This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Designation: F3168 – 23

Standard Practice for Hayride Attractions[1]

This standard is issued under the fixed designation F3168; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice applies to hayride attractions used primarily in amusement, entertainment, recreational or agritourism applications. Such applications include but are not limited to family entertainment centers, camps, shopping centers, malls, seasonal attractions, pumpkin patches, corn mazes, farms, tree farms, temporary special events, fairs, carnivals and municipal parks.

1.2 This practice is intended to provide consistent criteria, references and operational considerations in the specifications, management and operation of hayride attractions.

1.3 This practice establishes guidelines that will provide a level of conformity for the purpose of reducing potential hazards to patrons, attendants, actors and spectators.

1.4 This practice is intended to be taken into consideration by architects, designers, engineers, construction contractors, manufacturers, appropriate inspectors, owners and operators who are involved with the design, construction, manufacture, installation, operation, maintenance, inspection or major modification of hayride attractions.

1.5 This practice specifically *includes* the following types of devices or attractions:

1.5.1 Hayride attractions used as an element or in combination with another hayride attraction, corn maze, zombie walk, paintball game, tree harvesting farm, seasonal attraction, haunted house, haunted attraction, fair, exposition or agritourism event.

1.5.2 Hayride attractions used primarily in off road applications, fixed courses or designated areas.

1.5.2.1 Hayride attractions in this standard are towed by mechanical means.

1.6 This practice specifically *excludes* the following types of devices or attractions:

1.6.1 Hayride attractions designed exclusively for private or home use.

1.6.2 Amusement rides, devices or attractions with a mechanical power rating of 27 (hp) or less and commonly referred to as a trackless train, mall train, tandem wagon or barrel train.

1.6.3 Animal powered or drawn carriages, wagons or trailers.

1.6.4 Human powered or drawn carriages, wagons or trailers.

1.6.5 Passenger trams used primarily in amusement parks, theme parks, zoos, wildlife parks or water parks.

1.6.6 Amusement rides, devices or attractions where the passenger carriers are guided by a rail or track system.

1.6.7 Parade floats.

1.7 This standard practice does not purport to address all of the hazards associated with hayride attractions. The practice's existence alone will not prevent injuries. Like other physical activities, hayride attraction use involves the risk of injury, particularly if the equipment is used improperly or if users fail to follow the posted rules or fail to follow attendant's instructions. The text of this standard practice references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.8 This practice includes an appendix (non-mandatory), which provides additional information (for example, rationale, background, interpretations, drawings, commentary and so forth) to improve the user's understanding and application of the criteria presented in this practice. The appendix information shall not be interpreted as mandatory criteria.

1.9 This standard includes the following sections:

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[1] This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.61 on Adventure Attractions.

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1.10 *Units*—The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.11 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.12 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F747 Terminology Relating to Amusement Rides and Devices

F770 Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices

F1193 Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices

F2291 Practice for Design of Amusement Rides and Devices

3. Terminology

3.1 Reference Terminology F747-15.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *agritourism, n*—the act of conducting an activity for the enjoyment of the public that is related in some way to agriculture.

3.2.2 *hayride attraction, n*—an experience in which passengers board a wagon or trailer, typically a wagon filled with straw or hay, and are taken on a set course.

4. Significance and Use

4.1 The purpose of this standard practice is to delineate requirements regarding the design, operation, maintenance and inspection of hayride attractions with the primary purpose of entertainment, recreation or agritourism.

5. Design

5.1 Design requirements for hayride attractions shall be in accordance with Practice F2291-18 as applicable, and the following exceptions and inclusions unique to hayride attractions.

5.1.1 This section establishes information and procedures for the design of hayride attractions and major modifications to hayride attractions.

5.1.2 Hayride attractions are not considered to be Portable Amusement Rides or Devices, and as such are not required to follow requirements specific to Portable Amusement Rides or Devices contained in Practice F2291.

