



MEMORANDUM

TO: NFPA TC on Structural and Proximity Fire Fighting Protective Clothing and Equipment

FROM: Stacey Van Zandt

DATE: September 20, 2010

SUBJECT: NFPA 1971 ROP TC FINAL Ballot Results (F2011)

The Final Results of the NFPA 1971 ROP Letter Ballot are as follows:

30 Members Eligible to Vote
3 Not Returned (Davis, Doan, and Scianna)

There are two criteria necessary to pass ballot [(1) affirmative $\frac{2}{3}$ vote and (2) simple majority].

- (1) The number of affirmative votes needed for the proposal/comment to pass is 18.
(30 eligible to vote - 3 not returned - 0 abstentions = $27 \times 0.66 = 17.82$)
- (2) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required. This is the calculation for simple majority:
[30 eligible $\div 2 = 15 + 1 = (16)$]

Reasons for negative votes, etc. from alternate members are not included unless the ballot from the principal member was not received.

According to the final ballot results, all ballot items received the necessary $\frac{2}{3}$ required affirmative votes to pass ballot.

1971-2 Entire Document (Log # CP72)

Affirmative with Comment

Stull, J. This is unnecessary proposal since separate proposals should be provided for any specific areas of the standard to be changed. It is only in this fashion that members can clearly identify the specific proposed areas in the standard.

1971-3 Chapter 2 (Log # CP16)

Negative

Stull, J. Both test methods use different principles in measuring burst resistance. No data have been provided to show the correlation between the two methods.

1971-8 3.3 (Log # CP49)

Affirmative with Comment

Allen, J. 3.3.X Glove Body definition should read as: The part of the glove that extends from the tip of the fingers to 50mm (2in) beyond the wrist crease.

1971-9 3.3, 6.4 7.4, 8.1, 8.6 8.25 (Log # CP12)

Negative

Curtis, P. Based on the new information provided in the responses submitted by others I respectfully change my vote from the affirmative to the negative.

Fanning, D. We are an industry leading manufacturer of fire helmets to the first responder community, and if proposal 1971-9 #CP12 proceeds as drafted, approximately 60% of our current fire helmet models would fall into the draft-defined "protected ocular zone". This outcome would be in opposition to the true intent of this specific draft proposal. The submitter indicated that the definition of the ocular zone would be refined so that compliance of current helmets on the market not be affected. The outcome of this proposal, especially in combination with 1971-120 #CP36 HPI proposal, would effectively eliminate thermoplastic helmets from the first responder market.

Melia, D. Appears that if this Log is accepted it would possibly eliminate a certified product currently being used by the FDNY.

Rihn, J. We agree with the intent of this proposal to create a "Protected Ocular Zone" to establish pass/fail criteria for the Heat and Thermal Shrinkage test. However, the effectiveness of this proposal is highly dependant upon the relationship between 1971-120 Log #CP36 FAE-SPF (which can redefine the Horizontal Positioning Index of the helmet) and this proposal. If 1971-120 Log #CP36 is accepted to the standard certain helmet designs which are in service and used today will fail this "Protected Ocular Zone" requirement out of the box due to the shape of their brim.

Also, many thermoplastic helmets used today would be compromised by the Heat and Thermal Shrinkage test due to the relationship between the Protected Ocular Zone and the shape and size of the helmet brim. The proposed Ocular Zone was derived from section 6.4 Protective Helmet Element Design Requirements for faceshield/goggles and is not intended to be an element in conjunction with thermal heat resistance except for this proposal.

Affirmative with Comment

Fithian, W. Comments:

Section 8.6.12.3 - Testing the goggle both with and without the goggle protection device deployed is unnecessary. The goggle protection device material will be tested for flame and heat separately (see Log #74), which will cover any effects from the helmet heat test. The goggle should be tested without the protective device deployed, which is the worst case scenario. Additionally:

Section 8.X.1 - The manufacturers should be determining the proper positioning of their helmets. See SEI Comments for Log #CP36.

Section 8.1.X - The manufacturers should be determining the proper stowed positioning of their faceshield/goggle eye protection devises. See SEI Comments for Log #CP35.

