

**MEETING OF THE NFPA
TECHNICAL COMMITTEE ON SPECIAL OPERATIONS
PROTECTIVE CLOTHING AND EQUIPMENT
San Diego, CA
March 14-16, 2012**

AGENDA

WEDNESDAY - March 14, 2012

1. **8:00 a.m.** Call to order - Chairman Dean Cox
2. Introduction of members and guests
3. Staff Liaison Report - Dave Trebisacci
4. Approval of the minutes of the meeting in Alexandria, VA, July 12-13, 2011
5. Chairman's remarks - Dean Cox
6. TCC update
 - a. Possible merger of NFPA 1999 with Special Ops TC
7. **9:00 a.m.** Adjourn to breakout room for training on new document revision process
8. Requirements for first layers in the military (C. King, Propel LLC; C. Powell, U.S. Army)
9. NFPA 1975 (F13 cycle) public input (attached)
10. NFPA 1975 committee input
11. NFPA 1855 (F12 cycle) public comments (sent separately after comment closing date 3/2/12)
12. NFPA 1855 committee comments
13. Document update and review of revision cycle calendar
 - NFPA 1951 – NITMAM update, next revision cycle TBD
 - NFPA 1953 – Contaminated Water PCE (SC agenda Aug 2012, requesting F14 cycle)
 - NFPA 1858 – Rope/Harness SCAM (SC agenda Aug 2012, requesting F14 cycle)
 - NFPA 1952 – Current edition 2010, next edition 2015 (F14)
 - NFPA 1983 – 2012 edition now available, next edition 2017 (F16)

14. Old Business

15. New Business

- Dates and locations for future meetings
- Other Issues

16. Adjourn at close of business, Friday, March 16, 2012

MINUTES OF THE MEETING

TECHNICAL COMMITTEE ON SPECIAL OPERATIONS PROTECTIVE CLOTHING AND EQUIPMENT

ALEXANDRIA, VA

12 -- 13 JULY 2011

The meeting was called to order by Chairman Dean Cox at 08.00 on Tuesday, 12 July 2011.

The following members and guests were present:

MEMBERS IN ATTENDANCE:

Dean Cox, Chairman	Fairfax County (VA) Fire & Rescue
Karen Lehtonen, Secretary	Lion
Dave Trebisacci, Staff Liaison	NFPA

Steve Corrado	Underwriters Laboratories
Charles Dunn	TenCate Protective Fabrics
Dan Gohlke	WL Gore and Associates
Bill Haskell	NIOSH
Diane Hess	PBI Performance Products
Steve Hudson	Pigeon Mountain Industries
Kim Klaren	Fairfax County (VA) Fire & Rescue
James Murray	FDNY
Jack Reall	Columbus (OH) Division of Fire
Beverly Stutts	Underwriters Laboratories

GUESTS IN ATTENDANCE:

James Baker	Lion Total Care
Amy Brayshaw	Navy Clothing and Textile Research Facility
Donna Cox	Patricio Enterprises/PEO Soldier Equipment
John Drewniak	Whites Manufacturing
Ken Hanzalik	3M
Kimberly Hunter	Pigeon Mountain Industries
Cleveland Heath	Navy Clothing and Textile Research Facility
Ulf Nystrom	Trelleborg Protective Products
Faith Ortins	Diving Unlimited Int
Matthew Pappafotopoulos	PCCI Inc
Blades Robinson	Dive Rescue International

Members and guests introduced themselves. Staff Liaison Dave Trebisacci read the Committee Procedures statement and provided a Staff Liaison report which included a cycle update for the various documents covered by this Technical Committee. He also provided an overview of the new NFPA standards development process, which will affect the next edition of NFPA 1975. NFPA 1975 is one of 17 documents that will be the first to be revised according to the new process. He indicated that further information is available on the NFPA web site, and will provide additional assistance to technical committee members as the new process begins operation.

The Minutes of the last Committee meeting held in Ft Lauderdale, FL 29 -- 31 March 2011 were reviewed.

Motion by Diane Hess, seconded by Steve Corrado

To approve the Minutes of the 29 -- 31 March 2011 Ft Lauderdale, FL

Motion passed

Chairman's Remarks:

Chairman Cox outlined the plan for the meeting. The primary objective is to process the proposals received in NFPA 1855. The task group working on NFPA 1953 will continue their work concurrently. The Technical Committee will review the draft of NFPA 1858 in order to move it forward. A proposed FI on NFPA 1975 will also be discussed.

TCC Update:

Chairman Cox attended the TCC meeting by conference call; he provided a summary to the Technical Committee of the TCC Actions taken on NFPA 1951. Chairman Cox reported to the Technical Committee that no TCC Actions were taken on NFPA 1983.

Chairman Cox and Staff Liaison Trebisacci reported on a TCC discussion on the use of the term "All Hazards" in lieu of "CBRN Hazards". Further discussion was held on the use of the term "All Hazards" by this Technical Committee and possible inclusion in NFPA 1855. There was confusion amongst the Technical Committee on how to apply the "All Hazards" concept and terminology at this time. The Technical Committee agreed that the concept requires further discussion and research and took no action to include the language in NFPA 1855. The Technical Committee will consider the concept as it develops within other Technical Committees and as other documents are processed.

NFPA 1855 Proposal Review & Committee Comment Work

Actions were taken on the public proposals received and committee proposals generated.

Discussion on NFPA 1975 Proposed FI

The proposed FI submitted by Steve Corrado was discussed by the Technical Committee. After discussion the group agreed that the intent was to conduct the pre-conditioning of 100 cycles prior to the optional flame resistance test and to conduct the pre-conditioning of 25 cycles prior to the Heat and Thermal Shrinkage Test and Thermal Stability Test. The reason for the 100 cycles of pre-conditioning is to ensure that FR topical treatments are durable for at least 100 laundering cycles. The Technical Committee will clarify the language during the next revision process of NFPA 1975.

Document Updates – Task Groups

Contaminated Water Rescue Task Group (Jim Murray) - Proposed NFPA 1953

The Task Group continued their work at this meeting and has prepared a proposed draft for entry into cycle. The technical committee discussed the options for entering into cycle and agreed to request from Standards Council to enter into the 2014 cycle.

Rope and Harness SCAM Task Group (Steve Hudson) - Proposed NFPA 1858

A proposed draft was circulated to the Technical Committee and was posted on the Technical Committee page. Language still is needed to address rope grabs and descenders and will be added as part of the next draft. The technical committee discussed the options for entering into cycle and agreed to request from Standards Council to enter into the 2014 cycle.

The next drafts of NFPA 1858 and NFPA 1953 are due to Dave Trebisacci NLT October 2011.

Old Business:

Public Input due on NFPA 1975 by January 4, 2012. Dave Trebisacci to circulate the deadlines for the Fall 2013 revision cycle to the TC.

New Business:

The next meeting will be held NLT 16 March of 2012 to address public input on NFPA 1975. Task group work will also continue on the other projects within the committee.

Future Meeting Planning:

March 14-16 2012	ROC NFPA 1855, Public Input for NFPA 1975 Proposed Locations: Phoenix, AZ or San Diego, CA (piggyback with the EMS TC Meeting on March 13) March 16 could be ½ day.
NLT Jan 5, 2013	ROC Meeting for NFPA 1975

Motion by Diane Hess, second by Jack Reall
To adjourn
Motion passed

Chairman Cox adjourned the meeting at 12:00 on 13 July 2011.

