



Standard Practices for Parasailing¹

This standard is issued under the fixed designation F3099; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This standard provides guidelines and procedures for the operation, maintenance, and inspection of parasail vessels, equipment, and associated activities including crew training and flying passengers 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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *Federal Regulations*:²
46 CFR Part 16 Chemical Testing

3. Significance and Use

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

4. Weather Monitoring and Limits

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

4.1.1 The device may 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, the weather monitoring device, under 4.1, may be located within the immediate proximity of the operating area provided it is continually monitored by a company employee available to

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.

Current edition approved Sept. 1, 2014. Published September 2014. DOI: 10.1520/F3099-14.

² 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>.

provide updated weather information to the vessel Master via radio or cellular phone.

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 passengers on a parasail vessel).

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](#)).

4.3.2 A weather log may be in any format with the weather information recorded manually or electronically.

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

4.3.4 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.

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

4.3.6 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.

4.3.7 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.

4.4.1.2 Ground visibility less than 0.5 miles.

4.4.1.3 Thunder Storm within 7 miles.

4.4.1.4 Wind gust with a differential greater than 15 mph of the sustained wind.

4.4.1.5 Wind gust exceeding 25 mph.

4.4.2 Parasail operations, suspended as a result of weather conditions exceeding the parameters enumerated in 4.4.1, shall remain suspended for a minimum of 30 min. Parasail operations may resume only after a minimum of 30 min have elapsed

from the last monitored weather condition that exceeded the thresholds listed in 4.4.1.

4.4.3 Regions effected by prevailing Trade Winds may operate with an additional 5 mph allowance to the sustained wind speed provided that:

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 for the wind conditions.

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.

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

5.1.2 Vessels used for parasail operation shall be purpose 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 toelines shall be braided with a minimum rated tensile strength of not less than 4800 lb (2177 kg).

5.1.5 Parasail toelines shall not exceed 1200 ft in length.

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 toelines of greater than 300 ft in length,

5.2.7 Parasail deflating/arresting device,

5.2.8 Boat hook with a minimum reach of 10 ft,

5.2.9 Knife capable of cutting toeline,

5.2.10 Parasail including canopy, harness, and

5.2.11 A United States Coast Guard approved Type III lifejacket, or equivalent, sized for all passengers going aloft.

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, chutes, harnesses, toelines, etc.).

5.3.1.2 All 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 and toeline shall be visually, and to the extent possible, physically inspected by a qualified crewmember prior to each day's parasail activities.

5.3.3 *Periodic Inspection:*

5.3.3.1 Parasail harness, passenger bars, and canopies shall be sent to the manufacturer every year to be overhauled and inspected. The manufacturer shall provide a letter or certification of the equipments' inspection and endorsement for subsequent use. This maintenance shall be recorded in a maintenance log (see 5.3.4).

5.3.3.2 A qualified vessel crewmember (see 7.2.1.3) may conduct periodic inspections as specified in 5.3.3.1, in lieu of the manufacturer inspection. The periodic inspection shall be documented and recorded as specified in 5.3.3.1.

5.3.4 *Record Keeping:*

5.3.4.1 The vessel owner shall maintain a log or otherwise record all maintenance and inspections performed on the vessel and its equipment.

5.3.4.2 Record keeping shall include the date the maintenance/inspection was performed and the name of the qualified individual or company who performed maintenance/inspection.

5.3.4.3 Recorded data shall be retained for a minimum of 3 years on board the vessel or on the premises of the place of business. It is recommended that records be maintained for the life of the equipment which would exceed 3 years (for example, parasail vessel, winches, and larger equipment).

5.3.4.4 The maintenance records shall be made available for inspection by the Authority Having Jurisdiction (AHJ) when requested.

6. Operations

6.1 *Pre-Flight Operations:*

6.1.1 Crewmembers shall ensure passengers are properly fitted with a lifejacket prior to flight.

6.1.2 Crewmembers shall ensure passengers are within the manufacturer's minimum and maximum load capacity for the parasail equipment in use.