1971-10 3.3.x Boot Liner (New), 7.10.19, 8.6.1.1, 8.6.1.2, and 8.6.8 (Log # 95)

Negative

Durby, T. Rejection of this log and acceptance of log CP54 is creating further inconsistency in this 1971 standard. CP54 is adding flame resistance testing for trim, labels and tags to the glove body composite. If it is important to add flame resistance testing for the gloves why is it not important to add at least heat and thermal shrink and to boot liners that contact the skin. The committee statement for Log 95 also applies to CP54, "There is no evidence of boot liners melting or causing injuries in the field."

1971-11 3.3.x Component Recognition/Component Recognized, 4.1.x, 4.3.x, and A.4.1.x (New) (Log # 110)

Negative

Stull, J. This issue warrants additional discussion by the TCC who has responsibility over this area.

1971-15 3.3.x Integrated Fall Protection Device, 7.1.3, and 7.1.5 (New) (Log # 99)

Negative

Stull, J. The committee statement is inconsistent with the action, which only partly achieves the intended change. No specific change was proposed that captures the requirements that such devices be tested for heat resistance. If so specified, test method changes in sections 8.1 and 8.6 will also be needed.

1971-18 3.3.40 Faceshield, 6.5.2, 7.4.4, and 8.6.12.6 (Log # 40)

Negative

Melia, D. There are no established parameters as mentioned in the committee statement.

Stull, J. An incomplete substantiation has been provided. The so called "preferred" method has not been validated and was only recently proposed with limited input by task group and committee members.

Photographs and data have been provided to support the subject proposal.

1971-21 3.3.76 Moisture Barrier, 3.3.80 Outer Shell, 3.3.140 Thermal Barrier, and 3.3.xx Facing (Log # 4)

Negative

Stull, J. An inappropriate substantiation has been provided. The reference to paragraph 4.1.4 makes no sense with respect to the issue of "facings." Materials used in making garments liquid resistant should qualify as moisture barrier no matter how they are referred to.

1971-24 4.4.1(3) (Log # CP13)

Negative

Stull, J. The removal of the overall liquid integrity testing from follow-on testing does not account for the fact this is the only test that is applied to full garments and that minor changes can occur in the manufacturing design of garments that can go undetected by the certification organization.

Abstain

Rousse, S. I am abstaining from this vote because Sperian could benefit from the removal of the Whole Garment Liquid Penetration Test during the annual recertification process.

1971-27 5.1.7(8) (Log # CP1)

Affirmative with Comment

Corrado, S. ROP language does not match that submitted by the task group. Task group language is as follows: 5.1.7.x* For principal materials of construction of gloves, at least outer shell, moisture barrier, thermal liner, and wristlet shall be listed. Generic names of materials shall be used. Type of leather shall be listed, such as cow leather, elk leather, etc. Additional materials that are used throughout the majority of the glove body shall also be listed on the label.

A.5.1.7.x For example, an additional thermal liner that is used in the entire back of the glove shall be listed on the label. Elastic and similar should not be listed. Trade names may be added if desired.

1971-28 5.1.7(8) (Log # 51)

Affirmative with Comment

Stull, J. There is no required "listing" of components. In fact, if the action on Proposal 1971-11 were "accept", then the committee would be able to reference "recognized components."

1971-31 5.3.1 (Log # CP30)

Affirmative with Comment

Rihn, J. We agree and support this proposal however helmet manufacturers designate helmets by model type or name, not by part number due to the overwhelming combination of options (color, earlap material, faceshield, goggles, reflective trim, etc.). All possible combinations of helmets used in conjunction with proximity shrouds could not possibly be listed on the label. Therefore we propose the word "model" be added to the following in 5.3.2.

*...Following this statement, the additional protective items or detachable components shall be listed by type item/component, identification, **model**, or part number, and where applicable, how properly assembled.*

1971-33 6.1.x (New) and A.6.1.x (New) (Log # 88)

Negative

Stull, J. The committee statement is not substantiated. The "fire service" has been 2 to 3 individuals on the committee who have provided ridiculous and unsubstantiated claims for potential abuse. This argument is illogical because many manufacturers already provide inspection openings.

1971-42 6.5.x (New) (Log # 75)

Negative

Melia, D. I believe this is already covered in NFPA 1500. The final cost to the end user who want to provide eye protection by the use of safety glasses would be severe.

