



## National Fire Protection Association

1 Batterymarch Park, Quincy, MA 02169-7471  
Phone: 617-770-3000 • Fax: 617-770-0700 • www.nfpa.org

### MEMORANDUM

TO: NFPA Technical Committee on Structural and Proximity Clothing and Equipment  
FROM: Stacey Van Zandt  
DATE: September 9, 2011  
SUBJECT: NFPA 1851 ROP TC FINAL Ballot Results (F2012)

---

---

The Final Results of the NFPA 1851 ROP Letter Ballot are as follows:

33 Members Eligible to Vote  
4 Not Returned (Barker, Davis, Doan, and Ford)  
25 Affirmative on All  
4 Negatives (Lakey, Melia, Oliver, & Stull on one or more proposals as noted in the report)  
0 Abstentions

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 20.  
(33 eligible to vote - 4 not returned - 0 abstentions =  $29 \times 0.66 = 19.14$ )
- (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:  
[33eligible  $\div 2 = 16.5 = (17)$ ]

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.

---

**Document # 1851**

---

**1851-1** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**Entire Document** (Log # CP1 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-2** Eligible To Vote:33 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 4**Chapter 3, 4, 6, 7, 8, 11, Annex A** (Log # CP9 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**Negative****Lakey, S.** 3.3.49 Change Advanced repair to Basic repair when "ISP" is not used in conjunction with Verified.**Oliver, A.** 4.2.4, (b) - Manufacturer Trained ISP should be limited to basic repairs as there is no oversight of these companies. If this category is needed to expand choice for organizations, the manufacturer trained ISP should be held to the same testing time frame as Verified ISP's. The manufacturer trained ISP should be required to be trained by the manufacturer at the manufacturer's facilities and subject to both an on-site practical and written test annually or every 23 months as proposed. In addition, the manufacturer should provide the trained ISP a certificate that indicates an expiration date of 12 months or to correspond with the 1851 standard revision cycle. Manufacturers should also be required to provide a public list of their manufacturer trained ISP's to assist in market oversight.

8.4.2 Delete "Major". The word "major" implies an advanced repair can be completed by a manufacturer trained organization or ISP.

8.4.3 - Moisture barrier repairs should be considered Advanced repairs and subject to 4.2.4.6

**Affirmative with Comment****Stull, J.** The committee should endeavor to create parity for the requirements of verification affecting both ISPs and organizations, such that one group of providers does not have a distinct advantage over others. Specific qualifications are needed for verification of inspection and cleaning capabilities.

---

**1851-3** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**3.3.x Patch and A.3.3.x (New)** (Log # 42 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.**

**Document # 1851**

---

**Ford, II, R.**

---

**1851-4** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**3.3.36 Flame Resistance and A.3.3.36 (New) (Log # 1 )**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-5** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**4.2.5 (Log # 20 )**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-6** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**5.1.2 and A.5.1.2(6) (Log # 32 )**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-7** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**5.1.6.1 (New) (Log # 17 )**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-8** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.2.2.5(3)(c) (Log # 2 )**

---

**Document # 1851**

---

**Not Returned**  
**Barker, R.**  
  
**Davis, R.**  
  
**Doan, S.**  
  
**Ford, II, R.**

---

**1851-9** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.2.3.1 (Log # 3 )**

---

**Not Returned**  
**Barker, R.**  
  
**Davis, R.**  
  
**Doan, S.**  
  
**Ford, II, R.**

---

**1851-10** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.2.3.3 (Log # 4 )**

---

**Not Returned**  
**Barker, R.**  
  
**Davis, R.**  
  
**Doan, S.**  
  
**Ford, II, R.**

---

**1851-11** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.3.1 (Log # 21 )**

---

**Not Returned**  
**Barker, R.**  
  
**Davis, R.**  
  
**Doan, S.**  
  
**Ford, II, R.**

---

**1851-12** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.3.3 (Log # 16 )**

---

**Not Returned**  
**Barker, R.**  
  
**Davis, R.**  
  
**Doan, S.**

**Document # 1851**

---

**Ford, II, R.**

---

**1851-13** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.4 (Log # 5)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-14** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.5, A.12.2.1, and A.12.2.3.1 (Log # 33)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-15** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.5.2 (Log # 6)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-16** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.5.3 (Log # 7)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-17** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.5.4 (Log # 8)**

---

Document # 1851

---

- Not Returned
- Barker, R.
  
- Davis, R.
  
- Doan, S.
  
- Ford, II, R.