The Contaminated Water Rescue Task Group continued their task group meeting work until close of business after the adjournment of the Technical Committee.

Respectfully submitted,

Karen Lehtonen

Karen Lehtonen, Secretary
TC on Special Operations Protective Clothing and Equipment

NFPA 1975

PUBLIC INPUT

1975- Log #1 FAE-SCE
(3.3.9 Flame Resistance and A.3.3.9 (New))

Final Action:

Submitter: Glossary of Terms Technical Advisory Committee,

Recommendation: Revise text to read as follows:

3.3.9* Flame resistance (protective apparel). The property of a material whereby combustion is prevented, terminated, or inhibited following application of a flaming or non-flaming source of ignition, with or without subsequent removal of the ignition source.

A.3.3.9 Flame resistance can be an inherent property of the textile material, or it can be imparted by specific treatment.

Substantiation: It is important to have consistent definitions of terms within NFPA. The term flame resistance is widely used in the documents associated with protective apparel. NFPA definitions should be in a single sentence. Most NFPA definitions of "flame resistance" and uses of the term are in the documents associated with firefighters/first responders. In general, for other uses the term has been replaced and previous references to flame resistance are now being replaced by references to materials that meet the requirements of NFPA 701. It is likely that the documents associated with first responders would like to retain this concept and therefore the definition is being modified with a qualifier and with an annex note for the second sentence. Also, a recommendation is being made that NFPA 1500 be the primary document responsible. The definition is included in NFPA 1851, 1951, 1971, 1975, 1977, 2112 and 2113.

1975- Log #2 FAE-SCE
(7.1.1 and 7.1.2 (New))

Final Action:

Submitter: Steven D. Corrado, Underwriters Laboratories Inc.

Recommendation: Revise text to read as follows:

7.1.1 Woven and nonwoven textiles, excluding interlinings, shall be tested individually for heat resistance as specified in Section 8.2, Heat and Thermal Shrinkage Resistance Test, and shall not melt, drip, separate, or ignite, and shall not shrink more than 10 percent in any direction.

7.1.2 (NEW) Knits, excluding interlinings, shall be tested individually for heat resistance as specified in Section 8.2, Heat and Thermal Shrinkage Resistance Test, and shall not melt, drip, separate, or ignite, shall be able to be stretched to the original dimensions, shall not break, and shall not shrink more than 10 percent in any direction.

Substantiation: The referenced ISO 17493, Section 7.1 states: "If, in stretching knit fabric specimens, the specimens break or cannot be stretched to the original dimensions, then this observation shall be reported in lieu of the measured shrinkage".

This requirement, as part of the method addresses the case where knit fabrics break, or cannot be stretched. If this is to be considered as a failure, then Ch. 7 should reflect this.

This is not original material; its reference/source is as follows:
ISO 17493.

1975- Log #3 FAE-SCE
(A.8.4.1.2)

Final Action:

Submitter: Steven D. Corrado, Underwriters Laboratories Inc.

Recommendation: Add text to read as follows:

A.8.4.1.2 Examples of major seams include but are not limited to seat seams, side seams, and inseams of pants; seat seams, side seams, inseams, yoke seams, sleeve set, and shoulder seams of coveralls; and yoke seams, side seams, sleeve set, side seams, and shoulder seams of shirts. Major seams do not include seams that do not expose the wearer's skin or undergarments when ruptured, for example pocketing or emblem seams.

Substantiation: Current Annex item explains what a major seam is, but does not explain what a major seam is not. Since NFPA 1975 only references major seams, the recommended text will aid users and testing organizations is distinguishing between major and other types of seams.

1975- Log #4 FAE-SCE
(B.3.3)

Final Action:

Submitter: Steven D. Corrado, Underwriters Laboratories Inc.

Recommendation: Delete B.3.3.

Substantiation: B.3.3 refers to requirements that were removed for the 2009 edition. Only one seam strength requirement exists.

1975- Log #5 FAE-SCE
(8.3.2.1.1 and 8.3.5(5) (New))

Final Action:

Submitter: Steven D. Corrado, Underwriters Laboratories Inc.

Recommendation: Add text to read as follows:

8.3.2.1.1(NEW) Where a 1 m square of textile cannot be obtained, the samples for preconditioning shall be a minimum of the size to be tested.

8.3.5(5) (NEW) Where the specimen size is such that a 102- by 102-mm (4- by 4-in.) square cannot be achieved, three specimens shall be tested folded face to face, and three specimens shall be tested folded back to back.

Substantiation: The ASTM test method is written to apply to fabric yardage. NFPA 1975 applies this method to material other than fabric yardage – e.g. knit collars and cuffs – where it is not possible to obtain the ASTM required sample sizes. Recommended language will specify how these other materials are to be tested.

1975- Log #6 FAE-SCE
(3.3.9 Flame Resistance and A.3.3.9 (New))

Final Action:

Submitter: Marcelo M. Hirschler, GBH International

Recommendation: Revise text to read as follows:

3.3.9* Flame Resistance. The property of a material whereby combustion is prevented, terminated, or inhibited following application of a flaming or non-flaming source of ignition, with or without subsequent removal of the ignition source. ~~Flame resistance can be an inherent property of a material, or it can be imparted by specific treatment.~~

A.3.3.9 Flame resistance can be an inherent property of a material, or it can be imparted by specific treatment.

Substantiation: NFPA definitions need to be in single sentences. The second sentence in this definition is not really a part of the definition and should either become an annex note (as proposed) or be included in a mandatory part of the standard.

1975- Log #7 FAE-SCE
(2.3.2 and C.1.2.2)

Final Action:

Submitter: Marcelo M. Hirschler, GBH International

Recommendation: Revise text to read as follows:

2.3.2 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM D 751, *Standard Test Methods for Coated Fabrics*, 2006.

ASTM D 1683/D1683M, *Standard Test Method for Failure in Sewn Seams of Woven Apparel Fabrics*, 2011a ~~2007~~.

ASTM D 3940, *Standard Test Method for Bursting Strength (Load) and Elongation of Sewn Seams of Knit or Woven Stretch Textile Fabrics*, 1983 (Withdrawn 1995).

ASTM D 6413, *Standard Test Method for Flame Resistance of Textiles (Vertical Test)*, 2011a ~~1999~~.

C.1.2.2 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM D 751, *Standard Test Methods for Coated Fabrics*, 2006.

ASTM D 1683/D1683M, *Standard Test Method for Failure in Sewn Seams of Woven Apparel Fabrics*, 2011a ~~2007~~.

ASTM D 3940, *Standard Test Method for Bursting Strength (Load) and Elongation of Sewn Seams of Knit or Woven Stretch Textile Fabrics*, 1983 (Withdrawn 1995).

ASTM D 6413, *Flame Resistance of Textiles (Vertical Test)*, 2011a ~~1999~~.

ASTM F 1731, *Standard Practice for Body Measurement and Sizing of Fire and Rescue Services Uniforms and Other Thermal Hazard Protective Clothing*, 1996 (2008) ~~2002~~.

ASTM F 1939, *Standard Test Method for Radiant Heat Protective Performance of Flame Resistant Clothing Materials*, 2008 ~~1999a~~.

Substantiation: Standards Date Update.

NFPA 1855

PUBLIC

COMMENT

1855- Log #1 FAE-SCE
(1.1.1)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

1.1.1 This standard shall specify the minimum selection, care and maintenance requirements for utility technical rescue protective, rescue and recovery technical rescue protective, and chemicals, biological agents...".

