



Designation: F3099 – 23

Standard Practices for Parasailing¹

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1. Scope

1.1 This practice provides guidelines and procedures for the operation, maintenance, and inspection of parasail vessels, equipment, and associated activities including crew training and flying patrons aloft in a parasail.

1.2 *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.

1.3 *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.*

1.4 *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

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

2.2 *Federal Regulations:*³

46 CFR Part 16 Chemical Testing

46 CFR Part 175.400 Definition of Terms

3. Significance and Use

3.1 The purpose of this standard is to establish procedures for water based parasailing activities.

¹ This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.65 on Parasailing.

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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.

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

4. Weather Monitoring and Limits

4.1 Vessels used for parasailing operations shall be equipped with a weather monitoring device.

4.1.1 It is acceptable for the device to be fixed or portable, provided it is accessible by the vessel Master at the vessel's operating console.

4.1.2 The device shall be electronic with a visual display.

4.1.3 In restricted locations such as manmade lakes, it is acceptable for the weather monitoring device, under 4.1, to be located within the immediate proximity of the operating area provided it is continually monitored by a company employee available to provide updated weather information to the vessel Master via radio or cellular phone. The location of the wind measuring device shall be selected to best represent conditions for the parasailing operation.

4.1.3.1 A VHF radio, alone, is not acceptable for weather monitoring.

4.2 The vessel Master shall check and remain cognizant of current and forecasted weather conditions for the area of operation and account for the weather conditions for the duration of the parasail set (the "onboard" group of patrons on a parasail vessel).

4.2.1 The vessel master shall visually monitor the wind speed, wind direction, and sea conditions during parasailing operations.

4.3 *Weather Log*—The vessel Master shall maintain a weather log.

4.3.1 Log entries shall include: wind direction, wind speed, wave height, and sky conditions. A sample weather log is provided as enclosure (see **Appendix X1**).

NOTE 1—It is acceptable for a weather log to be in any format with the weather information recorded manually or electronically.

4.3.2 A legend shall be provided for any coded or abbreviated log entries.

4.3.3 Log entries shall be recorded directly by the vessel Master or may be relayed to another crewmember aboard or company employee ashore for permanent recording.

4.3.4 Weather conditions shall be recorded by the vessel Master at the start of the day and prior to each parasail set.

4.3.5 Weather logs and the recorded data shall be retained for a minimum of 1 year on board the vessel or on the premises of the place of business.

4.3.6 The weather log shall be made available for inspection by the Authority Having Jurisdiction (AHJ) when requested.

4.4 *Weather Limits:*

4.4.1 Parasail operations shall not be conducted when the current observed weather conditions in the area of operation include:

4.4.1.1 Sustained wind speed greater than 20 mph (9 m/s) measured from the vessel in the intended flight zone using a commercially available wind speed gauge (anemometer).

4.4.1.2 Ground visibility due to rain or heavy fog less than 0.5 miles (0.80 km).

4.4.1.3 Thunder Storm detected by weather device within 7 miles (11.3 km).

4.4.1.4 Wind gust with a differential greater than 15 mph (6.7 m/s) of the current sustained wind.

4.4.1.5 Wind gust exceeding 25 mph (11 m/s) from the vessel in the intended flight zone.

4.4.1.6 Operating less than 500 ft (152 m) from the base of any cloud.

4.4.1.7 Rain observed in the intended flight zone for more than 5 min.

4.4.2 Parasail operations, suspended as a result of weather conditions exceeding the parameters enumerated in 4.4.1 or 4.4.3, shall remain suspended for a minimum of 30 min and will not resume until weather conditions are checked and recorded in the weather log.

4.4.3 It is acceptable for regions affected by prevailing trade winds to operate exempt from 4.4.1.1 and 4.4.1.5 provided that 4.4.3.1 and 4.4.3.2 are met:

4.4.3.1 The sustained wind direction is offshore for the Parasail operation, and

4.4.3.2 The parasail equipment in use is sufficiently rated by the manufacturer for the wind conditions measured from the vessel in the intended flight zone using a commercially available wind speed gauge (anemometer).

