

STATE OF NEW YORK
DEPARTMENT OF LABOR
STATE OFFICE BUILDING CAMPUS
ALBANY, NEW YORK 12240-0100

In the Matter of

Part 41 of Title 12 of the Official Compilation
Of Codes, Rules and Regulations
Of The State of New York

(Cited as 12 NYCRR 41)

Cases: ICR 41.5.b

COMMISSIONER'S
DECISION

APPLICABLE
VARIANCE
AV-121

AERIAL PERFORMERS

Flying Over Unnecessary
Persons

DATED:
October 7, 2010

Pursuant to Section 30 of the Labor Law, the Commissioner of Labor has reviewed the above cited provisions of Industrial Code Rule 41, as they relate to aerial performances over the public.

The Commissioner of Labor has also reviewed numerous petitions for variance or other relief relative to such performances and the decisions rendered relative to these petitions.

The Commissioner of Labor finds that the issuance of an Applicable Variance from the above cited provisions of Industrial Code Rule 41, as such pertain to aerial performances over the public, would not violate the spirit and purpose of said rules and would secure the public safety as contemplated by said rules.

APPLICABLE VARIANCE

A variance from the cited provisions of Industrial Code Rule 41 is hereby GRANTED subject to the following conditions:

THE CONDITIONS

1. This Applicable Variance does not apply to circus acts or acts at amusement parks, such as trapeze, high wire or similar acts.
2. Aerial performers/props shall not fly less than 15 feet clear above the audience floor, except aerial performers for theatrical performances in legitimate theaters with fixed seating shall not fly less than 12 feet clear above the audience floor. Flights below this height will require a Site Specific Variance.
3. Responsibility for the adequacy of structural elements involved in the installation of the lift system lies with the designer of record, and the State of New York assumes no responsibility for such adequacy.
4. A certification from a New York State Professional Engineer or Registered Architect indicating that the rigging and related equipment will support the installed props/equipment/personnel shall be maintained on site. The certification shall be available for review by the Commissioner.
5. Written approval, from the building owner where the equipment is to be used, stating that the loads applied to the building's structure as a result of the rigged equipment are acceptable shall be maintained on site. A copy of the approval shall be on site and available for review by the Commissioner.
6. Structural design shall include a minimum safety factor of 5 with respect to ultimate (breaking strength) for hardware, and a minimum safety factor of 10 with respect to breaking strength for steel wire rope and other ropes. All design calculations must include both static and dynamic loading, including controlled emergency stop loading.
7. The performer's safety harness shall be designed such that it cannot be released while loaded.
8. Equipment used (ropes, lines, cables, harnesses and hardware) shall be designed to support the weight of the performer (and any props) comfortably and to bear live loads. The equipment shall be manufactured for that purpose and shall be load rated in accordance with a recognized standard such as NFPA 1983.
9. No hazardous materials shall be flown over the audience as part of the effect.
10. Suspension equipment must be designed so that performer will not fall as a result of failure of any one support wire or its fastenings.

11. All fasteners, connections, trusses, etc. used in the rigging shall be installed and tested in accordance with the manufacturer's instructions.
12. Carabiners shall conform to NFPA 1983 and shall be tested and stamped by a recognized testing agency such as Underwriters Laboratory or comparable. Carabiners shall be the locking type. All surfaces of the carabiner shall be free of cracks, sharp edges, corrosion, burrs, or excessive wear. Gate opening and closing should be quick and easy. The gate and any locking mechanism shall close freely and completely. Rivets should not be bent, loose or missing. If a carabiner does not pass the inspection, it shall be removed from service.
13. Any flying harness shall be considered as part of the rigging and NOT part of the costume. Careful attention shall be paid so that any costume elements worn over the flying harness do not impair the vision, mobility and/or safety of the performer. No part of the costume shall be attached to the harness. No harness shall be cleaned, dyed, painted or marked with a substance which may degrade the strength and/or integrity of the harness materials.
14. Prior to using the proposed rigging and safety harnesses at each venue, the equipment shall be inspected by the Commissioner to ensure it is in safe working condition. At least 10 days prior to the first performance in a venue, the Commissioner shall be notified in writing of the time and place at which the performance will be presented.
15. All flying harnesses shall be inspected for wear or other defects by a competent person prior to each performance. A written record of each inspection shall be maintained.
16. Equipment inspection and maintenance records shall be available for review by the Commissioner.
17. Any carried props shall be secured to prevent falling on the audience.
18. The performer shall be secured with a tether or comparable device to any ride-on props used during the flight to prevent falling.
19. Aerial apparatus shall include provisions for a controlled, safe emergency stop if needed during the flying move. The emergency stop provisions and procedures shall be documented. A written evacuation plan for situations when the performer gets stopped over the audience shall be developed to ensure that all involved personnel are proficient in bringing the performer safely to the floor or to an alternate safe location. The procedures set forth in the evacuation plan shall be tested, at any location along the path of

flight, in the presence of the Commissioner at his/her request. A copy of the emergency stop provisions, procedures, and evacuation plan shall be kept on the premises and shall be readily available to the Commissioner's representative.

20. In the event of an uncontrolled stop (due to a power outage, drive failure or other unanticipated sudden event), the resulting condition shall not present a hazard to flying performers/props or the audience. Hazards include but are not limited to: abrupt deceleration that could harm performers, excessive movement that could cause performers to impact objects and sustain injury, excessive movement that could cause the performers/props to contact the audience, excessive movement that could cause the performers/props to damage or dislodge objects that could harm the audience, etc.
21. Performers riding on or in props shall not travel at a speed greater than 6 feet per second when flying over the audience.
22. Performers wearing a flying harness and suspended by wires shall not travel at a speed greater than 8 feet per second while flying/suspended over the audience.
23. When the aerial apparatus is stored before and after use, it shall be supported by a non-combustible element, such as a metal bracket or steel wire rope.
24. Non-performing support personnel shall be provided with OSHA compliant or comparable fall protection as required by law.

This APPLICABLE VARIANCE shall apply and shall be applied by all enforcement officials to all persons and in all places to which the aforesaid provisions of Industrial Code Rule 41 apply to aerial performances over the public with the same force and effect as if this APPLICABLE VARIANCE were duly granted upon separate petition for the use and benefit of every person affected by the cited provisions of Industrial Code Rule 41.

Date: October 7, 2010

COLLEEN C. GARDNER
COMMISSIONER OF LABOR

By


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