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #2 FAE-SCE
(Chapter 2)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Chapter 2 – Update references to the following standards:

NFPA 1951, 2012 Edition

NFPA 1971, 2012 Edition

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #3 FAE-SCE
(3.3.33 Crown Straps)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

3.3.33 Crown Straps. See 3.3.104.2

Crown straps is now part of the definition of straps in 3.3.104.

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #4 FAE-SCE
(10.2.2)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

10.2.2 Retired technical rescue protective ensembles and ensemble elements as determined in ~~10.1.8~~ 10.1.7 shall be permitted to be used as follows:

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #5 FAE-SCE
(12.1.3.2(5))

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

12.1.3.2 (5) Pour 1 cup of the alcohol-tap water mixture specified in ~~12.1.3.1~~ 12.1.2.1 onto the barrier material in the cupped area of the barrier.

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #6 FAE-SCE
(A.7.1.9)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

A.7.1.9 Some dry cleaning solvents that are used in lieu of water can damage components of the ensembles and ensemble elements. ~~Reflective trim,~~ Visibility markings, helmets and leather gloves, in particular, can be adversely affected by such solvents. The manufacturer should be consulted prior to dry cleaning to confirm that ensembles and ensemble elements will not be damaged.

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #7 FAE-SCE
(B.1.1, B.1.2.2, and B.1.2.3)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

- B.1.1 Update references to the following standards:
NFPA 1971, 2012 Edition
- B.1.2.2 Update references to the following standards:
ANSI Z87.1, 2010 Edition
- B.1.2.3 Update references to the following standards:
ASTM F1731, 1996 (2008) Edition
ASTM F1930, 2011 Edition

Substantiation: The following editorials are necessary based on the draft provided in the ROP including editorial references in the ROP.

1855- Log #8 FAE-SCE
(Chapter 3 Various Definitions)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

~~3.3.20.2 Contract Cleaning. Cleaning conducted by a facility outside the organization that specializes in cleaning protective clothing.~~

~~3.3.63 Independent Service Provider (ISP). See 3.3.XX Verified Independent Service Provider (ISP). An independent third party utilized by an organization to perform any one or any combination of advanced inspection, advanced cleaning, or advanced repair services.~~

3.3.72* Organization. The entity that provides the direct management and supervision for the emergency services personnel.

3.3.72.1 Manufacturer trained organization. An non-verified organization trained by any element manufacturer of the same element type to conduct any one or a combination of Advanced Cleaning, Advanced Inspection and Basic Repair on the organization's elements.

3.3.72 Verified organization. An organization verified by a third party certification organization to conduct any one or a combination of Advanced Cleaning, Advanced Inspection, Basic Repair and Advanced Repair on any organization's elements.

3.3.XX Verified Independent Service Provider (ISP). An independent service provider verified by a third party certification organization to conduct any one or a combination of Advanced Inspection, Advanced Cleaning, Basic Repair or Advanced Repair service.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #9 FAE-SCE
(4.2 and 4.4.2)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

~~4.2.4 Where the organization performs its own repairs or uses an independent service provider (ISP) to perform garment element repair services, with the exception repairs, identified in Section 8.3, the organization or ISP shall meet the requirements of Chapter 11 and shall be verified by a third-party certification organization.~~

~~4.2.4.1 The organization or ISP shall receive written verification from the certification organization to perform garment element repair services.~~

~~4.2.4.2* The certification organization's written verification shall specify the categories of repair the organization or the ISP is verified to perform and the processes used to perform these services.~~

~~4.2.4.3 The written verification shall indicate that the organization or the ISP has demonstrated a working knowledge of Chapter 8, as well as the design and performance requirements of NFPA 1951, *Standard on Protective Ensembles for Technical Rescue Incidents*.~~

~~4.2.5 Where the organization performs its own advanced inspection or advanced cleaning, or basic repair, the organization shall be trained by the ensemble or ensemble element manufacturer, a verified ISP, or an ISP. Where the organization uses an ISP for training or to perform advanced inspection, advanced cleaning, or basic repair, the ISP shall be trained by the ensemble or ensemble element manufacturer.~~

~~4.2.5.1* The element manufacturer or ISP training provider shall have instructional delivery requisite knowledge and skills for an instructor. Documentation shall be provided upon request to the organization and, where applicable, to the certification organization.~~

~~4.2.4 The organization shall use one of the following to perform advanced cleaning, advanced inspection and repair services of ensembles and ensemble elements:~~

~~(a)* Manufacturer trained organization for their own organization's elements only.~~

~~(b)* Verified organization.~~

~~(c)* Verified ISP~~

~~Table 4.2.4 Responsibilities for Garment Element Inspection, Cleaning and Repair.~~

Insert Table 4.2.4 Here

4.2.4.1 Verified organizations and verified ISPs shall meet the requirements of Chapter 11, Verification and shall be verified by a third-party certification organization.

4.2.4.2 Where the organization is a verified organization or uses a verified ISP, approval from the element manufacturer shall not be required.

4.2.4.3* Verified organizations and verified ISP's shall receive written verification from the third-party certification organization to conduct garment element advanced cleaning, advanced inspection or advanced cleaning, advanced inspection and advanced repair services.

4.2.4.4 The written verification shall indicate that the verified organization or the verified ISP has demonstrated a thorough knowledge of this standard as well as the design and performance requirements of NFPA 1971, *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*.

4.2.4.5 All garment advanced repairs shall be conducted by the garment manufacturer, a verified organization or verified ISP.

4.2.4.6 Manufacturer trained organizations performing advanced cleaning and advanced inspection shall be trained by an element manufacturer of the same element type or by a verified ISP. The element manufacturer or verified ISP shall provide documentation that the organization has received the necessary training.

4.4.2* Where the manufacturer's instructions regarding the care or maintenance of the protective ensembles or elements differ from a specific requirement(s) in this standard, the manufacturer's instructions shall be followed for that requirement. Manufacturers shall not be permitted to override the requirements of this standard for third party verification.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This

language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #10 FAE-SCE
(6.3)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a, 1855-12, 1855-17, 1855-18

Recommendation: Revise text to read as follows:

6.3 Advanced Inspection.

6.3.1 Advanced inspection and any necessary testing shall be performed by ~~a verified ISP, ISP, or the organization's trained personnel;~~ the element manufacturer, a manufacturer trained organization, a verified organization or a verified ISP.

6.3.2 The member(s) of the organization who has received training in the advanced inspection of the ensembles or ensemble elements shall be responsible for performing, ~~or managing~~ or coordinating advanced inspections ~~or the advanced inspection process.~~

6.3.2.1* ~~The ensemble, ensemble element manufacturer, verified ISP, or ISP trained by the element manufacturer, and the organization shall determine the level of training required to perform advanced inspections. The ensemble, ensemble element manufacturer, verified ISP, or ISP trained by the element manufacturer, and the organization shall provide written documentation of training.~~ The ensemble or ensemble element manufacturer or a verified ISP and the organization shall determine the level of training required to perform advanced inspections. The ensemble or ensemble element manufacturer or verified ISP shall provide written verification of training.

6.3.2.1.1 If the organization is a verified organization, they shall be permitted to determine the level of training necessary to perform the Advanced Inspection, without any further written verification.

