Designation: F747 – 23

Standard Terminology Relating to Amusement Rides and Devices[1]

This standard is issued under the fixed designation F747; 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 terminology is a repository of terms approved by Committee F24 and its subcommittees. Reproducing terms approved within all other individual F24 standards and guides, this terminology will provide a single location where terms related to amusement rides and devices are freely accessible to the public, committee members and can be maintained, updated and utilized as effective communication tools. Although published alphabetically, terms unique to a specific F24 standard or guide are indicated as such by the reference which follows the applicable term.

1.2 *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]

F2375 Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions

F2376 Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems

F2959 Practice for Aerial Adventure Courses

F2970 Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts

F3168 Practice for Hayride Attractions

3. Terminology

acceleration, impact—those accelerations with duration of less than 200 ms.

acceleration, sustained—those accelerations with duration greater than or equal to 200 ms.

accepted engineering practice—that which conforms to accepted principles, tests, or standards of nationally recognized technical or scientific authorities.

aerial trekking course—self-guided aerial adventure course containing elements intended to be obstacles. **F2959**

agritourism—the act of conducting an activity for the enjoyment of the public that is related in some way to agriculture. **F3168**

air-supported structure—an amusement device that incorporates a structural and mechanical system and employs a high-strength fabric or film that achieves its strength, shape, and stability by pretensioning with internal air pressure, all of which are intended to provide an enclosed area for the self enjoyment of those so confined within.

aliasing—a phenomenon associated with sampled data systems, wherein a signal containing significant energy at frequencies greater than one half of the system sample frequency manifests itself in the sampled data as a lower frequency (aliased) signal. Aliasing can be avoided only by limiting the frequency content of the signal prior to the sampling process. Once a signal has been aliased, it is not possible to reconstruct the original signal from the sampled data.

amusement railway ride—an amusement ride that may have multiple vehicles (for example, locomotive(s), coach(es), etc.) linked together, at least one of which has on board mechanical propulsion that has an on board operator(s), utilizing flanged wheels on railroad type rails with a gauge of 12 in. or greater, that is insular to national regulations, which is designated by the Designer/Engineer as an amusement railway ride.

amusement ride or amusement device—a device or combination of devices or elements that carry, convey, or direct a person(s) over or through a fixed or restricted course or within a defined area, for the primary purpose of amusement or entertainment.

assembly area—a designated area primarily used for mounting or dismounting the trampoline court. **F2970**

[1] This terminology is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.20 on Specifications and Terminology.

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[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.

calibration constant—the arithmetic mean of the sensitivity coefficients, evaluated at frequencies that are evenly spaced on a logarithmic scale between FL and FH.

calibration value—the ratio of the reference calibration system output, in engineering units relevant to the transducer, to the data channel output, in volts, as measured at constant excitation frequency and amplitude.

canopy tour—aerial adventure course which provides patron access to the canopy of a forest. **F2959**

carnival—a mobile enterprise principally devoted to offering amusement or entertainment to the public in, upon, or by means of portable amusement rides or devices or temporary structures in any number or combination, whether or not associated with other structures or forms of public attraction.

challenge course—guided aerial adventure course containing elements intended to be obstacles. **F2959**

channel frequency class (CFC)—a frequency response envelope that conforms to Fig. 1 and is referred to by the value FH in hertz. The CFC frequency response envelope is defined by the boundaries shown in Fig. 1 and the following characteristic frequencies:

F_L—Pass band lower limit (hertz). Always equal to zero (0.0) hertz.

F_H—Pass band upper limit (hertz). The CFC designator.

F_N—The corner or knee of the frequency response envelope. Always equal to or greater than 1.667 × FH.

F_S—The minimum sample frequency for a sampled data system that corresponds to the designated CFC. Always equal to or greater than 12 × FH.

DISCUSSION—FL, FH, FN, and FS are always specified in hertz. While the characteristics of the CFC may be applied to individual components of a data channel, the CFC is, by definition, the frequency response envelope of the entire data channel from the mounted transducer to the final representation of the acquired data.

children zone—a trampoline court, an area within a trampoline court, or an area adjacent to a trampoline court designated by the designer/engineer, manufacturer, or owner/operator primarily for use, activity, entry, or dismount by young children. **F2970**

concession go-kart—an amusement ride or device, which meets all of the following specifications: the device is a single vehicle, unattached to other vehicles or a common frame system, which is powered without connection to a common energy source, which is driver controlled with respect to acceleration, speed, braking, and steering, which operates within the containment system of a defined track, and which simulates competitive motor sports, which is used by members of the general public for a fee. A concession go-kart has a maximum capacity of two persons and no cargo capacity.

DISCUSSION—This definition specifically excludes similar go-kart devices that are intended for use as competitive (racing) karts or similar go-kart devices intended for ownership and use by private owners. This definition specifically excludes devices, such as electronically or rail guided amusement rides and bumper cars or other similar amusement motor sports devices that operate under circumstances where there is no defined direction of travel.

concession go-kart attendant—the person or persons whose duties may include but are not limited to the instruction, dispatch, and limitation of ride duration of persons driving concession go-karts.

containment system—a device installed on the concession go-kart track, which defines the boundaries of the track, and whose primary purpose is to contain the vehicles within the defined boundary.

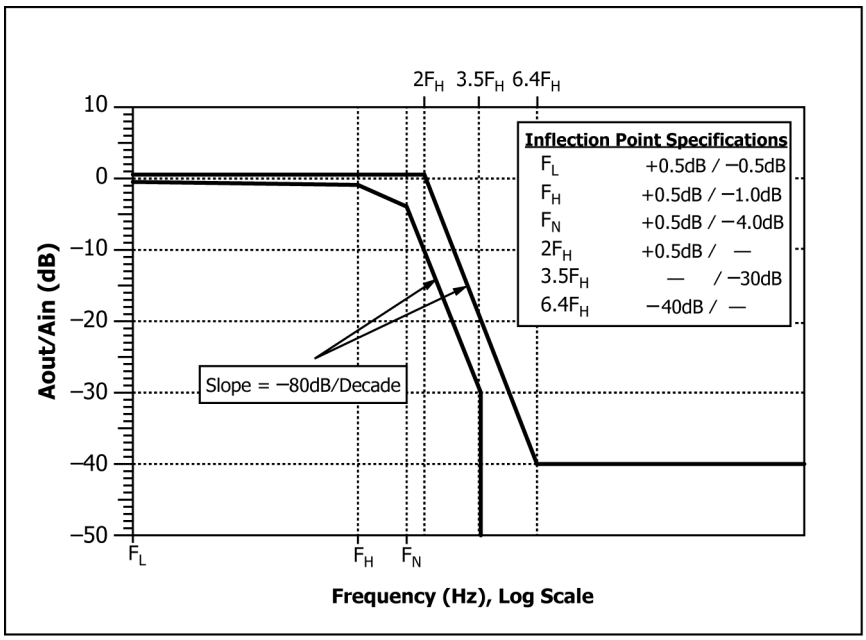

FIG. 1 Frequency Response Envelope