US MANTA ASSOCIATION

MANTA WINJAMMER, TWINJAMMER ONE DESIGN CLASS RULES

The purpose of these rules is to maintain the integrity and uniformity of the one design Manta Winjammer and Twinjammer yachts and racing fleets. The premise of one design racing is that the boats are as identical as possible so that only the skill and luck of the pilots will determine the outcome. Each owner is responsible for keeping his or her yachts within these specifications.

FAIR SAILING: THE FUNDAMENTAL RULE

A pilot shall participate in a race only by fair sailing, skill and by individual effort. Any pilot racing found to be in violation **will** be disqualified from the race.

TECHNICAL INSPECTION

Tech inspections shall be avoided whenever possible, it is expected that all pilots will abide by the fair sailing rule and one design doctrine. Tech inspections of a yacht will only occur, at the request of an owner of his or her yacht, or at the request of any sailor participating in a race or regatta. Any yacht found to be noncompliant **will be assessed for penalty and may** be disqualified from the race. A regatta Technical Inspection Committee will be appointed by the Manta Class President or delegate for each regatta.

GENERAL YACHT DESCRIPTION

- 1. Yachts shall be a Manta Winjammer or Twinjammer as manufactured by Manta Products Inc. unless allowed herein.
- 2. Sails and Battens shall be supplied by Manta Products. Sail repairs may be done by anyone, but they may not improve or otherwise modify the sail as supplied by the factory. Battens must be used as supplied by the factory and their shape may not be changed.
- 3. Wheels and bearings to be supplied by Manta Products Inc. or any vender providing wheels and bearings of equivalent size, shape and material.
- 4. Tires to be supplied by any vender, sizes permitted as follows: 5.30-4.50x6, 15-6.00x6, 4.10-3.50x6, or 13-5.00x6. Rear tire maximum height is 15 inches.
- 5. Except as noted below all replacement parts to be supplied by Manta Products Inc.

ALLOWABLE NON FACTORY MODIFICATIONS

A. Replace the topmast plastic with a solid fixed rounded piece, no higher than one inch to allow the mast to slide into the sail pocket with greater ease.

- B. Rear axle may be reinforced with wood, provided the reinforcement is made internally within the factory axle tubing between the axle spindle inserts. Recommended: douglas fir wooden dowel.
- C. Rear axle spindles may be replaced with longer bolts. Beam is not to exceed 86.25" in width for the Twinjammer and 64" width for the Winjammer.
- D. Steering "T" may be moved fore or aft to suit pilots' height, either by the addition of a longer tie rod supplied by Manta Products Inc. or by cutting down the existing stock tie rod.
- E. Steering "T" post may be reinforced from the top of the post to mid frame rail with a steel or aluminum piece of material 16"-18"x1-1/2"

 If the threads are worn in the steering tie rod, a clevis pin (with appropriate pin or locking ring) or a 3/16" bolt (grade 5 or better) with bolt hole center no less than ½" from end of tube may be added to retain the tie rod to the pivot.
- F. One 3" hexaratchet block may be attached to the mast between the boom fork and the base of the mast.

 Twinjammer stock (4) 1-1/2" blocks max., all mounting locations may be upgraded to (4) 2-1/4"Harken #001 or #002 or equivalent.

 Winjammer stock (3) 1-1/2" blocks maybe upgraded to (3) 2-1/4" Harken #001 or #002 or equivalent.
- G. Seat and seat tube padding may be added, but the seat position, size or angle shall not be altered in any way.
- H. Trampoline may be supplied by Manta Products Inc. or the trampoline may be reinforced or replaced by any fabric suitable for the purpose, provided that the reinforcement or replacement does not alter the structure or stiffness of the boat. The replacement trampoline must be no larger than the stock original.
- I. Mechanical batten adjusters are allowed on both the Twin and single. Mechanical adjusters may be purchased from anyone. A batten may be shortened or lengthened to accommodate a particular mechanical adjuster. A hole may be drilled to accommodate a particular batten adjuster. Grommets may be added to a sail at the ends of the batten pockets to accommodate mechanical batten adjusters.
- J. Internal wheel spacers between the wheel bearings are permitted. Wheel washers may be coned to reduce friction.
- K. Manufacturer assigned or US sail numbers at least 8" in height shall be displayed in a legible manner on both sides of the sail. Staggered, with the starboard side higher.
- L. Tell tails, wind vanes, direction indicators and speedometer allowed.

- M. Strut preventer (not adjustable during a race) is permitted to help prevent sail damage.
- N. The mast sections may not be modified in any way except as follows: a wood dowel placed internally extending up from the base maximum length 8 feet is allowed to help keep the mast mid-section from failing. Alternately, short pieces of aluminum tubing, less than 20 inches in length, maybe internally placed at the base/mid-section joint to provide strength and reduce failing.
- O. Yacht and sail graphics in the bottom panel only. Except for a sail makers standard slicker or insignia, advertising shall not be allowed.
- P. The A frame supports and boom may be reinforced with internal wooden dowels.

OTHER RULES

- 1. The carrying of a co-pilot or ballast is optional. However, a co-pilot or ballast shall not be added, deleted or changed during a regatta.
- 2. All pilots shall wear a fastened seat belt, hard shell helmet and eye protection at all times during racing.
- 3. When, during the course of a race, a yacht has come to a complete stop, a pilot may restart his yacht by using his/her foot to push up to 3 (three) times in succession. The yacht must then come to a complete stop before the pilot can push again.
- 4. All NALSA racing rules not in conflict with these rules apply.

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