5.2 Adjustments to Terms in Practice F2291-18:

5.2.1 Replace the term “amusement rides and devices” with “hayride attractions”.

5.2.2 Replace the terms “amusement ride or device” or “ride or device” with “hayride attraction”.

5.2.3 Replace the terms “ride analysis” with “device analysis”.

5.3 *Tow Vehicles*—The tow vehicle is used to pull a wagon/trailer that is conveying patrons to, through or from an attraction or over a pathway or trail. The tow vehicle shall have the weight, capacity and traction to be able to control a fully loaded wagon/trailer. All tow vehicles or the wagon/trailer shall be equipped with a fire extinguisher and some form of communication system.

NOTE 1—If the tow vehicle is a tractor, then the weight of the tractor can be increased by adding weight fluid in the rear tires and additional weight on the front of the tractor. If additional weight is necessary, weight should be added according to the manufacturer’s guidelines.

5.4 *Wagons/Trailers*—Since the size and type of wagons/trailers vary, the wagon/trailer being used shall be of the type that the tow vehicle is able to control it on the terrain when fully loaded. Wagons/Trailers shall be constructed to reduce the risk of injury while entering, transporting and exiting the wagon/trailer. Each venue shall determine how its wagon/trailer shall be constructed based upon the particular circumstances of that venue.

5.4.1 All wagons/trailers shall be equipped with a patron barrier or bulkhead that is installed along the side of the wagon/trailer closest to the tow vehicle that will prevent anyone from exiting the wagon/trailer on the side closest to the tow vehicle. The height of the patron barrier or bulkhead shall be a minimum of 18 in. determined by each venue based upon the circumstances of that venue. (See Fig. X1.1.)

5.4.2 All wagons/trailers shall have a tamper-proof locking hitch connecting the wagon/trailer to the tow vehicle. (See Fig. X1.2.)

5.4.3 All wagons/trailers shall have a safety chain or steel cable of appropriate strength installed to connect the wagon/trailer to the tow vehicle. The safety chain/cable shall be attached with a tamper-proof locking device. The locking device shall be of the type that it cannot accidentally become detached. (See Fig. X1.3.)

5.5 All wagons/trailers shall be marked with a unique identifiable feature so that it easily can be identified. Examples

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

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include but are not limited to, numbers, letters, symbols or colors. (See Fig. X1.4.)

5.6 *Gates*—If the wagon/trailer has attached steps or an opening in the raised sides for means of loading/unloading, a gate or other means of a patron barrier is required. The need for a gate and the type of gate and possible locking mechanism will depend upon each venue and the circumstances of that particular venue.

5.7 *Loading/Unloading*—Common methods of loading and unloading wagons/trailers consist of: wagons/trailers outfitted with steps that are attached to the wagon/trailer or use of a loading or unloading dock.

5.7.1 All steps or ramps shall be of appropriate dimensions (height, width, tread and slope) to support the occupancy load of the attraction and provide a method of upward or downward, or both, ingress/egress. Loading docks and ramps shall comply with Practice F2291-18, Section 14 as it applies to steps, handrails and risers. Based upon the unique circumstances of the venue, consideration shall be given to the appropriate landing space required and if any additional features should be implemented, such as handrails or extra traction.

5.7.2 During nighttime operation, the loading and unloading areas shall be illuminated in order to increase patron visibility.

6. Ownership, Operation, Maintenance, Inspection and Training Requirements

6.1 Ownership, operation, maintenance, inspection and training requirements for hayride attractions shall be in accordance with Practice F770-18 as applicable, and the exceptions and inclusions unique to hayride attractions.

6.2 Adjustments to common terms used throughout Practice F770-18.

6.2.1 Replace the term "amusement rides and devices" with "hayride attractions" except for subsection 2.1 of Practice F770-18.

6.2.2 Replace the terms "amusement ride or device" or "ride or device" with "hayride attraction".

6.3 *Loading and Unloading:*

6.3.1 Before loading or unloading, the tow vehicle shall come to a complete stop and be parked in such a way that the tow vehicle will not move while the wagon/trailer is being loaded or unloaded. If the average grade of the ground over the combined length of the tow vehicle and wagon/trailer is greater than 2% then the driver shall remain in the tow vehicle while the wagon/trailer is being loaded or unloaded.

6.3.2 Each venue shall determine whether or not it is appropriate to designate an individual to assist patrons who are loading or unloading from the wagon/trailer.

