and Flame Test to 260° C (500° F). The Committee decided to postpone addressing the proposal until instructed to by the NFPA.

AGENDA ITEM 7; TC REVIEW OF PUBLIC PROPOSALS TO NFPA 1989

The Committee acted upon the public proposals submitted for NFPA 1989.

AGENDA ITEM 8; TC REVIEW OF PUBLIC PROPOSALS TO NFPA 1852

The Committee acted upon the public proposal submitted for NFPA 1852.

AGENDA ITEM 9; TC REVIEW OF PUBLIC PROPOSALS TO NFPA 1981

The Committee acted upon the public proposals submitted for NFPA 1981.

AGENDA ITEM 10; COMMITTEE PROPOSALS

The Committee developed proposals for NFPA 1852.

The Committee developed proposals for NFPA 1981 based on the following reports from the Task Groups:

Task Group on Facepiece Lenses

TG Chairman Chris Anaya reported on the Task Group's recommendations for facepiece lens tests. The TG recommended that two new tests—a Lens Radiant Heat Test and a Lens Convective Heat Test—be added to NFPA 1981.

MOTION BY CHRIS ANAYA; SECOND BY STEPHEN MILES

That the Committee accept the Task Group on Facepiece Lenses' report on the Lens Radiant Heat Test as a recommendation for Committee Proposal 5.

MOTION CARRIED.

MOTION BY STEVE MILES; SECOND BY JACK JARBOE

That the Committee accept the Task Group on Facepiece Lenses' report on the Lens Convective Heat and Flame Resistance Test as a recommendation for Committee Proposal 6.

MOTION CARRIED.

Task Group on Communications

TG Chairman Brian Cox reported on the Task Group's recommendations for changes to NFPA 1981 regarding communication tests. He presented to the Committee the revised sections of the document, with assistance from USSI personnel.

MOTION BY JACK JARBOE; SECOND BY BRIAN COX

That the Task Group on Communications summarize their recommendations for a Committee Proposal on Communications and submit a final recommendation to the Committee.

MOTION CARRIED.

The Committee agreed that any changes the Committee made during Committee discussion be incorporated into the TG's final recommendation. TG Chairman Cox then submitted a final recommendation to the Committee.

MOTION BY JACK JARBOE; SECOND BY CLINT KALLER

That the Committee accept the Task Group on Communications' report as a recommendation for Committee Proposal 2.

MOTION CARRIED.

Task Group on NFPA 1981 Standard Division (Structural Fire/Emergency Services)

TG Chairman Rodney Colbert reported on the progress the TG has made on developing a second section in NFPA 1981 for non-firefighting applications. He presented the TG's report. Chairman Rossos directed the TG to continue its work. Chairman Rossos and TG Chairman Colbert will meet to determine additional TG members.

Task Group on "Buddy Breathers"

TG Chairman Clint Kaller presented the TG's report to the Committee.

MOTION BY JACK JARBOE; SECOND BY DAVE HASTON

That the Committee accept the Task Group on Buddy Breathers' report as a recommendation for Committee Proposal 4.

MOTION CARRIED.

The Committee then developed additional Committee Proposals, as follows:

MOTION BY CLINT KALLER; SECOND BY JACK JARBOE

That the Committee accept the motion Steve Weinstein made in December, 2007 in Ft. Lauderdale regarding simultaneous connection of pneumatics and HUDs as Committee Proposal 8.

MOTION CARRIED.

The Committee considered a recommended Committee Proposal submitted by Richard Duffy regarding adding the term "All Hazards" to NFPA 1981.

MOTION BY DAVID BERNZWEIG; SECOND BY STEPHEN MILES

That the TC adopt Richard Duffy's Recommended Proposal #1 as a Committee Proposal, but amending the term "All Hazards" to "All Hazards Environments."

HAND VOTE

Yes 8 No 11

MOTION FAILED.

MOTION BY DAVID BERNZWEIG; SECOND BY CHRIS ANAYA

That the TC adopt Richard Duffy's Recommended Proposal #3 as Committee Proposal 7.

MOTION CARRIED.

David Bernzweig presented language to the Committee adding labeling requirements to NFPA 1989.

MOTION BY DAVID HASTON; SECOND BY CLINT KALLER

That the Committee adopt the labeling requirements for 1989 as proposed by David Bernzweig as Committee Proposal 9.

MOTION CARRIED.

AGENDA ITEM 11; OLD BUSINESS

Jonathan Szalada reported that NIOSH will open a docket for a Notice on Proposed Ruling for Closed-Circuit SCBA in the second quarter of 2012.

AGENDA ITEM 12; NEW BUSINESS

Jonathan Szalajda reported on NIOSH's evaluation of a device that uses VLE technology (aloe gel as a filtering medium). The evaluation showed that the device did not meet NIOSH's performance criteria as an air purifying respirator. NIOSH used new technical methods as well as standard methods to evaluate the technology.

Chairman Rossos solicited suggestions from the Committee regarding possible dates and locations for the next TC meetings (December 6-7, 2011 and March 26-28, 2012).

AGENDA ITEM 13; ADJOURNMENT

MOTION BY CLINT KALLER; SECOND BY LEE BIRCH
To adjourn.

MOTION CARRIED.

Chairman Rossos adjourned the meeting at 15.10 on 21 July 2011.

Respectfully submitted,

A handwritten signature in black ink, reading "Steven H. Weinstein". The signature is written in a cursive, flowing style.

Steven H. Weinstein, Secretary
Technical Committee on Respiratory Protection Equipment