NFPA 1914 (Log #CC6)

(Log #CC8)

1914-1-(3-3.56): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Delete 3.3.56 in the draft.

SUBSTANTIATION: With the change to A.3.3.68 proposed in public comment 1914-17 (Log #1) the term monitor nozzle is no longer used in the document

COMMITTEE ACTION: Accept

(Log #CC1)

1914-2-(3-3.61): Accept SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise the definition of platform to read as follows: Platform. An assembly consisting of the support structure, floor, railings, and operator's secondary controls that is attached to the tip of a boom or an aerial ladder for carrying personnel and equipment.

SUBSTANTIATION: The revised definition addresses the fact that the collection of components is an assembly, not just individual components, and clarifies that the referenced operator's control station is the secondary controls, not to be confused with the primary control station which is located at ground

COMMITTEE ACTION: Accept

(Log #CC4)

1914-3-(4-1.1, 4.1.2 and 4.1.3): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-22

RECOMMENDATION: Combine 4.1.1, 4.1.2 and 4.1.3 and rewrite to read

- specifically designated as nondestructive tests (NDT) shall be conducted at the following times: 4.1.1 All inspections and tests specified in this standard except those
- (1) At least annually
- (2) After major repairs or overhaul
 (3) Following the use of the aerial device when the aerial device could have been subjected to unusual operating conditions of stress or load
- (4) When there is reason to believe that usage has exceeded the manufacturer's recommended aerial device operating procedures
- 4.1.2* The inspections and tests specified in this standard as nondestructive tests (NDT) shall be conducted at the following times:
- At least every 5 years.
- (2) Whenever visual inspection or load testing indicates a potential problem.
- (3) When there is a desire to further confirm continued operational safety. SUBSTANTIATION: The rewrite better clarifies when each of the two levels

of inspection and testing are required. COMMITTEE ACTION: Accept

(Log #CC7)

1914-4-(4-7.4) : Accept

SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 4.7.4 to read as follows.

- All liquid penetrant inspections shall be conducted in accordance with the following standards:
- (1) ASTM E 165, Standard Test Method for Liquid Penetrant Examination (2) ASTM E 1220, Standard Test Method for Visible Penetrant Examination Using the Solvent-Removable Process
- (3) ASTM E 1418, Standard Test Method for Visible Penetrant Examination Using the Water-Washable Process

Add the following to 2.1.2.2

ASTM E 1220, Standard Test Method for Visible Penetrant Examination Using the Solvent-Removable Process, 1999
ASTM E 1418, Standard Test Method for Visible Penetrant Examination

Using the Water-Washable Process, 1998

SUBSTANTIATION: The requirements in ASTM E 1220 and ASTM E 1418 are used when inspecting aerial devices using liquid penetrant inspections and a reference to the standard test methods was inadvertently left out of NFPA 1914.

COMMITTEE ACTION: Accept

1914-5-(4-7.7): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 4.7.7 to read as follows:

- 4.7.7 All acoustic emission inspections shall be conducted in accordance
- with the following standards:

 (1) ASTM E 569, Standard Practice for Acoustic Emission Monitoring of Structures During Controlled Stimulation

 (2) ASTM E 650, Standard Guide for Mounting Piezoelectric Acoustic
- **Emission Sensors**

Add the following to 2.1.2.2

ASTM E 650, Standard Guide for Mounting Piezoelectric Acoustic Emission

Sensors, 1997
SUBSTANTIATION: The requirements in ASTM E 650 are used when inspecting aerial devices using acoustic emission inspection and a reference to the document was inadvertently left out of NFPA 1914. **COMMITTEE ACTION**:Accept

(Log #CC5)

1914-6-(4-7.8): Accept **SUBMITTER**: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Add a new paragraph as 4.7.8 to read as follows: All eddy current inspections shall be conducted in accordance with ASTM E 1004, Standard Practice for Determining Electrical Conductivity Using the Electromagnetic (Eddy Current) Method.

Add the following to 2.1.2.2

ASTM E 1004, Standard Practice for Determining Electrical Conductivity Using the Electromagnetic (Eddy Current) Method, 1999.

SUBSTANTIATION: Eddy current inspections are used in inspecting aerial

devices and a reference to the appropriate test method was inadvertently left out of NFPA 1914.

COMMITTEE ACTION: Accept

(Log #CC3)

1914-7-(5-4.10): Accept SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-36

RECOMMENDATION: Revise 5.4.10 of the draft to read as shown.

- 5.4.10 Elevation, Extension, and Rotation Lock(s). The elevation, extension, and rotation lock(s) shall be inspected as follows:

 (1) Inspect the manual valve on the elevation, extension, and rotation lock(s) for external hydraulic fluid leakage.