6.4 *Owner/Operator Responsibilities:*

6.4.1 Each owner/operator shall have written operating procedures for the hay ride attraction, which are an integral part of their staff-training program. These procedures shall include, but not be limited to:

6.4.2 Description of the hay ride operation.

6.4.3 Specific duties assigned of each assigned operator(s) and attendant(s) position(s) of the hay ride operations.

6.4.4 General safety procedures.

6.4.5 Instructions on specific procedures to follow in the event of unusual conditions or an interruption of operation including an evacuation plan outlined in 6.13.

6.4.6 Additional instructions, if any provided by the Owner/Operator.

6.5 *Inspection Program:*

6.5.1 *Pre-Opening Inspection*—Owner/operators of hayride attractions shall have an inspection program consistent with the inspections outlined in this practice and Practice F1193-18a.

6.5.2 Prior to allowing patrons onto the hayride attraction, the owner/operator shall conduct or cause to be conducted a daily documented preopening inspection, based on provided instructions, to ensure the proper operation of the hayride attraction. The inspection shall include, but not be limited to, the following:

6.5.3 *Equipment Inspections:*

6.5.3.1 *Tow Vehicles*—All tow vehicles shall be thoroughly inspected prior to seasonal operations and on a daily basis thereafter on operational days. A checklist of this inspection is required with items that are appropriate to the particular venue. Specific items that shall be inspected include, but are not limited to: Fluid levels, tire pressure, tire wear, lug nuts, brakes, bearings, and towing apparatus. (See Table X1.1 and Table X1.2.)

6.5.3.2 *Wagons/Trailers*—All wagons/trailers shall be thoroughly inspected prior to seasonal operations and on a daily basis thereafter on operational days. A checklist is required with items that are pertinent to the particular venue. Specific items that shall be inspected include, but are not limited to: tire pressure and capacity, lug nuts and stairs (if applicable). (See Tables X1.3-X1.8.)

6.5.3.3 If secondary mechanical brakes are used on the wagon or trailer, in conjunction with the tow vehicle, they shall be inspected prior to seasonal operations and on a daily basis thereafter on operational days.

6.5.3.4 Daily inspection reports shall be completed by an individual designated by management for the following: tow vehicle, wagon/trailer and trail/route prior to opening each day.

6.5.4 *Trail Grooming and Inspection*—The trail/route for each attraction shall be inspected prior to the start of the season. Once the season begins, the trail/route for each attraction shall be inspected on a daily basis on operational days and groomed appropriately to eliminate excessive ruts and debris as needed. It is required that a checklist be prepared that incorporates regular inspections and grooming. Specific items for trail grooming and inspection shall include, but are not limited to the following: Identify uneven areas due to erosion, tripping hazards, sink holes and fallen branches. (See Table X1.13 and Table X1.14.)

6.6 *Maintenance of Tow Vehicles and Wagons/Trailers*—All tow vehicles and wagons/trailers shall be maintained on a daily basis on operational days. A checklist is required with items that are appropriate to the particular venue. (See Tables X1.4-X1.8.)

6.7 *Driver Training:*

6.7.1 The Owner/Operator of the hay ride attraction shall verify and document that drivers receive training in accordance with Practice F770-18 and this standard practice.

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6.7.2 All drivers of a tow vehicle shall be properly trained in the operation of that tow vehicle. The appropriate training shall be determined by each venue based upon the circumstances of that venue. If a venue operates when it is dark, additional training for the drivers operating at night shall be implemented based upon the circumstances of that particular venue.

6.7.3 Each venue shall implement rules for all drivers that are appropriate for that venue. (See Table X1.11 and Table X1.12.)

6.8 *Driving Speeds*—All tow vehicles shall be operated at a speed that is appropriate for that venue. All drivers of the tow vehicles shall receive training before operating the tow vehicle with a loaded wagon/trailer. The training shall instruct the driver as to what speeds are appropriate along the trail/route of that particular venue.

6.9 *Operating on Non-Private Roads:*

6.9.1 The tow vehicle and each wagon/trailer shall possess the following: operable hazard signal lights; a yellow revolving, flashing or strobe light visible from any direction and reflective edge marks or lights to identify the outermost edges of the rear, front and sides of the wagon/trailer when operating on a non-private road.