Affirmative with Comment

Stull, J. The proposed change does not completely identify all of the necessary criteria that are needed to specify goggles compliance with ANSI Z87.1 and the types of goggles that are covered by the standard.

1971-43 6.5.2 (Log # 71)

Negative

Durby, T. We as technical committee members have a responsibility to add reasonable requirements to the standard to improve firefighter safety. Adding a goggle requirement to helmets takes nothing away from the firefighter, the only down side is a small increase in cost.

McKenna, M. I agree that the decision accurately reflects the decisions made at the meeting, but disagree that the flexibility is in the best interest of the fire service.

1971-45 6.5.2.3 (New) (Log # 73)

Negative

Stull, J. This proposal is incomplete. If a shielding means is provided for goggles, then additional criteria must be provided for the survivability/durability of the shielding.

1971-46 6.7.3 (Log # CP50)

Affirmative with Comment

Allen, J. 6.7.3.1 The glove body should read as: The glove body shall extend circumferentially from the tip of the fingers to 50mm (2in) beyond the wrist crease. The words "at least" should be eliminated from Log #CP50.

1971-47 6.7.3.3 (Log # CP48)

Affirmative with Comment

Corrado, S. Reference to Table 6.7.6.1 should be removed. Reference to Figure A6.7.6.1 should be removed. These are not correct references for this section.

1971-51 6.10.2.1 (Log # CP22)

Negative

Stull, J. The proposed change is poorly written. Booties by themselves cannot meet any of the general criteria applied in Section 7.10, where many tests are applied to full footwear.

1971-55 6.14, 7.6 and 7.14 (Log # 35)

Negative

Stull, J. No justification was provided for the removal of the liquid barrier requirements for helmet shrouds. The substantiation only mentions thermal insulation.

1971-56 6.14.2 and 7.14.2 (Log # 31)

Negative

Melia, D. No data was produced by any committee member to indicate that there was an increase in burns to members who wore the already approved vented hood. This would eliminate an already certified product that is currently being used by the FDNY.

Stull, J. The hood is intended as an interface device not a protective element. It is intended to protective the interface areas of which the top of the head is not. The same argument about losing a helmet can be made for a glove that is lost (which I have found to be more common).

1971-57 6.14.4.1 (Log # 69)

Negative

Melia, D. No data was produced by any committee member to indicate that there was an increase in burns to members who wore the already approved vented hood. This would eliminate an already certified product that is currently being used by the FDNY.

Stull, J. The hood is intended as an interface device not a protective element. It is intended to protective the interface areas of which the top of the head is not. The same argument about losing a helmet can be made for a glove that is lost (which I have found to be more common).

1971-59 6.14.5 (Log # CP44)

Negative

Stull, J. The proposed change provides no means for determining the conformity of adjustable hoods.

1971-62 Chapter 7, 8 (Log # CP71)

Negative

Stull, J. The proposed test has not been validated, provides insufficient detail, is completely subjective, and uses incorrect terminology. No specific need has been demonstrated for the inclusion of this test.

1971-66 7.1.7, 8.52 (Log # 8)

Negative

Stull, J. No information has been provided to show that the proposed test achieves the protection that is intended. The fact that some firefighter are burned on their knees with reinforcements that use "impermeable" materials should provide doubts for the efficacy of the proposed method.

1971-70 7.1.24 (Log # 48)

Negative

Stull, J. No specific justification has been provided for the proposed criteria or the basis of the test. See comments on Proposal 1971-66 above.

1971-71 7.2.x (New) (Log # 63)

Negative

Stull, J. While a substantial amount of work has gone into the development of this test over many years, specific arguments for positioning the requirement in 1971 have not been fully made. The broad application of the method to all materials on the shell could result in added test costs without commensurate benefits.

1971-72 7.2.2 (Log # 70)

Affirmative with Comment

Pegg, M. Although I will vote in the affirmative, composite development needs to continue such that we can effectively reduce thermal heat stress incurred by Firefighters wearing PPE. The leading cause of Firefighter death continues to be cardiac-related. This needs to be addressed ASAP.