 (2) Verify by visual inspection that the manual valve elevation lock operates properly by engaging the lock and then attempting to raise and lower the ladder while the main hydraulic system is operating. ladder while the main hydraulic system is operating.

 (3) Verify by visual inspection that the manual valve extension lock operates
- properly by engaging the lock and then attempting to extend or retract the
- ladder while the main hydraulic system is operating.

 (4) Verify by visual inspection that the manual valve rotation lock operates properly by engaging the lock and attempting to rotate the turntable clockwise

and counterclockwise while the main hydraulic system is operating. **SUBSTANTIATION**: The change in 5.4.10(1) is for clarification that the valve is part of the lock, not necessarily the lock itself. The deletion of the word "valve" in (2), (3), and (4) is to emphasize that it is the lock that must operate properly. The valve is part of the lock. **COMMITTEE ACTION**:Accept

(Log #2)

1914-8-(5-6.30(5)): Accept in Principle SUBMITTER: Tom Hillenbrand, Underwriters Laboratories Inc. COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 5.6.30(5) to read as shown:

(5) For post 1996 compliant aerial ladders, verify that the speed of the aerial ladder, when being operated from the tip controls, does not exceed the speeds identified in NFPA 1901, Standard for Automotive Fire Apparatus, 1996

Edition or newer.

SUBSTANTIATION: The requirements for speed limitations on aerial ladder movement with tip controls were first published in the 1996 Edition of NFPA 1901. These requirements should not include aerial devices manufactured prior to 1996 because that might require the tip controls to be retrofitted to slow them down which is not the purpose of the testing standard. Timing should only be done on 1996 or newer aerials or if the manufacturer has published tip control speeds.

COMMITTEE ACTION: Accept in Principle
Revise 5.6.30(5) to read as follows:

(5) If the aerial ladder was built to the 1996 or a later edition of NFPA 1901, Standard for Automotive Fire Apparatus, verify that the speed of the aerial ladder, when being operated from the tip controls, does not exceed the speeds allowed in the edition of NFPA 1901 to which the aerial ladder was manufactured

COMMITTEE STATEMENT: The committee is editorially modifying the proposed wording to clarify that the compliance is to NFPA 1901 and tying the speed allowance back to the edition of NFPA 1901 that the aerial ladder was manufactured to.

(Log #CC9)

1914-9-(5-8.4.3): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-62

RECOMMENDATION: Delete the word "maximum" in the first sentence. SUBSTANTIATION: The word "maximum" implies there is a range of rated capacities in the horizontal position at full extension and there is a single rated capacity in that position. Deleting the word will eliminate confusion.

COMMITTEE ACTION: Accept

(Log #CC10)

1914-10-(5-8.4.8, 5.8.4.8.3 (new)): Accept SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Delete the caution statement under 5.8.4.8.

Add a new 5.8.4.8.3 to read as follows:

The weights shall be added to the ladder in a manner that does not shock load the ladder.

CAUTION: Dropping the weights and shock loading the ladder can damage

SUBSTANTIATION: The existing caution statement contains requirements which is not a proper use of a caution statement. The requirement on how to add weights to the ladder is being moved to a separate paragraph together with a revised caution statement that states the consequences of improperly adding

COMMITTEE ACTION: Accept

(Log #CC11)

1914-11-(5-8.4.10, 5.8.4.11 (New)): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Delete the caution statement under 5.8.4.10.

Add a new paragraph after 5.8.4.10 to read as follows: 5.8.4.11 The ladder shall not be moved while the test weight is applied. CAUTION: Moving the ladder with a test weight applied could result in the application of forces that damage the ladder.

Renumber existing 5.8.4.11 through 5.8.4.11.2 as 5.8.4.12 through 5.8.4.12.2

5.8.4.12.2.

SUBSTANTIATION: The existing caution statement contains requirements which is not a proper use of a caution statement. The requirement prohibiting moving the ladder while the test weights are applied is being moved to a separate paragraph together with a revised caution statement that states the consequences of moving the ladder with the test weights applied.

COMMITTEE ACTION: Accept

(Log #CC12)

1914-12-(5-8.5.8, 5.8.5.8.3 (new)) : Accept SUBMITTER: Technical Committee on Fire Department Apparatus. **COMMENT ON PROPOSAL NO:1914-76**

RECOMMENDATION: Delete the caution statement under 5.8.5.8.