The remainder of 6.3 stays the same.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

Table 4.2.4 Responsibilities for Garment Element Inspection, Cleaning and Repair					
	<u>MFG</u>	<u>V ISP</u>	<u>V ORG</u>	<u>MT ORG</u>	<u>USER</u>
<u>Routine Inspection (6.2)</u>	-	-	-	-	●
<u>Advanced Inspection (6.3)</u>	●	●	●	●	-
<u>Complete Liner Inspection (6.4)</u>	●	●	●	●	-
<u>Routine Cleaning (7.2)</u>	-	-	-	-	●
<u>Advanced Cleaning and Decontamination (7.3)</u>	●	●	●	●	-
<u>Basic Repair (8.3)</u>	●	●	●	●	-
<u>Advanced Repair (8.4)</u>	●	●	●	-	-
<u>Training Provider</u>	●	●	-	-	-

MFG=Element Manufacturer; V ISP=Verified ISP; V ORG=Verified Organization; MT ORG=Manufacturer Trained Organization; USER=End User

1855- Log #11 FAE-SCE
(6.4)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a, 1855-31, 1855-32, 1855-33

Recommendation: Revise text to read as follows:

6.4 Complete Barrier Inspection.

6.4.1 Complete barrier inspection of all rescue and recovery technical rescue garments and CBRN technical rescue garment elements shall be performed by a the garment manufacturer, a manufacturer trained organization, a verified organization or a verified ISP or the organization's trained personnel.

6.4.2 The member(s) of the organization who has received training in the complete barrier inspection of the garment element shall be responsible for performing, ~~or managing~~ or coordinating the complete barrier inspection or the complete barrier inspection process.

6.4.2.1 The garment element manufacturer or a verified ISP and the organization shall determine the level of training required to perform complete barrier inspections. The garment element manufacturer or verified ISP shall provide written verification of training.

6.4.2.1.1 If the organization is a verified organization, they shall be permitted to determine the level of training necessary to perform the Complete Liner Inspection, without any further written verification.

The remainder of 6.4 stays the same with the exception of a reference correction in 6.4.5.1.

6.4.5.1 The barrier material shall be tested using the hydrostatic test to evaluate the water penetration barrier, as specified in Section ~~12.3~~ 12.2, and shall show no leakage.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #12 FAE-SCE
(7.1.10)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

~~7.1.10* When contract cleaning or decontamination is used, the ISP shall demonstrate, to the organization's satisfaction, that the procedures for cleaning and decontamination do not compromise the performance of the ensembles and ensemble elements~~

When a verified ISP is used for cleaning or decontamination, the Verified ISP shall demonstrate, to the organization's satisfaction, that the procedures for cleaning and decontamination do not compromise the performance of ensembles and ensemble elements.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #13 FAE-SCE
(7.3)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a, 1855-40

Recommendation: Revise text to read as follows:

7.3 Advanced Cleaning and Decontamination.

7.3.1 Advanced cleaning shall be performed by a verified ISP, or ISP, trained by the element manufacturer, who will provide written documentation of training.

Advanced cleaning shall be performed by the element manufacturer, a manufacturer trained organization, a verified organization or a verified ISP.

7.3.1.1 The member(s) of the organization who has received training in the advanced cleaning of the ensembles or ensemble elements shall be responsible for performing, managing, or coordinating advanced cleaning or the advanced cleaning process. The advanced cleaning shall be managed by a member of the organization or conducted by members of the organization who have received training in the advanced cleaning of protective ensembles and ensemble elements.

~~7.3.1.2 The ensemble or ensemble element manufacturer or verified ISP and the organization shall determine the level of training required to perform advanced cleaning. The ensemble or ensemble element manufacturer or verified ISP shall provide written verification of training.~~

The ensemble or ensemble element manufacturer or verified ISP and the organization shall determine the level of training required to perform advanced cleaning. The ensemble or ensemble element manufacturer or verified ISP shall provide written verification of training.

~~7.3.1.3 The ensemble or ensemble element manufacturer shall provide written verification of training.~~

7.3.4 The training of the organization's personnel shall be performed by the element manufacturer or a verified ISP, or ISP, trained by the element manufacturer who will provide written documentation of training.

7.3.4.1 If the organization is a verified organization, they shall be permitted to determine the level of training necessary to perform Advanced Cleaning without any further written verification.

The remainder of 7.3 stays the same.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #14 FAE-SCE
(8.1)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a, 1855-44

Recommendation: Revise text to read as follows:

8.1 Requirements for All Ensembles and Ensemble Elements.

~~8.1.1 All repairs shall be performed by the original ensemble or ensemble element manufacturer, verified ISP, ISP or a member of the organization after training by either the manufacturer or by a verified ISP or an ISP in the repair of ensembles or ensemble elements.~~

All repairs shall be performed by the original manufacturer, a verified ISP who has received training, or a member of the organization who has received training. Training shall be provided by an element manufacturer or by verified ISP in the repair of ensembles or ensemble elements.

8.1.1.1 Requirements for garment element repair shall be specified in Section 8.2 through 8.4.

8.1.2 The member(s) of the organization who has received training in the repair of the ensembles or ensemble elements shall be responsible for performing or managing repairs.

8.1.3 Ensembles or ensemble elements shall be subjected to advanced cleaning, when necessary, before any repair works is undertaken.

8.1.3.1 Ensembles contaminated by CBRN terrorism agents shall be immediately retired after CBRN exposure is confirmed and shall not be reused.

8.1.4* All repairs and alterations to the ensemble or ensemble element shall be done in a manner and using like materials and components that are compliant with NFPA 1951, Standard on Protective Ensembles for Technical Rescue Incidents.

8.1.5 Due to the different methods of construction, the ensemble or ensemble element manufacturer shall be contacted if the organization or verified ISP is unsure of whether a repair can be accomplished without adversely affecting the integrity of the ensemble or ensemble element.

8.1.6 Replacement interface components shall be installed in a manner consistent with the ensemble or ensemble element manufacturer's method of construction or recommendation.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #15 FAE-SCE
(8.3)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.3 Additional Requirements for Basic Garment Element Repair.

8.3.1 The repairs specified in this section shall be performed by the element manufacturer, ~~by both verified and nonverified organizations, or by both verified and nonverified ISPs~~ the organization, manufacturer trained organizations, verified organizations or verified ISP's. Basic repairs shall be limited to the following:

- (1) Patching of minor tears, char marks, and ember burns to a separable outer shell
- (2) Repairing of skipped, broken, and missing stitches to a separable outer shell
- (3) Replacement of missing hardware, excluding positive closure systems to a separable outer shell
- (4) Reclosing of the liner of a garment after inspection

~~8.3.2 Basic repairs shall be limited to the following:~~

- ~~(1) Patching of minor tears, char marks, and ember burns to a separable outer shell~~
- ~~(2) Repairing of skipped, broken, and missing stitches to a separable outer shell~~
- ~~(3) Replacement of missing hardware, excluding positive closure systems to a separable outer shell~~
- ~~(4) Reclosing of the liner of a garment after inspection~~

8.3.3 Repairs to non-barrier garment barrier materials shall be permitted provided there is no stitching through the barrier material.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #16 FAE-SCE
(8.4)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.4 Additional Requirements for Advanced Garment Element Repair.

8.4.1* The repairs specified in this section shall be conducted *only* by the element manufacturer, a verified organization, or a verified ISP meeting the requirements as specified in Chapter 11, Verification.