6.1.3 Crewmembers shall ensure passengers are properly fitted into the parasail harness. Harness waist strap shall be placed around the passenger's waist, not the lifejacket.

6.1.4 Vessel Master shall confirm that weather conditions are within the limits specified in 4.4.

6.2 *Flight Operations:*

6.2.1 Parasail operations shall be limited to flight not exceeding 500 ft above ground level.

6.2.2 For offshore wind conditions, maintain a minimum 1000 ft distance from shore.

6.2.3 For onshore wind conditions, maintain:

6.2.3.1 1000 ft distance from shore for wind speed of 0 to 5 mph.

6.2.3.2 1000 ft + 1 times the towline length from shore for wind speed of 6 to 10 mph.

6.2.3.3 1000 ft + 2 times the towline length from shore for wind speed of 11 to 15 mph.

6.2.3.4 1000 ft + 3 times the towline length from shore for wind speed 16 to 20 mph.

6.2.4 For enclosed waters (lakes, bays, sounds, etc.), the vessel Master shall operate so as to maximize the distance of the parasail to the surrounding shoreline given the prevailing weather conditions such that the riders will experience a water landing should they experience a towline separation.

6.2.5 *Dipping*—If part of the flight involves dipping the passengers in the water, the following shall apply:

6.2.5.1 The vessel owner shall establish written procedures for dipping passengers. These procedures shall address vessel speed, controlling rate of descent, controlling level of passenger immersion in the water, and maximum duration of immersion.

6.2.5.2 Passengers shall not be more than 150 ft from the vessel when being dipped.

6.2.5.3 The vessel owner shall establish training requirements for dipping passengers and ensure this training has been conducted and recorded for the crewmembers conducting this activity.

6.2.6 *Towline Care:*

6.2.6.1 Should the towline come in contact with saltwater, it shall be rinsed with freshwater as soon as practicable but no later than at the conclusion of the day's parasail operations.

6.2.6.2 When not in use, towlines shall be stored in a dry, covered environment away from direct sun exposure.

6.2.6.3 The bitter end of a towline shall be trimmed to whatever following criteria is most frequent: the manufacturer's specification, a minimum of 12 in. every 100 flights or a minimum of 12 in. every 30 days. The trimmed piece shall be labeled with the date trimmed and vessel name and retained aboard the vessel or on the premises of the place of business until the existing towline is permanently removed from service. Trimming of the bitter end shall be recorded as part of the maintenance log in accordance with 5.3.4.

6.3 *Emergency Procedures:*

6.3.1 The vessel owner shall establish emergency procedures to include but not limited to:

6.3.1.1 Fire,

6.3.1.2 Sudden or heavy weather,

6.3.1.3 Man overboard,

6.3.1.4 Water landings,

6.3.1.5 Towline separation to include arresting of the parasail canopy and retrieval of riders in the water with the canopy attached.

6.3.2 The Emergency Procedures shall be posted or readily available onboard the vessel.

6.3.3 The vessel owner shall ensure that drills and training for crewmembers in the emergency procedures listed in 6.3 are conducted at regular intervals.

6.3.3.1 The vessel owner shall document the date and time of all emergency drills are conducted along with the names of crewmembers participating in accordance with 7.2.2.

7. Crew Requirements

7.1 *General:*

7.1.1 A parasail vessel shall be manned with a minimum of two crewmembers (Master + 1 Deckhand) while conducting Parasail operations.

7.1.2 A minimum of one crewmember onboard shall be certified and current in an accepted course of standard First Aid including Adult-Child-Infant cardiopulmonary resuscitation (CPR). Accepted courses shall include nationally recognized and accredited training courses that issue course completion documents.

7.1.3 All crewmembers as defined in 7.1.1 shall be enrolled and participating in an approved drug testing program in accordance with 46 CFR Part 16 or equivalent program.