1971-75 7.4.2, 8.16 (Log # CP33)

Negative

Stull, J. While there is merit for improved dexterity testing, no specific data have been presented as part of the substantiation to justify the implementation of this test. The required coefficient of variation is completely unrealistic for a human subject based test.

1971-88 7.7.2 and 7.7.2 (Log # 55)

Negative

Fithian, W. Comment: This log should be rejected and the test method should not be included in the 2011 edition of the NFPA 1971 Standard. Dr. Barker's group should be commended for the effort that has gone into developing this new method. However, insufficient data is available to assess the validity of this method and additional testing is needed to determine if this method (1) generates reproducible data within each testing facility; (2) generates reproducible data between testing facilities; (3) has established the proper pass/fail criteria; (4) when conducted on currently certified glove models, does not unintentionally eliminate models that should be otherwise acceptable; (5) has commercially available equipment to conduct the test.

This test method should not be included at this time, but validation of this test method should continue. Once further study has been successfully completed, it should be considered for inclusion in the next edition of the NFPA 1971 Standard.

Rousse, S. I am voting negative on this log because I believe that this log was supposed to be accepted in principle, similar to the test method proposed in Log #54. This would allow the TC to continue looking at the work Dr. Barker is proposing and make a final decision during the ROC.

Stull, J. While the proposed test provides an excellent demonstration of overall hand insulation by gloves, it has significant limitations for replacing TPP testing in ascertaining the thermal insulation provided in many areas of gloves given the limited number and placement of sensors on the manikin hand.

1971-94 7.7.6 (Log # CP54)

Negative

Rousse, S. I am voting negative on this log because the labels were never intended to be tested for flame resistance, unless they are on the outside of the glove.

1971-99 7.8.2 (Log # CP15)

Affirmative with Comment

Fithian, W. 8.6.4.1 The test oven shall be as specified in ~~ISO 17493~~.....

Comment: ASTM will publish a new method for test oven specifications based on the ISO 17493 method. The NFPA 1971-2011 Standard will reference this new ASTM method, once it is published the beginning of 2011.

1971-101 7.8.4 (Log # 81)

Negative

Stull, J. The action on this proposal is incorrect and inconsistent with the provided committee statement. The action should be "accept in principle."

1971-102 7.10.x (New) (Log # 61)

Abstain

Stull, J. This was one of the few new tests where substantial data was taken and a statistically-based validation process was used to justify the consideration of the requirement. Like many committee statements, this committee statement makes an erroneous claim for the elimination of rubber footwear.

1971-103 7.10.7 (Log # 107)

Negative

Stull, J. The committee handling of this proposal is in error and does not reflect the intent of the proposer. It is further design restrictive by requiring that all of the puncture resistance be provided by the puncture resistant plate when in fact other means are available for imparting footwear sole puncture resistance.

1971-104 7.10.9 and 8.41 (Log # 109)

Affirmative with Comment

Stull, J. While the test has been subject to some validation, no substantiation has been provided for the proposed criteria (e.g., did the criteria arise in Europe?)

1971-114 7.20.1.1 and 8.66 (Log # 87)

Abstain

Stull, J. A separate TCC task group has been established to harmonize CBRN requirements, including MIST among all affected standards, including NFPA 1971 that is not dependent on the activities of ASTM.

1971-115 7.20.1.3 (Log # 86)

Abstain

Stull, J. A separate TCC task group has been established to harmonize CBRN requirements, including chemical permeation resistance among all affected standards, including NFPA 1971.

1971-119 Chapter 8 and Annex (Log # CP14)

Negative

Allen, J. The current standard calls for the water markable glove to be a light weight, tightly woven medium or dark colored, 100% polyester fabric. Switching to a knit glove will make the outer glove difficult to don and flex. It is also noted that water on a knit glove is difficult to see.

I do not agree with Section 8.33.4.3. This section states that two containers of water are used for submerging the glove. I would like to be able to test only 1 glove at a time.

Stull, J. While clarifications have been provided for the revised test method, I do not agree with conducting flexing of the glove outside the liquid.

1971-120 Chapter 8 Sections (Log # CP36)

Negative

Allen, J. The manufacturer's helmet positioning index (HPI) is a reliable and repeatable means of positioning each model helmet on the test headform. However, some helmet brims have complex curves and it is unknown what part to level.