---

1851-18 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
 6.3.5.5 (Log # 9 )

---

- Not Returned
- Barker, R.
  
- Davis, R.
  
- Doan, S.
  
- Ford, II, R.

---

1851-19 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
 6.3.5.7 (Log # 10 )

---

- Not Returned
- Barker, R.
  
- Davis, R.
  
- Doan, S.
  
- Ford, II, R.

---

1851-20 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
 6.3.6.1 (Log # 11 )

---

- Not Returned
- Barker, R.
  
- Davis, R.
  
- Doan, S.
  
- Ford, II, R.

---

1851-21 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
 6.3.6.2 (Log # 12 )

---

- Not Returned
- Barker, R.
  
- Davis, R.
  
- Doan, S.

**Document # 1851**

---

**Ford, II, R.**

---

**1851-22** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.6.3 (Log # 13)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-23** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.3.6.5 (Log # 14)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-24** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.4.3 and A.6.4.3 (Log # 34)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-25** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**6.4.5.2 (Log # 30)**

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Affirmative with Comment**

**Document # 1851**

---

**Stull, J.** The action on this proposal is inconsistent with the approach being proposed for NFPA 1855. No changes have been accepted with respect to the procedures used for integrity checks of the moisture barrier. The current procedures do not reflect industry practice by ISPs and other organizations and should be given further consideration.

---

**1851-26** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.4.5.2, 12.3.4, and 12.3.5** (Log # 31 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Affirmative with Comment**

**Oliver, A.** Reporting more detailed levels of failure will assist organizations, along with input from their ISP, in determining whether further investment in the element is both safe and economical. In addition, the failure levels with help indicated the type of repairs are needed or whether moisture barrier replacement is needed. This type of reporting should be encouraged by organizations from their service providers.

**Stull, J.** Hydrostatic testing has a potentially high impact on firefighter safety and the costs of clothing maintenance. There are also concerns about how the identification of leaks relate to firefighter exposure. While it prudent for the committee to reject the proposed change on the basis of no supporting data, the committee should endeavor to address this topic in a manner which provides an appropriate level of safety and practicality.

---

**1851-27** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**6.5.4.2, 12.3.5.1, 12.3.5.2** (Log # 38 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Affirmative with Comment**

**Stull, J.** See my Comment on Affirmative on Proposal 1851-26 (Log #31).

---

**1851-28** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4  
**7.3.1** (Log # 22 )

---

**Not Returned****Barker, R.****Davis, R.**

**Document # 1851**

---

**Doan, S.**

**Ford, II, R.**

---

**1851-29** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**7.3.7(10)** (Log # 15)

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-30** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**8.1.1** (Log # 23)

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-31** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**8.2.3** (Log # CP3)

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-32** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**8.2.3.4** (Log # 43)

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Document # 1851**

---

**1851-33** Eligible To Vote:33 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 4**10.1** (Log # 39 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Negative**

**Melia, D.** There is no scientifically-validated data that shows that a fire helmet degrades over a 10 year period to the point of failure. Many helmets are still in excellent condition after 10 years and are being forced into retirement by this standard. The committee without any hard data is putting a financial burden on the fire service. With all the technological advances seen over the last 20 years I find it hard to comprehend how the manufacturers and testing labs cannot develop a non destructive test that would show a fire helmet can still provide the needed protection for a firefighter after 10 years. An example would be football helmet testing. The expense to the fire service to be forced to replace a fire helmet that still provides adequate protection is unacceptable.

Having one blanket retirement age for all components of this standard puts an undue burden on the fire service. It is well accepted that gloves will never make it to 10 years. A well made helmet does provide the needed protection for longer than 10 years with a documented inspection, care and maintenance program in place. The goal is to provide safe equipment for the people wearing the gear. I know several larger departments that have decided not to follow the guidelines established by the NFPA because they cannot afford to replace helmets that are still being maintained and continue to provide adequate protection.

---

**1851-34** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**10.1.2, 10.1.3** (Log # CP10 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****1851-35** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**10.1.2 and 10.1.2.1 (New)** (Log # 36 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

Document # 1851

1851-36 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

10.1.2 and 10.1.3 (Log # 18)

Not Returned

- Barker, R.
- Davis, R.
- Doan, S.
- Ford, II, R.

1851-37 Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

11.1.1.1 (Log # 24)

Not Returned

- Barker, R.
- Davis, R.
- Doan, S.
- Ford, II, R.

1851-38 Eligible To Vote:33 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 4

11.2.12 (Log # 48)

Not Returned

- Barker, R.
- Davis, R.
- Doan, S.
- Ford, II, R.