7.2 *Crewmember Training:*

7.2.1 The vessel owner shall establish a crewmember training program that includes, but is not limited to:

7.2.1.1 Vessel familiarization, inspection, and maintenance,

7.2.1.2 Emergency procedures listed under 6.3,

7.2.1.3 Parasail equipment familiarization, inspection, maintenance, and stowage,

7.2.1.4 Passenger pre-flight instructions, preparations, and checks,

7.2.1.5 Parasail launch, flight, and recovery operations,

7.2.1.6 Flight monitoring.

7.2.2 The vessel owner shall maintain a record of drills and training conducted for all crewmembers to document and verify crewmember proficiency with the requirements listed in 7.2, 7.3.3, and 7.4.2. Training entries shall include the date, description, crewmember, and signature verification of the qualified individual supervising and/or conducting the training and/or drill. Vessel owners may review and use crewmember held training logs, as specified in 7.3.4 and 7.4.3, to verify crewmember proficiency with the requirements of 7.2, and the required number of flight rotations as specified in 7.3.3 and 7.4.2.

7.3 *Master:*

7.3.1 The Master shall be familiar with all applicable State and local rules and regulations governing parasailing.

7.3.2 A Master shall read and become familiar with all aspects of this ASTM standard and review it on an annual basis.

7.3.3 A Master shall qualify for conducting parasail operations by demonstrating proficiency in the items listed within 7.2 and completing a minimum of 500 flight rotations, under the direct supervision of a qualified Master, prior to serving as a qualified Master aboard a parasail vessel.

7.3.4 To prove proficiency in conducting parasailing activities, a Master should maintain a log of their training, to include review of this ASTM standard, and all other parasailing specific training activities. This log shall include a record of

flight rotations, as part of a qualification process, and associated training which shall be verified by the name and signature of the qualified vessel Master or vessel Owner who supervised and/or conducted the training and the date of the training.

7.4 *Deckhand:*

7.4.1 The deckhand's duties and responsibilities shall be to support the Master in the overall operation of the parasail vessel and associated activities.

7.4.2 A Deckhand shall qualify for conducting parasail operations by demonstrating proficiency in the items listed within 7.2 and completing a minimum of 50 flight rotations, under the direct supervision of a qualified Deckhand or Master, prior to serving as a qualified Deckhand aboard a parasail vessel.

7.4.3 To prove proficiency in conducting parasailing activities, a Deckhand should maintain a log of their training and all other parasailing specific qualification activities. This log shall include a record of flight rotations, as part of a qualification process, and associated training which shall be verified by the name and signature of the qualified vessel Master or Deckhand who supervised and/or conducted the training and the date of the training.

7.5 *Record Keeping*—Training records maintained by Vessel Owners and Crewmembers under this section shall be made available for inspection by the Authority Having Jurisdiction (AHJ) when requested.

8. Patron (Passenger) Responsibility

8.1 The owner/operator shall advise patrons of their inherent responsibilities as follows:

8.1.1 There are inherent risks involved in parasail operations. Patrons, 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 properly use all parasailing safety equipment, as instructed by the crew. Patrons have a duty to exercise good judgment and act in a responsible manner while parasailing to obey all oral or written instructions, restrictions, or warnings, prior to and during participation.

8.1.2 Patrons have a duty to not participate when under the influence of drugs or alcohol.

8.1.3 Patrons have a duty to properly use all safety equipment provided.

8.1.4 Patrons have a duty to advise the vessel crew of any impairments or disabilities.

8.1.5 The vessel Master may refuse flying for anyone at any time and for any reason if in their judgement it is not safe to do so (for example, inclement weather conditions, patrons intoxicated, patrons unable/unwilling to follow directions, etc.).

9. Keywords

9.1 crewmember; deckhand; dipping; drills; emergency; equipment; maintenance; master; operations; parasail; passenger bar; training; weather conditions; weather log; weather monitoring device

APPENDIX

(Nonmandatory Information)

X1. EXAMPLE WEATHER LOG

X1.1 See Fig. X1.1.

