

- used on either side, opposite the boom, or with the boom. (New US SAIL Rules, 1994)
9. **Mainsheet:** All parts of the mainsheet shall lead between the boat and a block or blocks on the boom any distance up to and including 36" in front of the black band. A "head knocker" is permitted. A traveler is permitted, but it must be located no further forward than the same 36" in front of the black band.
 10. **Safety:** A suitable anchor, line, paddle, bailing device, and boarding ladder shall be aboard. A suitable lock pin to prevent accidental retraction of the keel in the event of a knockdown or capsize shall be on board. Bunk cushions supplied by the manufacturer or cushions equivalent to them may be on board, but not required when racing during a sanctioned regatta. These requirements may be waived by local fleets only by procedure outlined in By-Laws Article VI.
 11. **Personal Equipment:** A PFD for every crew member and a type IV throwable device is required on board at all times.

3.5 Article V: Sails.

1. **General:** San Juan 21's may carry mainsail, jib, genoa, and spinnaker, as shown in the sail plan and as herein specified when racing in Class Association races. Only two suits of working sails with genoa and spinnaker will be approved for use by a contestant in National Regattas.
2. **Mainsail:**
 - a. The mainsail shall be attached to the mast and boom by arrangement of its boltrope (or slugs attached thereto) in the grooves of the spars. Loose-footed mains are prohibited.
 - b. Luff and foot measurements shall be controlled by the band system.
 - c. **Sail measurements** shall be made with sufficient tension to draw the cloth smooth and taut. The **leech chord**, measured from the aft corner of the headboard, shall not exceed 24 feet 6 inches. The girth, is measured at 90 degrees to the luff chord, at 6 feet 0 inches, and 12 feet 0 inches down from the head. At 6 feet 0 inches down from the head, the girth will not exceed 3 feet 11 inches. At 12 feet 0 inches down from the head, the girth will not exceed 6 feet 3 inches. All measurements will include the boltrope.
 - d. Battens shall divide the leech chord into equal sections with 2-inch tolerance to avoid seams on all but the top batten. The aft top corner of the top batten pocket will be a minimum of 56 inches from the aft corner of the headboard. Maximum batten lengths are: upper - 24 inches, two middle and lower - 36 inches.
 - e. Hollows in leech between battens are not to exceed 3/4 inches in roach.
 - f. Headboards shall be triangular, with the upper side of the triangle not exceeding 4 inches in length.
 - g. The mainsail shall be made of 3.5 oz. or heavier woven material. Mylar or other film construction is prohibited.
 - h. A Cunningham or sail control grommet is permitted.
 - i. **A reefing zipper** on the mainsail is not permitted to be used while racing. Roller, slab or jiffy reefing is allowed.
 - j. Windows in the mainsail are permitted.

3. Jib:

- a. The dimensions of the jib, measured with sufficient tension to draw the sailcloth and luff tapes smooth and taut, edge of cloth to edge of cloth projected, shall not exceed the following: LUUFF, 20 feet 0 inches; LEECH, 18 feet 3 inches; and FOOT, 9 feet 0 inches.
- b. The jib shall be made of a 3.5 oz. or heavier woven cloth material. Mylar or other film construction is prohibited.
- c. Jib foot roach must be a fair continuous curve.
- d. Windows are permitted.
- e. Battens are prohibited.

4. SPINNAKER:

- a. The spinnaker shall be made of a .6 oz. or heavier, nylon or polyester material.
- b. Spinnaker sheet fittings may be placed at any position on the deck, but not so as to extend outboard of the deck.
- c. Maximum dimensions of the spinnaker, measured with sufficient tension to just pull wrinkles out, shall not exceed the following: FOOT CHORD, 13 feet 10 inches; LUUFF CHORD, 22 feet 6 inches; MIDGIRTH, 13 feet 10 inches. Mid-girth is found by dividing the luff in equal parts, then measuring the width of the sail at that point. Maximum foot roach is 8 inches.
- d. Luff lengths must be no more than 2 inches different in length.
- e. Maximum width of headboard is 5 inches.

5. GENOA JIB:

- a. The Genoa shall be made of 3.5 oz or heavier woven material. Mylar or other film construction is prohibited.
- b. The dimensions of the Genoa, measured with sufficient tension to draw the sail cloth and luff tapes smooth and taught, edge of cloth to edge of cloth projected, shall not exceed the following: LUUFF, 22 feet 3 inches; LEECH, 20 feet 6 inches; FOOT, 12 feet 2 inches.
- c. Windows are permitted.
- d. Battens are prohibited.