8.4.2 ~~Major repairs to the garment outer shell shall be performed only by the garment element manufacturer or by a verified ISP consistent with the garment element manufacturer's methods. The garment element manufacturer shall be contacted if the organization is unsure of whether a repair is major or minor consistent with the garment element manufacturer's methods. The garment element manufacturer shall be contacted if the organization is unsure of the complexity of the repair.~~

8.4.3* ~~All repairs to the garment barrier materials shall be performed only by the garment element manufacturer or by a verified ISP consistent with the barrier material manufacturer's methods. The organization shall contact the original garment element manufacturer if the organization is unsure as to whether an area to be repaired contains a barrier material consistent with the barrier manufacturer's methods. The original garment element manufacturer shall be contacted if the organization is unsure as to whether an area to be repaired contains a barrier material.~~

8.4.4 Due to labeling requirements, as well as the complexity and specialized equipment needed to replace entire garment element component layers (e.g., the outer shell), ~~barrier materials, or barrier materials~~, only the garment element manufacturer or the garment element manufacturer's designated verified ISP shall replace entire garment component layers.

8.4.5 Restitching of more than 25 continuous mm (1 continuous in.) of a Major A and Major B seam shall require consulting the garment element manufacturer ~~or shall be performed by the garment element manufacturer or by a verified ISP in a manner consistent with the garment element manufacturer's methods~~ and shall be conducted in a manner consistent with the garment element manufacturer's methods.

8.4.6 Repairs to Major B seams in the moisture barrier shall require consulting the garment element manufacturer and shall be conducted in a manner consistent with the barrier manufacturer's recommendations.

8.4.7* All repaired stress areas shall be reinforced in a manner consistent with the garment element manufacturer's methods.

8.4.8 ~~If replacing visibility markings necessitates sewing into a Major A seam, visibility markings replacement shall be done only by the garment element manufacturer or by a verified ISP unless the organization is also a verified ISP conducted in a manner consistent with the garment element manufacturer's methods.~~

8.4.9* Replacement zippers shall be installed in a manner consistent with the garment element manufacturer's method of construction. If the complexity of the repair is uncertain, the garment element manufacturer shall be consulted.

~~8.4.9.1 If the complexity of the repair is uncertain, the garment element manufacturer shall be consulted:~~

~~8.4.9.2 Zippers that are part of a positive closure system shall not be replaced by the organization unless the organization is also a verified ISP:~~

8.4.10* Replacement hook-and-loop fastener tape shall be installed in a manner consistent with the garment element manufacturer's method of construction. If the complexity of the repair is uncertain, the garment element manufacturer shall be consulted.

8.4.11* Replacement reinforcement materials shall be installed in a manner consistent with the garment element manufacturer's method of construction.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #17 FAE-SCE
(8.5)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.5 Helmet Element Repair.

8.5.1 In addition to the requirements in Section 8.1. All repairs to helmet components other than as specified herein shall be performed in accordance with the helmet element manufacturer's instructions.

8.5.2* Where there is indication of a crack, dent, abrasion, bubbling, soft spot, discoloration, or warping in the helmet shell, the helmet element manufacturer ~~or its designated ISP~~ shall be contacted to determine serviceability.

The remainder of 8.5 stays the same.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #18 FAE-SCE
(8.6)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.6 Glove Element Repair. In addition to the requirements in Section 8.1. All repairs to glove components shall be performed in accordance with the glove element manufacturer's instructions. The glove manufacturer shall be contacted to determine feasibility of the repair.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #19 FAE-SCE
(8.7)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.7 Footwear Element Repair.

8.7.1 In addition to the requirements in Section 8.1, All repairs to footwear components shall be performed in accordance with the footwear manufacturer's instructions.

8.7.2 Other than the replacement of bootlaces and zipper assemblies, ~~all repairs to boots shall be performed by the footwear element manufacturer~~ shall be contacted to determine feasibility of the repair or its designated ISP.

8.7.3 All replacement bootlaces and zippers shall be provided by the footwear element manufacturer.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #20 FAE-SCE
(8.8)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.8 Goggle Element Repair. Goggle components that become cracked or badly scratched shall be replaced.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #21 FAE-SCE
(8.9)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.9 Hood Interface Component Repair. In addition to the requirements in Section 8.1, All repairs to hoods shall be performed in accordance with the element manufacturer's instructions.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #22 FAE-SCE
(8.10)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

8.10 Additional Requirements for CBRN Technical Rescue Protective Ensembles. All repairs to CBRN technical rescue protective ensembles shall be referred to the ensemble manufacturer for repair.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #23 FAE-SCE
(11.1)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

11.1 General.

11.1.1 In order for an organization or ISP to be verified, it shall meet the requirements of this chapter.

~~11.1.1.1 Verification of the organization or ISP shall be limited to repairs of garment elements only~~ include advanced inspection, advanced cleaning and advanced repairs of garment elements only. Verification of the organization or ISP shall not apply to helmet elements, glove elements, footwear elements, hood element, or optional CBRN ensembles.

~~11.1.1.2 Verification of the organization or ISP shall not apply to helmet elements, glove elements, footwear elements, goggle elements, hood elements or CBRN technical rescue protective ensembles.~~ An organization or ISP shall be permitted to be verified for Advance Cleaning and Advanced Inspection only.

~~11.1.1.3 Where an organization or ISP is verified for conducting repairs, the organization or ISP shall also be verified for Advanced Cleaning and Advanced Inspection.~~

~~11.1.1.4 The verified organization or ISPs shall be listed. The listing shall contain Advanced Cleaning; Advanced Inspection and/or the Repair categories that the organization or the ISP is verified to conduct. Repair categories shall be garment outer shell repairs, and garment barrier material repairs.~~

~~11.1.1.5 Where the certification listing includes the barrier material repair category, the listing shall include the barrier material manufacturer and trade name designation.~~

11.1.2 All verification of the organization or ISP shall be performed by a certification organization that meets at least the requirements specified in Section 11.2 and that is accredited for personal protective equipment in accordance with ISO Guide 65, *General requirements for bodies operating product certification systems*. The accreditation shall be issued by an accreditation body operating in accordance with ISO 17011, *Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies*.

~~11.1.2.1 and 11.1.2.2 Delete existing as it's covered in 11.1.2~~

11.1.3 The verified organization or verified ISP shall not use the NFPA name or the name or identification of this standard, NFPA 1855, in any statements about its services unless the services are verified as compliant to this standard.

~~11.1.3.1* No provider of the services covered by this standard shall claim to be an ISP, a Verified ISP or a Verified Organization unless they comply with all of the requirements in this Standard and are third party verified in accordance with the requirements of this chapter.~~

~~11.1.4 All verified organizations or ISPs shall be listed by the certification organization:~~

~~11.1.4.1 The listing shall contain the repair categories that the organization or the ISP is verified to conduct:~~

~~11.1.4.2 Repair categories shall be garment outer shell repairs, garment barrier material repairs, and garment lining material repairs:~~

~~11.1.4 The certification organization shall not issue any new verifications to the 2008 edition of NFPA 1851, Standard on Selection, Care and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, on or after the NFPA effective date for the 2013 edition which is [NEW EFFECTIVE DATE TO BE INSERTED]~~

~~11.1.5 Organizations or ISP's verified to the 2008 edition of NFPA 1851, Standard on Selection, Care and Maintenance of Protective Ensembles shall undergo verification to the 2013 edition of NFPA 1851 within 6 months of the NFPA effective date for the 2013 edition which is [NEW EFFECTIVE DATE TO BE INSERTED]~~

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #24 FAE-SCE
(11.3)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

11.3 Inspection and Testing.

11.3.1 For verification of the organization's or ISP's ~~compliant repair~~ services, the certification organization shall conduct both inspection and testing as specified in this section.