6.9.2 Each venue that has a hayride attraction requiring travel on, over or across a non-private road or public right of way, shall determine if any jurisdictional permits are necessary and what additional safety features, if any are required.

6.10 *Communication System*—Each venue shall have a communication system in place that is appropriate for the particular venue. The communication system may provide communication between members of the venue that shall include the tow vehicle operators, chaperones on the wagon/trailer (if applicable), set actors, management, security and medical personnel.

6.11 *Emergency Access*—Each trail/route shall be designed in such a way as to accommodate emergency vehicles. Event staff, medical personnel and security shall be trained so as to be familiar with the trail/route and able to direct emergency vehicles to a particular location along the trail/route.

6.12 *Emergency Response/Evacuation:*

6.12.1 Event staff, medical personnel and security shall be trained on the procedure to be followed to evacuate the trail/route because of a medical emergency, weather conditions or any other emergency safety reason. An emergency evacuation plan shall be provided and shall include, but not be limited to: Ingress and egress of emergency vehicles, safe unloading procedures of wagons/trailers while on the trail and communication procedures between staff. (See Table X1.15.)

6.12.2 It is recommended that each venue develop an emergency response plan with the local fire, and or law enforcement or medical authorities, or both.

6.13 *Attendant/Actor Safety:*

6.13.1 The owner/operator of the hay ride attraction shall verify and document that attendants and actors receive training in accordance with Practice F770-18 and this standard practice.

6.13.2 All employees/actors shall receive proper training before they are allowed to work at the hayride attraction. It is recommended that written guidelines be prepared for this purpose with rules that are developed by each venue. These written guidelines shall be distributed to each employee/actor before they are allowed to work at the attraction.

6.13.3 Critical training items shall include, but not be limited to: Driver training, loading and unloading, vehicle training, emergency response, evacuation training, medical emergency response and communications etiquette. (See Table X1.15.)

6.14 *Patron Education (see Fig. X1.5 and Fig. X1.6):*

6.14.1 Instructions, when required by the manufacturer, owner or operator concerning hay ride rules shall be delivered to patrons prior to participation on the hay ride attraction.

6.14.2 Instructions may be delivered to patrons using video, audio, or computer based programs, prerecorded spiel, written document, signage, verbal instruction or other delivery method approved by the owner or operator.

6.14.2.1 An appropriate patron educational sign shall be posted in a conspicuous location of the waiting line, visible to the patrons before boarding the wagon/trailer. This sign shall include, but not be limited to the following, as applicable: Stay seated at all times; No smoking on or near the wagon/trailer at any time; No lighters on or near the wagon/trailer at any time; No touching actors, patrons or props at any time.

6.14.3 The owner/operator shall convey to participants the substance of the patron responsibility requirements found in 6.15.

6.15 *Patron Responsibility:*

6.15.1 As specified in Section 9 Patron Responsibility of Practice F770-18, the following instructions outline requirements as applicable to hay ride attractions and include requirements not specified in Practice F770-18 which are necessary and unique to hay ride attractions.

6.15.2 There are inherent risks in the participation in or on any hay ride attraction. Patrons of a hay ride attraction, by participation, accept the risks inherent in such participation of which the ordinary prudent person is or should be aware. Patrons have a duty to exercise good judgment and act in a responsible manner while riding on the hay ride and to obey all oral or written warnings, or both, prior to or during participation, or both.

6.15.3 Patrons have a duty to not participate in or on any hay ride attraction when under the influence of drugs or alcohol.

6.15.4 Patrons have a duty to properly use all hay ride attraction safety equipment provided.

6.15.5 Patrons have a duty to not participate in or on any hay ride attraction if they have preexisting medical conditions that could be exacerbated by participating in the attraction.

6.15.6 Patrons have a duty to conform with or meet height, weight, or age restrictions imposed by the manufacturer or owner to use or participate in the hay ride attraction activity.

6.16 *Incident Reports:*

6.16.1 As specified in Section 10 Classification Injuries and Illnesses of Practice F770-18, the following instructions outline requirements as applicable to hay ride attractions and

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include requirements not specified in Practice F770-18 which are necessary and unique to hay ride attractions.