4.4.4 *Sea Conditions:*

4.4.4.1 Parasail operations in lakes, intercostal areas, and rivers shall not be conducted when the wave height exceeds 3 ft (0.9 m).

4.4.4.2 Parasail operations offshore and in open waters shall not be conducted when wave heights exceed 4 ft (1.2 m) unless the period and wave height are within the following formula: 3 s period for each 1 ft (0.3 m) of wave height (for example, 15 s period = 5 ft (1.5 m) wave height).

4.4.4.3 In no case shall parasail operations be conducted in weather conditions that exceed the manufacturer's specified limitations for the equipment in use.

4.4.5 The vessel Master shall be responsible for assessing local weather conditions and determining if the weather conditions are within acceptable limits.

5. Equipment

5.1 *Materials and Manufacture:*

5.1.1 All parasail equipment in use, including but not limited to parasail canopies, parasail harness, or passenger bars, shall be properly designed for parasail operation. The equipment shall be used in accordance with the manufacturer's recommendations and limits.

5.1.2 Vessels used for parasail operations shall be specifically built for parasail operation.

5.1.3 Parasail equipment shall be operated, stowed, inspected and maintained in accordance with the manufacturer's recommendations. Equipment found in substandard condition shall be removed from the vessel for repair or destruction.

5.1.4 Parasail towlines shall be braided with a minimum rated tensile strength of not less than 6000 lb (27 000 N).

5.1.5 Parasail towlines shall not exceed the maximum length recommended by the towline, winch, or parasail equipment manufacturers or 1200 ft (365 m), whichever is shorter.

5.1.6 Parasail towlines shall be replaced annually or when showing signs of excessive wear such as diameter changes, broken filaments, abrasion, sun exposure damage (fading), signs of overlooking (appears to be fuzzy), guide equipment etc. Do not use if evidence of excessive wear, deterioration or damage is observed.

5.2 *Equipment*—The following equipment shall be available onboard the vessel:

5.2.1 Weather monitoring equipment in accordance with 4.1,

5.2.2 Primary anchor,

5.2.3 Secondary anchor or equivalent device to augment the primary anchor,

5.2.4 Hydraulic parasail winch,

5.2.5 Hydraulic parasail winch brake,

5.2.6 Level-wind system or equivalent device to ensure even pay out and take up of towlines of greater than 300 ft (91 m) in length,

5.2.7 Parasail deflating/arresting device,

5.2.8 Boat hook with a minimum reach of 10 ft (3 m),

5.2.9 Knife capable of cutting towline,

5.2.10 Parasail including canopy, harness,

5.2.11 A United States Coast Guard approved Type III lifejacket, or equivalent approved life jacket by authority having jurisdiction (AHJ), sized for all patrons going aloft,

5.2.12 A first aid kit that complies with USCG or local authority requirements, and

5.2.13 A marine VHF radio as required by the AHJ.

5.3 *Maintenance and Inspection:*

5.3.1 *Maintenance:*

5.3.1.1 The vessel owner shall implement written maintenance and inspection procedures for the vessel and the parasail equipment including but not limited to: vessel propulsion & auxiliary machinery, communications, navigation, firefighting equipment, lifesaving equipment, structural integrity of the hull and load path affected by parasail operations, and all associated equipment used for parasailing (that is, parasails, harnesses, towlines, etc.).

5.3.1.2 Maintenance of the winch system shall be done in accordance with the manufacturers guidelines.

5.3.1.3 Inspections and maintenance activities shall be recorded in a maintenance log (see 5.3.4).

5.3.2 *Pre-Flight Inspections*—The parasail harness webbing/stitching, passenger bar, canopy, shroud lines, yoke, and towline shall be visually, and to the extent possible, physically inspected by a qualified crewmember, as described in Section 8, prior to each day's parasail activities.