11.3.2 All inspections, evaluations, conditioning, and testing for verification of the organization or ISP shall be conducted by a certification organization's testing laboratory that is accredited in accordance with the requirements of ISO 17025, *General requirements for the competence of testing and calibration laboratories*.

11.3.3 The certification organization's testing laboratory's scope of accreditation to ISO 17025, *General requirements for the competence of testing and calibration laboratories*, shall encompass testing of personal protective equipment.

11.3.4 The accreditation of a certification organization's testing laboratory shall be issued by an accreditation body operating in accordance with ISO 17011, *Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies*.

11.3.5 A certification organization shall be permitted to utilize conditioning and testing results conducted by an organization or an ISP for verification provided the organization or the ISP testing laboratory meets the requirements specified in 11.3.5.1 through 11.3.5.5.

11.3.5.1 Where an organization or an ISP provides conditioning and testing results to the certification organization, the organization's or ISP's testing laboratory shall be accredited in accordance with the requirements of ISO 17025, *General requirements for the competence of testing and calibration laboratories*.

11.3.5.2 The organization or ISP testing laboratory's scope of accreditation to ISO 17025, *General requirements for the competence of testing and calibration laboratories*, shall encompass testing of personal protective equipment.

11.3.5.3 The accreditation of an organization's or ISP's testing laboratory shall be issued by an accreditation body operating in accordance with ISO 17011, *Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies*.

11.3.5.4 The certification organization shall also approve the organization's or ISP's testing laboratory.

11.3.5.5 The certification organization shall determine the level of supervision and witnessing of the conditioning and testing for verification conducted at the organization's or ISP's testing laboratory.

11.3.6 Sampling levels for testing and inspection shall be established by the certification organization and the organization or the ISP to ensure reasonable and acceptable reliability at a reasonable and acceptable confidence level that repair services are compliant to this standard, unless such sampling levels are specified herein.

11.3.7 For verification of an organization's or an ISP's advanced cleaning services, the certification organization shall evaluate the organization's or ISP's procedures in accordance with Section 7.3 of this standard.

11.3.8 For verification of an organization's or an ISP's advanced inspection services, the certification organization shall evaluate the organization's or ISP's procedures in accordance with Sections 6.3 and 6.4 of this standard.

11.3.7~~9~~ For verification of an organization's or an ISP's repair services, the following series of tests shall be required for each repair category for which the organization or the ISP is verified. Testing shall be conducted using new materials as outlined in Table 11.3.7~~9~~(a) and Table 11.3.7~~9~~(b).

****Insert Table 11.3.7~~9~~(a) and Table 11.3.7~~9~~(b) Here****

11.3.7~~9~~.1 For repairs to tears in the outer shell, barrier material, lining material, the certification organization shall create the tear in the material(s) to be repaired in accordance with Figure 11.3.7~~9~~.1

****INSERT FIGURE HERE**** (not submitted)

FIGURE 11.3.7~~9~~.1 Tear Repairs.

11.3.7~~9~~.2 For barrier material hole repairs, the certification organization shall create the hole in the material(s) to be repaired in accordance with Figure 11.3.7~~9~~.2

****INSERT FIGURE HERE**** (not submitted)

FIGURE 11.3.79.2 Hole Repairs.

11.3.79.3 The certification organization shall not allow test specimens that have been conditioned and tested for one method to be reconditioned and tested for another test method unless specifically permitted in the test method.

11.3.10 For verification of an organization's or ISP's Advanced Inspection services, the documentation and measurements specified in Table 11.1.10 shall be evaluated and verified to be compliant by the Certification Organization.

Table below is all New Text to be added....

****Insert Table 11.3.10 Here****

11.3.11 For verification of an organization's or ISP's Advanced Cleaning services, the documentation and measurements specified in Table 11.3.11 shall be evaluated and verified to be compliant by the Certification Organization.

Table below is all New Text to be added....

****Insert Table 11.3.11 Here****

~~11.3.9~~ 11.3.12 The organization or the ISP shall maintain all inspection and test data from the certification organization used in the verification of the organization's or the ISP's services. The organization or ISP shall provide such data, upon request, to the purchaser or authority having jurisdiction.

~~11.3.10~~ 11.3.13 All categories that are verified in accordance with this standard shall undergo verification on an annual basis.

No changes to 11.4.

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

Table 11.3.79 (a) Outer Shell Repairs

Who Makes Repair	Sample	Material	Test
Organization	5 ft felled seam 5 ft overedge seam	Outer shell material(s) utilized by the organization	NFPA 1951 — 7.1.1.6
	Small tear patch		Patched tear made from the outer shell material utilized by the organization
ISP	5 ft felled seam 5 ft overedge seam	7.5 osy Nomex IIIa plain weave fabric	NFPA 1951 — 7.1.1.6
	Small tear patch		Patched tear made from 7.5 osy Nomex IIIa plain weave fabric

Table 11.3.79 (b) Barrier Material Repairs

Who Makes Repair	Sample	Material	Test
Organization	5 ft seam	Barrier material(s) utilized by the organization	NFPA 1951 — 7.1.1.6
	Hole patch	Patched hole made from the barrier material(s) utilized by the organization	NFPA 1855 — 8.2.3 and NFPA 1951 — 7.1.2.4 in the as-received condition
	Tear patch	Patched tear made from the barrier material(s) utilized by the organization	NFPA 1855 — 8.2.3 and NFPA 1951 — 7.1.2.4 in the as-received condition
ISP	5 ft seam	<u>All barrier materials utilized by the organization repaired by the ISP</u>	NFPA 1951 — 7.1.1.6
	Hole patch	Patched hole made from the <u>all</u> barrier materials <u>utilized by the organization repaired by the ISP</u>	NFPA 1855 — 8.2.3 and NFPA 1951 — 7.1.2.4 in the as-received condition
	Tear patch	Patched tear made from the <u>all</u> barrier materials <u>utilized by the organization repaired by the ISP</u>	NFPA 1855 — 8.2.3 and NFPA 1951 — 7.1.2.4 in the as-received condition

Table 11.3.10 Advanced Inspection Evaluation

<u>NFPA 1855 clause to be evaluated</u>	<u>Method of evaluation</u>
<u>6.3.2</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>6.3.4</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>6.3.5.1 (1)-(4) and (6)-(15)</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>6.4.2</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>6.4.4</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>6.4.5</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>

Table 11.3.11 Advanced Cleaning Evaluation

<u>NFPA 1855 clause to be evaluated</u>	<u>Method of evaluation</u>
<u>7.3.4</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.5</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.6</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.7</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.8 (1)-(4) and (6)-(13)</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.8(5)</u>	<u>Direct measurement or observation by a representative of the Certification Organization</u>
<u>7.3.10</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.3.14</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.4.1</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.4.2</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.4.3 (1)-(3) and (5)-(6)</u>	<u>Audit or review of organization's or ISP's procedures and documentation by Certification Organization</u>
<u>7.4.3(4)</u>	<u>Direct measurement or observation by a representative of the Certification Organization</u>

1855- Log #25
(Annex A)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

Annex A Explanatory Material

A.4.2.4(a) A manufacturer trained organization receives training from an element manufacturer or a verified ISP in cleaning, inspection and repair services for that organization's own elements. For garment elements, this entity has not received any formal verification from a third party certification organization.

