Errata

NFPA 1900

Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances

2024 Edition

References: 20.11
Errata No: 1900-24-2

The Technical Committees on Fire Department Apparatus, Aircraft Rescue and Firefighting, and Ambulances note the following error in the 2024 edition of NFPA 1900*, Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances.*

1. The following section on Aerial Ladder Rated Capacity was inadvertently left out of the 2024 edition (including associated Annex A.20.11.4) and is now inserted back into document to read as follows:

20.11 Aerial Ladder Rated Capacity.

20.11.1 The rated capacity of the aerial ladder shall be a minimum load of 250 lb (114 kg) carried on the outermost rung of the outermost fly section with the aerial ladder placed in the horizontal position at maximum horizontal extension and with the stabilizers fully deployed.

20.11.1.1 The minimum rated capacity shall remain constant throughout the entire operating envelope of the aerial ladder.

20.11.1.2 The aerial ladder shall be capable of operating in any position while carrying its rated capacity on the outermost rung of the outermost fly section.

20.11.1.3 If the aerial ladder has a permanently mounted water delivery system, the 250 lb (114 kg) rated capacity shall be determined without water in the system.

20.11.2 The aerial ladder shall be able to carry its rated capacity on the outermost rung of the outermost fly section with the aerial ladder at 45 degrees to the horizontal and at maximum extension while discharging water at rated capacity through the full range of monitor or nozzle movements as permitted by the aerial manufacturer.

20.11.3 Rated capacities in excess of 250 lb (114 kg) shall be stated in increments of 250 lb (114 kg) and shall be in addition to any firefighting equipment installed on the aerial ladder by the manufacturer.

20.11.4* If the aerial ladder is rated in multiple configurations, the manufacturer shall describe these configurations, including the rated capacity at each operating position.
20.11.4.1 This information shall be provided in the operations manual and on a capacity label or on an electronic display at the operator's control station.

A.20.11.4 Ladder capacity ratings are established in many different operating positions other than full extension and zero degrees elevation. Ladders are often rated at higher tip capacities as elevation angles increase or when the ladder is not fully extended. Most manufacturers provide distributed load capacities (e.g., several persons), depending on the ladder's extension and elevation. Combination ratings that include capacity at the tip while discharging water are normally provided. These can vary with elevation and extension and are examples of multiple configurations. It is important that the manufacturer define for the user the ladder's rated capacity in various positions and operation modes.

Aerial control systems can now limit the motion of the aerial device based on the following conditions:

1. Geometric position of the aerial device
2. Weights and loads (e.g., ice, wind, nozzle reactions, slope conditions, and so on) applied to the aerial device that create overturning loads
3. Stabilizer extension at each location
4. Position of the aerial device with respect to the centerline of the truck
   These geometric conditions are complex, and the electronic systems should clearly monitor the required inputs and validate the range of motion with the loads applied while maintaining the required safety factors for vehicle stability and structural safety.

For aerial devices where the rated horizontal reach is less than two-thirds of the rated vertical height, the effects of wind load and dynamic loads from inertia are more significant and should be included in the structural and stability analysis.

2. Renumber all subsequent sections and cross references within these sections of Chapter 20 accordingly:

~~**20.11**~~ **20.12**
~~**20.12**~~ **20.13**
…
~~**20.32**~~ **20.33**

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