6.16.2 Medical incident reports shall be filled out by a person who is trained in the completion of incident reports, and witness statements, including patrons and staff, prior to leaving the venue on the day when the incident occurred. (See Tables X1.19-X1.21.)

6.17 *Signage/Rules*—Before, during, or shortly after patrons are loaded on the wagon/trailer, the applicable rules shall be announced to the patrons. (See Fig. X1.5 and Fig. X1.6.)

7. Keywords

7.1 actor; agriculture; agritourism; family entertainment center; farm; haunted attraction; haunted hayride; hayride; hayride attraction; inspection; maintenance; operation; paintball; pumpkin patch; recreational equipment; tow vehicle; tractor; trailer; wagon; wagon/trailer

APPENDIX

(Nonmandatory Information)

X1. OPTIONAL INSTRUCTIONS AND GUIDANCE

X1.1 These appendixes have been added to propose a series of options or instructions that offer direction without recommending a definite course of action. The purpose is to offer guidance based on a consensus of viewpoints, but not to establish a standard practice to follow in all cases. The intent is to increase the awareness of the user concerning available information within a given subject area, while providing information from which subsequent programs may be derived.

X1.2 *Appendix Table of Contents*—See below.

Item #	Description	Exhibit
1	Patron barrier or bulkhead	Fig. X1.1
2	Devices to lock wagons/trailers to tow vehicle	Figs. X1.2 and X1.3
3	Slow moving vehicle signage and wagon identification numbers	Fig. X1.4
4	Rules for patrons	Figs. X1.5 and X1.6
5	Annual tow vehicle checklist	Tables X1.1 and X1.2
6	Annual wagon/trailer checklist	Table X1.3
7	Daily tow vehicle and wagon/trailer maintenance checklist	Tables X1.4-X1.8
8	Driver Tests	Tables X1.9 and X1.10
9	Driver rules	Tables X1.11 and X1.12
10	Trail grooming and inspection checklist	Tables X1.13 and X1.14
11	Hayride emergency evacuation plan	Table X1.15
12	Actor guidelines	Tables X1.16-X1.18
13	Medical incident report	Tables X1.19-X1.21

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FIG. X1.1 Patron Barrier

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FIG. X1.2 Locking Hitch Pin

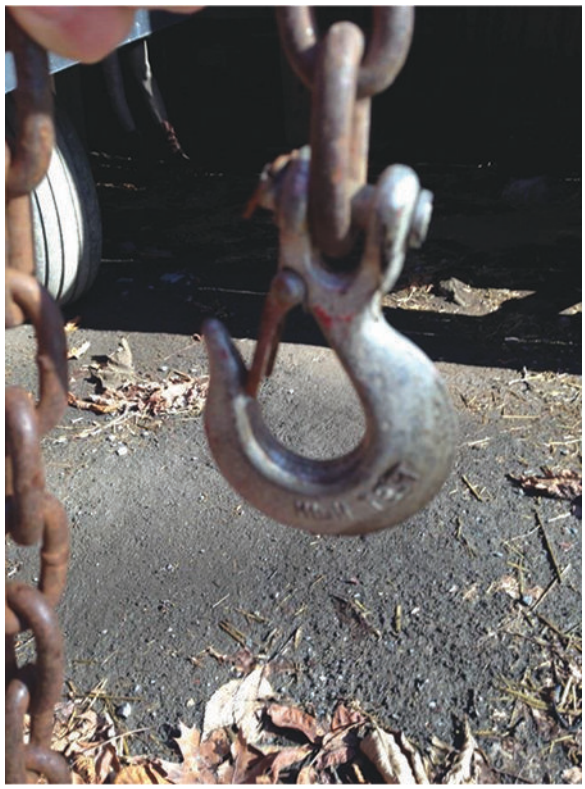

FIG. X1.3 Locking Safety Chain

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NOTE 1—Note the Slow Moving Vehicles markers and wagon identification numbers.

FIG. X1.4 Sample Slow Moving Vehicle Signage

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FIG. X1.5 Sample Safety Rules for Patrons

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