A.4.2.4(b) A verified organization has demonstrated the ability to conduct cleaning, inspection and repairs to a third party certification organization in accordance with this standard and is not required to have the approval of the element manufacturer to perform these services. Verified organizations are permitted to conduct these services for other organizations.

A.4.2.4(c) A verified ISP has demonstrated the ability to conduct cleaning, inspection and repairs to a third party certification organization in accordance with this standard and is not required to have the approval of the element manufacturer to perform these services.

A.4.2.4.23 The end user should always request the list of repair categories for which the verified ISP is approved to perform from the ISP.

~~A.4.2.5.1 Requirements for instructional delivery requisite knowledge and skills can be found in NFPA 1670, Standard on Operations and Training for Technical Search and Rescue Incidents.~~

A.4.4.2 It should be noted that the intent of this requirement is not to allow manufacturers to dictate which verified ISP an organization must use. The organization is allowed a choice in service providers for cleaning, inspection and repairs.

A.6.3.2.1 For any inspection program to be effective, ensembles and ensemble elements should be evaluated by trained individuals. The individuals evaluating the ensembles and ensemble elements should understand the limitations of each element and recognize the signs of failure. Utilizing trained individuals provides consistency on whether an item should be repaired or retired. The manufacturer, verified ISP, or ISP and organization. The manufacturer and the organization; the verified ISP and the organization or a verified organization should determine the level of training required to perform advanced inspections. Resources for training that should be considered, as a minimum, are the manufacturer(s) of the elements in use; the Fire and Emergency Manufacturers and Services Association (FEMSA) user guides; NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*; and professional cleaning and repair facilities.

A.8.2.4 Although some hardware can be replaced in the field, it should be noted that field application might not be as permanent or as strong as when the hardware is replaced at the factory, by a verified organization, or by a verified ISP.

A.8.4.1* For elements that are being repaired by a verified ISP, the following questions should be asked to determine if the verified ISP is knowledgeable enough to insure repaired elements are safe and serviceable. It is important that the organization request information for the verified ISP so that the organization can make an informed decision about who and how their gear is being maintained. The following questions should provide assistance in making that decision, but they should not be considered to be all inclusive and the organization may have other questions they would like to ask as well.

1) Can the ensemble or ensemble element be repaired (i.e. is the damage too severe, or does the age and/or overall condition of the garment make a repair too costly or safety prohibitive?)

2) Does the Verified ISP have a certificate they can provide for review?

3) Carefully read the certificate and/or the certification organization's listing. It will identify what materials the Verified is verified to repair. Some verifications are limited to outer shells and therefore cannot repair barrier materials. Other verified ISP's elect to only become verified to work on specific barrier material, not all. It is important to confirm that a verified ISP has been verified to work on the specific type of barrier material found in your garment.

4) Does the verified ISP have liability insurance for repair or replacement of lost or stolen ensembles or ensemble elements?

5) The verified ISP should have a quality assurance program and should make that program available to you upon request.

6) Does the verified ISP take appropriate steps to prevent cross contamination between any and all items being repaired?

7) Does the verified ISP have training to do the required repair?

8) Does the verified ISP have documentation that the repair was completed?

- 9) Does the verified ISP have current calibration data for the gauges used on the Hydrostatic testing apparatus?
- 10) Does the verified ISP follow guidelines of the barrier material manufacturer for repair of barriers materials?
- 11) At what point do you make the decision to replace a barrier rather than repair it? Does age enter into your decision?
- 12) If a barrier has been repaired previously (examples – patches on the fabric, re-seam-sealing small areas of the seam), and additional punctures or taping issues are found, at what point do you stop repairing, and make the decision to replace the barrier? Does age enter into your decision?
- 13) Has the verified ISP attended seminars provided by barrier material manufacturers for proper testing and repair?
- 14) Does the verified ISP warranty their work and if so for how long?
- 15) What is the normal turn around time for repairs?

A.11.2.5 The contractual provisions covering verification programs should contain clauses advising the verified organization or verified ISP that, if requirements change, the process should be brought into compliance with the new requirements by a stated effective date through a compliance review program involving all currently verified repairs. Without such clauses, certification organizations would not be able to move quickly to protect their names, marks, or reputations. A verification program would be deficient without these contractual provisions and the administrative means to back them up.

A.11.2.12 Such inspections should include witnessing of advanced cleaning, advanced insp

Substantiation: The attached document represents work completed by a task group assigned to address the ISP requirements in the 2013 revision of 1851. This language should be consistent between 1855 and 1851. The attached has been appropriately modified to reflect the needed changes for differing product requirements in 1971 and 1951. This language refines and clarifies what entities can perform various functions and the level of training needed and who can provide this training based on the direction the task group was given from the technical committee.

This is not original material; its reference/source is as follows:

The task group on ISP requirements for NFPA 1851 collectively prepared the language provided in this submittal.

1855- Log #26 FAE-SCE
(Chapter 5)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-9, 1855-10

Recommendation: Revise text to read as follows:

Move the language proposed in 1855-10 from Section 5.1 to the new 5.2 proposed in 1855-9 as a new 5.2.7.

Substantiation: The language accepted in 1855-10 fits better with in section 5.2 of 1855-9 dealing with risk assessments. Therefore this language should be moved in the document for better flow and clarity.

1855- Log #27 FAE-SCE
(Table 5.2)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-9

Recommendation: Revise text to read as follows:

1955-9 Log CP#4. In Table 5.2 there are several Hazards where there are no check boxes indicated or there are items with question marks. If nothing is checked and it is not intended for 1951 ensembles or elements to protect from this hazard then there should be something in the text or annex that identifies that so the user of the document understands that. The question marks should also be resolved.

Substantiation: Having blank check boxes or question marks is confusing to the reader, these need to be resolved or explained by the committee so those using the document can understand the intent or purpose.

1855- Log #28 FAE-SCE
(A.5.1.8(2)(2)(f))

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-61

Recommendation: Revise text to read as follows:

A.5.1.8(2)(f) Any specific requirements for earflaps (design, materials, dimensions, attachment to shell specifics); if the organization determines ear flaps are required as they are not required in NFPA ~~1971~~ 1951.

Substantiation: There was an error in 1855-61 Log 29 where the reference incorrectly cites NFPA 1971 and it should be NFPA 1951.

1855- Log #29 FAE-SCE
(6.3.5.5)

Final Action:

Submitter: Karen E. Lehtonen, Lion

Comment on Proposal No: 1855-12

Recommendation: Revise text to read as follows:

6.3.5.5 Goggles elements shall be inspected for the following:

(1) Soiling

(2) Contamination

(3) Thermal Damage

(4) ~~(†)~~ Damaged or missing components of the goggle including discoloration or scratches

(5) ~~(‡)~~ Functionality of element components

(6) ~~(§)~~ Label integrity and legibility.

Substantiation: Goggles should also be inspected for soiling, contamination, and thermal damage in addition to the other items listed in 6.3.5.5.

1855- Log #30 FAE-SCE
(A.4.2.2, A.5.2.1, A.5.2.4, A.5.3.1, and A.5.3.1(2))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Use tab key to make the lists in these Annex paragraphs look more like outlines.

Substantiation: Editorial.

1855- Log #31 FAE-SCE
(12.2.3.1(1))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

"In a roughly horizontal position"

Substantiation: Having the apparatus in a horizontal position is not a critical test requirement and in fact it is desirable to have the apparatus clamping area tilted slightly to allow trapped air to escape when the water pressure is applied.