Add a new 5.8.5.8.3 to read as follows:

The weights shall be added to the ladder in a manner that does not shock load the ladder

CAUTION: Dropping the weights and shock loading the ladder can damage

SUBSTANTIATION: The existing caution statement contains requirements which is not a proper use of a caution statement. The requirement on how to add weights to the ladder is being moved to a separate paragraph together with a revised caution statement that states the consequences of improperly adding the weights

COMMITTEE ACTION:Accept

(Log #CC13)

1914-13-(5-8.5.10, 5.8.5.11 (New)): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Delete the caution statement under 5.8.5.10.

Add a new paragraph after 5.8.5.10 to read as follows: 5.8.5.11 The ladder shall not be moved while the test weight is applied.

CAUTION: Moving the ladder with a test weight applied could result in the application of forces that damage the ladder.
Renumber existing 5.8.5.11 through 5.8.5.11.2 as 5.8.5.12 through

SUBSTANTIATION: The existing caution statement contains requirements which is not a proper use of a caution statement. The requirement prohibiting moving the ladder while the test weights are applied is being moved to a separate paragraph together with a revised caution statement that states the consequences of moving the ladder with the test weights applied. **COMMITTEE ACTION**:Accept

1914-14-(5-9.4.2.1): Accept SUBMITTER: Technical Committee on Fire Department Apparatus,

COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 5.9.4.2.1 to read as follows:

The water system shall be filled with water, all air removed from the system, and the valve at the discharge end closed.

and the valve at the discharge end closed.

CAUTION: Failure to remove all air from the water system could result in injury if there is a component failure during the test.

SUBSTANTIATION: The requirement that all air be removed from the system is being moved from the caution statement to the main requirement as requirements do not belong in a caution statement. The caution statement is being rewritten to state the consequences of not removing air from the system.

COMMITTEE ACTION: Accept

(Log #3)

(Log #CC14)

1914-15-(5-9.6.1, 6-13.5 & 7.11.5.1): Accept in Principle SUBMITTER: Tom Hillenbrand, Underwriters Laboratories Inc. COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 5-9.6.1, 6-13.5 & 7.11.5.1 to read as follows:

If the waterway system is equipped with a water pressure gauges (s), each water pressure gauge shall be checked at 200 psi (14 bar) for accuracy to at least 3 points at 50 psi intervals. Care should be taken not to exceed the manufacturer's maximum rated working pressure.

SUBSTANTIATION: Pressure gauges need to be tested to at least three points to show linearity

COMMITTEE ACTION: Accept in Principle

Revise 5-9.6.1, 6-13.5 & 7.11.5.1 to read as follows:

If the waterway system is equipped with a water pressure gauges(s), each water pressure gauge shall be checked for accuracy to at least 3 points at 50 psi (3.45 bar) intervals without exceeding the maximum rated working pressure of the waterway system.

COMMITTEE STATEMENT: The requirement has been editorially

rewritten to integrate the second sentence as a requirement, eliminating the word "should" which cannot be used in the body of a standard. The rewrite also clarifies that it is the maximum rated working pressure of the waterway system that is not to be exceeded.

(Log #CC2)

1914-16-(6-10.5): Accept

SUBMITTER: Technical Committee on Fire Department Apparatus, COMMENT ON PROPOSAL NO:1914-76

RECOMMENDATION: Revise 6.10.5 in the draft to read as follows: If a leveling indicator(s) is provided to aid the operator in leveling the apparatus, the accuracy and legibility of the leveling indicator shall be checked.

Move the requirement to be 5.5.11 and renumber current 5.5.11 through 5.5.15 as 5.5.12 through 5.5.16. Change the reference in 5.5 from 5.5.15 to 5.5.16.

Change the reference in Sections 6.5 and 7.5 from 5.5.13 to 5.5.14. **SUBSTANTIATION**: Devices other than spirit levels are available and using the more generic term "leveling indicator" broadens the requirement. The requirement is being moved to section 5.5 as that will make the requirement applicable to aerial ladders which are covered by section 5.5, elevating platforms which are required by section 6.5 to meet section 5.5, and water towers which are required by section 7.5 to meet section 5.5. **COMMITTEE ACTION**: Accept

(Log #1)

1914-17-(A-3-3.68): Accept

SUBMITTER: Tom Hillenbrand, Underwriters Laboratories Inc. **COMMENT ON PROPOSAL NO:1914-76**

RECOMMENDATION: For an aerial ladder it is measured from the top rung of the outermost rung of the outermost fly section with the ladder at maximum elevation and extension; for an elevating platform, it is measured from the top of the platform handrails with the platform raised to its position of maximum elevation and extension; and for a water tower, it is measured from the discharge end of the water monitor nozzle with the boom raised to its

position of maximum elevation and extension.

SUBSTANTIATION: To accurately measure the rated vertical height, the aerial devices must be fully elevated and extended.

COMMITTEE ACTION Account

COMMITTEE ACTION: Accept