Curtis, P. Based on the new information provided in the responses submitted by others I respectfully change my vote from the affirmative to the negative.

Fanning, D. Proposal 1971-120 #CP36 should be eliminated as drafted. The current helmet positioning index (HPI) should not be eliminated from the standard; rather, the requirement of manufacturers to provide appropriate HPI information must be enforced. This draft proposal is too arbitrary, may not be repeatable, is too restrictive on types of helmets that can be certified, and leaves room open for interpretation by the respective lab, all of which does not benefit the first responder.

Fithian, W. Comment: This should be rejected in its entirety.

The manufacturer's helmet positioning index (HPI) is a reliable and repeatable means of positioning each model helmet on the test headform. The manufacturer should be determining the HPI, not the testing facility. ASTM, ANSI, CPSC and other standards use the manufacturer's HPI for drawing the test line and positioning the helmet for testing. Many current structural fire fighting helmets do not have horizontal lines on the brim; there is a downward tilt to the rear. This may create a situation whereby the testing facility will be forced to make a subjective decision regarding positioning of the helmet, which is certainly not repeatable between testing facilities or even within each testing facility. The newer style helmets (¾ motorcycle type) may not have horizontal lines that can be used, so without an HPI it will be subjective from year to year. Using the proposed horizontal method will be design restrictive for the manufacturers. There may need to be different HPI values for the different headforms (ISO J and EN168) if the distance from the crown to the basic plane is different and the head sizes and/or shapes are different.

Melia, D. I cannot make a judgement because I think there is missing information in the positioning of helmet. Section 8.1.x does not exist. I appreciate what the committee is doing in trying to standardize the helmet testing.

Rihn, J. This proposal to redefine the Horizontal Positioning Index (HPI) for helmets is unnecessary and attempts to rehabilitate an issue of enforcement rather than performance. Test labs are required to obtain from the manufacturer specific HPI references for each helmet tested. Currently manufacturers determine HPI's based on the helmets design as a complete system comprised of a shell, impact liner, suspension and headband. No two helmets are the same and therefore no two HPI's are the same. This proposal could cause helmets which are in use today to be tested in a position in which the manufacturer never intended it to be worn.

This proposal requires "the helmet shall be positioned on the headform such that the alignment of the brim is parallel with the horizontal to within 3 degrees." A helmet is designed as an integrated system of components. "The brim" is a style feature certainly not consistent from one helmet to the next. By designating "the brim" as a key positioning element of performance leaves room for interpretation by the respective lab and would jeopardize the acceptance of many helmets worn today. Also, helmets are designed to be worn with other PPE by the firefighter such as goggles and facepieces. These devices have shown that a helmets brim angle can be measured to as much as 10 - 15 degs. relative to this measurement method.

Rousse, S. I am voting negative on this log because after speaking with many helmet manufacturers, it appears that specifying a helmet position for testing that is different than the recommended position for use, may result in false failures.

Stull, J. Insufficient information has been provided for the conduct of this test (there is no 8.1.X). The creation of a standardized helmet positioning index is contrary to manufacturer practice for specifying the helmet position on the firefighter's head and does not account for varying wearing configurations.

1971-121 Chapter 8 (Log # CP59)

Negative

Stull, J. No substantiation has been provided for the implementation of this new glove test method or the proposed criteria. The test has not been validated for measuring the intended property.

1971-122 8.x (New) (Log # 54)

Negative

Allen, J. Based on pictures in the meeting, it appears a large percentage of the hand is not instrumented. The current proposal needs to better refine the sensor location and total instrumented area.

Fithian, W. Comment: (Same as Log 55) This log should be rejected and the test method should not be included in the 2011 edition of the NFPA 1971 Standard. Dr. Barker's group should be commended for the effort that has gone into developing this new method. However, insufficient data is available to assess the validity of this method and additional testing is needed to determine if this method (1) generates reproducible data within each testing facility; (2) generates reproducible data between testing facilities; (3) has established the proper pass/fail criteria; (4) when conducted on currently certified glove models, does not unintentionally eliminate models that should be otherwise acceptable; (5) has commercially available equipment to conduct the test.