Negative

Lakey, S. there are Federal Agencies that require the Verified ISP's currency to be within the 12 month period and do not recognize a facility that is past their due date typed on the verification certificate. The cause and effect would be the Verified ISP to lose a customer. Case example would be a Nuclear Energy Site run on Strict SOP's.

1851-39 Eligible To Vote:33 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 4

11.3.7.x (New) (Log # 44)

Not Returned

- Barker, R.
- Davis, R.
- Doan, S.
- Ford, II, R.

Negative

**Document # 1851**

---

**Stull, J.** The requirement in NFPA 1971 is recognized; however, the objective of verification is to permit an independent assessment of the ISP or organization to conduct a valid repair. This can only be confirmed by the quantitative measurement of seam strength. In this circumstance, certainly the failure of the seam before the base material is one proof that seam repair quality is deficient. However, it does not provide an objective basis for assessing seam quality.

---

**1851-40** Eligible To Vote:33 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 4

**11.3.7.1 (New)** (Log # 45 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Negative**

**Lakey, S.** NFPA 8.2.1 States that the repair shall be performed in the manner and using like materials as the garment element manufacturer which includes Seams. Sample seams should not be treated any differently than a seam used in actual repair situations. We are Testing for Competency in performing actual repairs.

**Oliver, A.** Professional ISP's that decide to obtain third party verification should be required to have the equipment and the ability to create their own seam samples in order to become verified.

---

**1851-41** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**11.3.7.3** (Log # 49 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**


---

**1851-42** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**11.3.7.4** (Log # 46 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**Document # 1851**

---

**1851-43** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**Table 11.3.7(a)** (Log # 41 )

---

Not Returned

**Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-44** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**Table 11.3.7(b)** (Log # 40 )

---

Not Returned

**Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-45** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**11.3.10** (Log # 19 )

---

Not Returned

**Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-46** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**11.4.3.1** (Log # 47 )

---

Not Returned

**Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-47** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**12.1.5.3** (Log # CP5 )

---

Not Returned

**Barker, R.****Davis, R.**

**Document # 1851**

---

**Doan, S.****Ford, II, R.**

---

**1851-48** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**12.2.4.2** (Log # 28 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Affirmative with Comment**

**Stull, J.** This information could be made advisory by placing it in the annex. Organizations that have not routinely performed these tests could use whatever advice makes the test easier and clamps could assist organization in more consistently carrying out this test.

---

**1851-49** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**12.2.5.1** (Log # 27 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.****Affirmative with Comment**

**Stull, J.** A decision will be made for pursuing this proposed change with the provision of existing data.

---

**1851-50** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**12.2.5.3** (Log # 29 )

---

**Not Returned****Barker, R.****Davis, R.****Doan, S.****Ford, II, R.**

---

**1851-51** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4**A.4.4.2** (Log # CP11 )

---

**Not Returned****Barker, R.**

**Document # 1851**

---

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-52** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.6.3.5.1(9)** (Log # 26 )

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-53** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.6.3.5.1(9)** (Log # 37 )

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-54** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.6.4.3.1** (Log # CP4 )

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

---

**1851-55** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.6.4.5.1** (Log # CP6 )

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Affirmative with Comment**

Document # 1851

**Stull, J.** The tentative acceptance of this suggested information by the committee is appreciated.

**1851-56** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.7.1.1** (Log # 35 )

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Affirmative with Comment**

**Stull, J.** It would be instructive to cite the referenced studies and other literature in the appendix so that others could view this information if interested.

**1851-57** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.7.3.6** (Log # 25 )

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**1851-58** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.7.3.7(5)** (Log # CP7 )

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Affirmative with Comment**

**Oliver, A.** Revise 3rd paragraph, 5th sentence: "These chemicals typically have pH values that are greater than 10.5 and are used in in high temperature cleaning greater than 130 degrees Fahrenheit."

**Stull, J.** The tentative acceptance of this suggested information by the committee is appreciated.

**1851-59** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.7.3.7(5)** (Log # CP8 )

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**

**Affirmative with Comment**

**Stull, J.** The tentative acceptance of this suggested information by the committee is appreciated. These procedures were developed by the University of Alberta. Additional supporting information will be provided during the public comment period.

---

**1851-60** Eligible To Vote:33 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 4

**A.10.1.1** (Log # CP2 )

---

**Not Returned**

**Barker, R.**

**Davis, R.**

**Doan, S.**

**Ford, II, R.**