1855- Log #32 FAE-SCE
(6.3.5.4(1), 6.4.5.1, 12.2, and 12.3)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Delete all of Section 12.1.

 Renummer Section 12.2 to Section 12.1.

 Renummer Section 12.3 to Section 12.2.

 6.3.5.4(4) Change Section 12.4 to Section 12.2.

 6.4.5.1 Change Section 12.3 to Section 12.1.

Substantiation: Section 12.1, the puddle test, has been moved to the annex. See A.6.3.5.1(4). There is no mandatory requirement for Section 12.1 anymore and so Section 12.1 is not appropriate in the main text anymore. This change results in the subsequent renumbering and cross reference changes.

1855- Log #33 FAE-SCE
(A.3.3.96.3)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "barrier" to "layer" in two places.

Substantiation: Editorial correction.

1855- Log #34 FAE-SCE
(3.3.131 Visibility Markings and A.3.3.131)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Delete asterisk.

 Delete A.3.3.131.

Substantiation: A.3.3.131 adds no new information.

1855- Log #35 FAE-SCE
(12.3.2(2))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

 The footwear specimen shall be placed upright in a container that allows the entire footwear specimen to be immersed in tap water.

Substantiation: Editorial revision.

1855- Log #36 FAE-SCE
(A.3.3.42)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

The utility and rescue and recovery elements are certified individually whereas CBRN elements must at least be certified as part of an ensemble and can additionally optionally be certified individually. CBRN elements cannot only be certified individually, but they can only be certified as part of an ensemble.

Substantiation: I think this additional text helps to make the intent of the TC more clear.

1855- Log #37 FAE-SCE
(12.2.3.1(3))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

~~75~~ 100 mm (~~3~~ 4 in)

Substantiation: Changing the diameter of the viewing area by a factor of 2 changes, the viewing area by a factor of 4. Commonly available devices use clamping devices with diameters of more than 4 inches. Using smaller devices will evaluate less of the barrier.

1855- Log #38 FAE-SCE
(10.1.2)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "no more than" to "no later than".

Substantiation: Editorial correction.

1855- Log #39 FAE-SCE
(10.2.2)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "10.1.8" to "10.1.7".

Substantiation: Wrong cross reference.

1855- Log #40 FAE-SCE
(11.1.3 and 11.1.4)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Revise text to read as follows:

11.1.3 The verified organization or verified ISP shall not . . .

11.1.4 All verified organizations or verified ISPs shall be . . .

Substantiation: Adding the adjective "verified" makes it clear which organizations and ISPs are being referred to.

1855- Log #41 FAE-SCE
(5.3.1(1))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "the 2007 edition" to "the current edition".

Substantiation: By the time this document is published I expect the 2007 edition of NFPA 1951 will be revised. See Section 5.3.1(2).

1855- Log #42 FAE-SCE
(6.3.5.1(4))

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "material integrity" to "performance properties".

Add (f) contamination.

Add (g) age.

Substantiation: Material integrity is not a defined performance property.

These are two additional considerations that are useful when looking at the moisture barrier for loss of barrier properties.

1855- Log #43 FAE-SCE
(5.1)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Delete asterisk.

Substantiation: No accompanying Annex text.

1855- Log #44 FAE-SCE
(A.6.3.5.1)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: In the last sentence change "barrier" to "liner" in two places.

Substantiation: Editorial revision.

1855- Log #45 FAE-SCE
(A.6.4.3)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Delete A.6.4.3.

Substantiation: This document does not use the inspection timeline referenced in this annex item. I believe this annex paragraph is incorrectly held over from the initial draft of this document.

1855- Log #46 FAE-SCE
(10.1.2)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Change "10 years" to "the time given in the table in 10.1.2" in two places.

Substantiation: 10 years is only correct for some of the ensemble elements as is shown in the table in 10.1.2.

1855- Log #47 FAE-SCE
(A.5.1.1)

Final Action:

Submitter: Daniel J. Gohlke, W. L. Gore and Associates

Comment on Proposal No: 1855-2a

Recommendation: Organizations responsible for selecting certified products are the best vehicle for enforcing correct representations of products. Organizations need to understand the correct way to refer to certified products and to be informed of the ways that uncertified products can be misrepresented, and to require suppliers to accurately communicate which products are certified versus products that are not certified.

The best expression to use when referring to compliant products is "the product is certified by (insert name of certification organization) to be compliant products is "the product is certified to be compliant with NFPA 1951" or "the product is certified to NFPA 1951" or "the certified NFPA 1951 product." IF it is certified, the certification organization that is certifying the compliance will have the product "listed." Any organization selecting certified products should confirm that the certification organization has the product listed. NFPA itself does not do the certifying, so an expression like "NFPA certified" is incorrect.

Insert here the already existing paragraph in A.5.1.1.

Expressions that do not use the term "certified" leave a lot of doubt about the status of the product. Frequently expressions are used that include the word compliant instead, e.g., "the product is compliant to NFPA 1951" or "the NFPA compliant product," etc. If the product is truly compliant then it is also certified because certification is part of the provisions of the standard. However, if the product is not truly compliant, then describing the product as certified will be illegal, but describing the product as compliant will only be a misrepresentation. Sometimes non-certifiable products are intentionally described as compliant to misinform the purchaser without incurring liability. It leaves open the uncertainty about who is claiming the compliance, and what the compliance is measured against. Some of the most egregious examples of this kind of practice are expressions like "the product complies with the viral penetration test requirements (or any other individual part of the standard) of NFPA 1951," or "the product complies with the footwear requirements (or other respective component parts) of NFPA 1951."

Certified NFPA products have many benefits over non-certified or non-certifiable products. Suppliers who can achieve the required level of product performance and quality are proud of this achievement. If they have achieved it, they will communicate it proudly and correctly. It has cost them considerable effort to achieve it. If the product is not represented as certified, it most likely cannot be certified. The authority having jurisdiction should appreciate what this means to the safety of their personnel and endorse the use of certified NFPA compliant products over non-certified products.

The following table tries to demonstrate the superiority of the "Certified NFPA" claim compared to other lesser claims.

Insert Table Here

Substantiation: This additional information will help the organization select and get certified NFPA products.

Claim	Certified by Cert Org X to be NFPA 1951 compliant	Manufacturer's test report documenting the claim that a product complies with a specific requirement in NFPA 1951	Manufacturer's verbal or marketing claim that a product complies with a specific requirement of NFPA 1951
What you get as a minimum	<p>Identify of the org that certified the product and the current listing</p> <p>Confirmation that the certification is current and to the current edition of the standard</p> <p>Available on request all the data generated to demonstrate passing results of all the design and performance requirements</p> <p>Details of all the test methods are documented and detailed, the number of specimens required for each test is known</p> <p>Pre-conditioning of all the specimens is required and known</p> <p>Confidence that the specimens are representative of or taken from finished products</p> <p>Specimens subject to</p>	<p>A written report documenting the date, the identity of the laboratory performing the test, the test method and the passing result. Still no information on the number of specimens tested or the condition or origin of those specimens</p>	

	<p>assembly are also tested (e.g. seams)</p> <p>Products are tested initially and every year according to a schedule</p> <p>Products are tested in an accredited lab whose results can be relied on</p> <p>Products are produced in a manufacturing plant with good manufacturing practices in place and that comply with ISO 9000 quality manufacturing practices</p> <p>Faulty products are subject to a recall</p>		
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