This test method should not be included at this time, but validation of this test method should continue. Once further study has been successfully completed, it should be considered for inclusion in the next edition of the NFPA 1971 Standard.

Stull, J. While the proposed test provides an excellent demonstration of overall hand insulation by gloves, it has significant limitations for replacing TPP testing in ascertaining the thermal insulation provided in many areas of the gloves given the limited number and placement of sensors on the manikin hand.

1971-125 8.1, 6.4, 6.5, 8.6 (Log # CP35)

Negative

Curtis, P. Based on the new information provided in the responses submitted by others I respectfully change my vote from the affirmative to the negative.

Fanning, D. Proposal 1971-125 #CP35 is design restrictive. Defining the stowed position based on the majority of faceshield designs on the market today is shortsighted, and could restrict future eye and face protection advancements that may better protect the first responder. In addition, this change could possibly eliminate or adversely impact many faceshields currently on the market (we are unaware of any testing that was communicated to the Committee). In Technical Committee and Task Group discussions, I do not recall discussion of a driving need for this change.

Fithian, W. Comment: This should be rejected in its entirety.

The faceshield and/or goggle stowed position has always been determined by the manufacturer. The manufacturers have established the intended design of their products and components. Therefore, instructions provided by the manufactures should be used for testing. Additionally, a method specified faceshield and/or goggle stowed position requirement will be design restrictive. The manufacturer should be required to describe the stowed position in the user information for each faceshield and goggle applicable for each model.

Rihn, J. This proposal is design restrictive. This proposal needs to take into consideration as part of it's interpretation that faceshields and goggles are treated equally in the standard and therefore would limit the storage of goggles to the front and top of the helmet and not the rear. Dictating the stowed position of a faceshield/design which has been in use for decades without the supporting data to substantiate the reason for change sets a bad precedent.

1971-128 8.1.6.1, 8.16.5.2, 8.16.5.3, 8.16.5.8, 8.19.5.2 (Log # CP43)

Affirmative with Comment

Corrado, S. Figure 8.1.X.1 (current Figure 8.1.6.1) missing from document.

1971-133 Table 8.1.11.4 (Log # 67)

Affirmative with Comment

Corrado, S. Per committee statement, values in Table 8.1.11.4(1) for 49C (120F) should be 40C (105F).

1971-135 8.1.14, 8.1.14.1 (Log # CP11)

Affirmative with Comment

Corrado, S. Figure was omitted.

1971-138 8.4.8.3 (Log # CP55)

Negative

Allen, J. Glove pouch lay-ups shall be palm to back and not allow for palm to palm or back to back. When the pouches are laundered, the innermost layers are abraded against each other. If the palm inner layer is different than the back inner layer, then the pouches will abrade differently.

1971-139 8.5.5.2 (Log # 16)

Negative

Fithian, W. **Comments:** This should be rejected in its entirety.

The use of an open pan containing an accelerant that is in an open, draft-free area of a testing facility, which is then lit to perform a test, does not seem to be a very safe way to conduct any type of performance test. A draft-free area as defined in the proposed method also indicates this test cannot be performed within or under a fume hood. This poses a significant safety hazard. Furthermore, insufficient test data is available to evaluate the proposed method and inter-laboratory testing has not been conducted to validate the reproducibility of this test method.

1971-147 8.7.7.1 (Log # 80)

Affirmative with Comment

Corrado, S. Glove areas to be tested were omitted from requirement. Glove areas are as follows:

A.) Palm side of hand to the wrist crease

C.) Palm side of fingers

D.) Palm side of thumb

I.) Side of hand to wrist crease, side of index finger, and side of thumb next to wrist crease next to the palm of the hand

K.) Between fingers and finger tips next to the palm of the hand

L.) Inside of thumb next to the palm of the hand

1971-149 8.7.7.8 (Log # 65)

Affirmative with Comment

Corrado, S. Glove areas to be tested were omitted from requirement. Glove areas are as follows:

A.) Palm side of hand to the wrist crease

C.) Palm side of fingers

D.) Palm side of thumb

I.) Side of hand to wrist crease, side of index finger, and side of thumb next to wrist crease next to the palm of the hand

K.) Between fingers and finger tips next to the palm of the hand

L.) Inside of thumb next to the palm of the hand

1971-150 8.8.4, 8.8.5 (Log # CP62)

Negative

Allen, J. Is there sufficient data to support the change to exposure time?

