



Designation: ~~F770–21~~ **F770 – 21a**

Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices¹

This standard is issued under the fixed designation F770; 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 provides guidelines for operations, maintenance, and inspection procedures for amusement rides and devices to be performed by the owner/operator.

1.2 *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.*

1.3 *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

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

3. Terminology

3.1 *Definitions:* [/catalog/standards/astm/fa8f6587-4af2-4751-982f-d26f8a2182eb/astm-f770-21a](https://catalog/standards/astm/fa8f6587-4af2-4751-982f-d26f8a2182eb/astm-f770-21a)

3.1.1 *owner/operator, n*—person or organization that is responsible for the maintenance and operation of an amusement ride or device.

4. Significance and Use

4.1 The purpose of this practice is to delineate information and to establish procedures for the operation, maintenance, inspection, and training for amusement rides and devices.

5. Owner/Operator's Responsibility

5.1 The owner/operator shall develop a program with necessary tasks to operate and maintain the amusement ride or device. The program shall include but not be limited to:

5.1.1 An operations program as outlined in Section **56**;

¹ This practice is under the jurisdiction of ASTM Committee **F24** on Amusement Rides and Devices and is the direct responsibility of Subcommittee **F24.40** on Operations. Current edition approved ~~May 15, 2021~~ Sept. 1, 2021. Published ~~June 2021~~ October 2021. Originally approved in 1982. Last previous edition approved in ~~2019~~ **2021** as ~~F770–19~~ **F770 – 21**. DOI: ~~10.1520/F0770-21~~ **10.1520/F0770-21A**.

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.

- 5.1.2 A maintenance program as outlined in Section 67;
- 5.1.3 An inspection program as outlined in Section 78, and
- 5.1.4 A training program as outlined in Section 89.

6. Operations Program Requirements

6.1 *Operating Document*—The owner/operator shall prepare an Operating Document for each amusement ride or device based on the recommended instructions and specifications provided by the manufacturer. This Operating Document shall be made available to each amusement ride or device operator and attendant. The Operating Document shall include but not be limited to:

6.1.1 Specific amusement ride or device operation policies and procedures with pertinent information from the manufacturer's instructions, including, but not limited to:

6.1.1.1 Description of the amusement ride or device operation;

6.1.1.2 Specific duties of each assigned operator(s) and attendant(s) position(s) of the amusement ride or device;

6.1.1.3 General safety procedures;

6.1.1.4 Instructions on specific procedures to follow in the event of unusual conditions or an interruption of operation, including an Evacuation Plan outlined in 5-26.2, and

6.1.1.5 Additional instructions from the owner/operator.

6.2 *Evacuation Plan*—The owner/operator shall have and maintain an evacuation plan for each amusement ride or device.

6.2.1 The owner/operator shall consider:

6.2.1.1 Standard load/unload area evacuation as the preferred protocol;

6.2.1.2 Amusement ride or device manufacturer's recommendations;

6.2.1.3 Conditions of the environment that could impact an evacuation;

6.2.1.4 Personnel responsible for performing an evacuation;

6.2.1.5 Notification and cooperation with the outside agencies and entities intended to participate in an evacuation;

6.2.1.6 Identification and location of equipment to support an evacuation;

6.2.1.7 Equipment that may be required to communicate with riders during an evacuation process;

6.2.1.8 Access and egress requirements for personnel and equipment to evacuate the amusement ride or device;

6.2.1.9 Actions required prior to evacuation to prevent inadvertent motion of the amusement ride or device, vehicle(s), carrier(s) and surrounding equipment in the evacuation pathway;

6.2.1.10 Order or sequence of evacuation to evacuate riders efficiently and safely;

6.2.1.11 An appropriate means of egress for evacuees;

6.2.1.12 Removal of riders unable to assist in their own evacuation because of disability, medical condition or other reasons, and

6.2.1.13 Procedures for arranging medical assistance as required during an evacuation.