Stull, J. The test has been substantially modified without validation or support of specific test data. There is a tremendous difference in heat transfer conditions between 30 seconds at 500 C and 20 minutes at 260 C.

Affirmative with Comment

Corrado, S. Figure 8.8.5.1 missing from document.

1971-158 8.24.4 (Log # 79)

Affirmative with Comment

Stull, J. Justification is needed for the proposed performance requirement.

1971-162 8.37.2.3 (Log # CP57)

Negative

Allen, J. Section 8.37.4.6 proposal is stating that the test subject shall wear the glove on the opposite hand during this test. I believe that if this happens, than the time requirements must also increase. This will now be a very difficult test to pass with wristlet type gloves.

Stull, J. The change for conducting glove donning using an opposing gloved hand is significant change that should be validated prior to accepting the change. The benefits of test realism must be carefully weighed against potential loss of test precision.

Affirmative with Comment

Fithian, W. **Comment:** SEI agrees with testing each glove opening configuration and the need to conduct the test with gloves on both hands of the test subject. However, the current pass/fail criteria that were established for conducting the test while wearing only one glove, is not appropriate for the revised test method. The current average donning performance criteria of 10 seconds for dry and 15 seconds for wet will eliminate many wristlet glove models currently on the market. Additional work is required to reestablish pass/fail criteria that are more appropriate for the proposed modification to the existing test method.

1971-165 8.42.10.1 (Log # CP68)

Affirmative with Comment

Corrado, S. Action says to delete existing 8.42.10.1. Action should be to insert new 8.42.10.1 and to renumber existing 8.42.10.1.

1971-167 8.48.3.3 (Log # 42)

Negative

Stull, J. Laundering may introduce a variable, but it also takes into account the garment's condition in which it is to be exposed to liquids. The elimination of the garment laundering simply because the test is difficult is not an adequate substantiation.

Abstain

Rousse, S. I am abstaining from this vote because Sperian could benefit from the removal of the 5 wash and dry conditioning.

1971-168 8.48.4.1 (Log # 43)

Negative

Stull, J. Laundering may introduce a variable, but it also takes into account the garment's condition in which it is to be exposed to liquids. The elimination of the garment laundering simply because the test is difficult is not an adequate substantiation.

Abstain

Rousse, S. I am abstaining from this vote because Sperian could benefit from the removal of the 5 wash and dry conditioning.

1971-170 8.48.5 Apparatus (Log # 90)

Negative

Fithian, W. Comment: This is intended to be an option for configuring the manikin during this test. There is considerable concern throughout the industry regarding the Liquid Penetration Test, including documented instances of "false positive" results or apparent inconsistencies in results that cannot be validated. The committee has determined the importance of this test, which SEI completely agrees with, however this Log addresses an anomaly that may be occurring throughout the industry. Furthermore, this Log does not introduce an unrealistic or unnecessary variability within the method, but provides a means for testing facilities to eliminate a potential source of error within the method.

1971-175 8.52 (Log # 82)

Negative

Stull, J. The action on this proposal is incorrect and inconsistent with the provided committee statement. The action should be "accept in principle."

1971-182 8.67 (Log # 85)

Abstain

Stull, J. A separate TCC task group has been established to harmonized CBRN requirements, including chemical permeation resistance among all affected standards, including NFPA 1971.

1971-185 8.73 (Log # 49)

Negative

Stull, J. No substantiation has been provided for the implementation of this test method. No validation information has been provided for the efficacy of this new test.

1971-186 8.73 (Log # 50)

Negative

Stull, J. No substantiation has been provided for the implementation of this test method. No validation information has been provided for the efficacy of this new test.

1971-188 A.5.x (New) (Log # 59)

Negative

Stull, J. The justification is inaccurate and reflective of an outdated "practice." If this proposal is to be rejected, a more suitable committee statement should be prepared.

1971-190 A.6.2.2 (Log # 60)

Negative

Stull, J. The addition of this information is useful to the fire service for understanding requirements relative to high visibility. The committee statement that firefighters can refer to the MUTCD does not take into account that most departments would not have ready access to this information.