

# CAPRI 14.2

# Capri 14.2 National Association Ed Jones, Secretary

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Website - www.capril4.org

# CAPRI 14.2 HANDBOOK

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- Officers and Fleets
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- Parts List

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# CAPRI 14.2 RULES CHANGES, Revised 10/12/02

#### **DEFINITIONS**

The Skipper - Add at end: (Not necessarily the helmsperson.)

- 2.18 After "clothing" add: and lifejackets
- 2.6 New wording, to follow existing wording: Any helmsperson who has placed in one of the top two positions in Silver division in a Capri 14.2 National Championship Regatta must compete in the Gold division in subsequent National Championship Regattas if competing as the helmsperson.
- 2.8 Change to read: Hiking straps shall not be modified to facilitate quick changes to strap length while underway. (Changed 8/20/00)
- 3.3.1 Change to read: The mast shall be a non-tapering aluminum alloy extruded section as provided by the class builder.
- Add: 3.3.2.1 A padeye and an additional jamcleat may be added to the lower part of the mast to control the cunningham line.
- Add: 3.3.4.1 Hardware may be added to the boom to provide a 2:1 (maximum) mechanical ratio for the outhaul. (Changed 1/15/98)
- Add: 3.3.11 Control lines, sheets, and halyards may be of any diameter and any material except wire.
- 3.3.6 Change to read: A whisker pole 7' 8" between the clip eyes shall be permitted using plastic and/or metal parts for the end fittings. Pole materials shall be aluminum alloy tubing up to 1 1/4" in diameter.
- 3.4.1 Change third sentence to read: Sailcloth shall be Dacron only, except for the jib window.

#### 3.5 OPTIONS

- I. Change to read: Window in jib. To be made of a non-woven material (i.e., mylar or plastic). A single window or multiple windows may be used. Total window area not to exceed 7 square feet.
- Add: P. Centerboard adjustment line. Plastic handles may be added to the ends of the line.

# **CAPRI 14.2 CLASS RULES AND SPECIFICATIONS**

#### **PURPOSE**

The following class rules and specifications are for the purpose of promotion and maintaining the Capri 14.2 as a strict one-design class racing sailboat, and to control development and modifications to the hull, rig, sail and other component parts after initial delivery of the complete boat from the class builder.

#### INTENT

It is the sole intent of these rules to guarantee, within human potentials, equality of each participating boat and placing the responsibility for successful, competitive racing on the abilities of the individual skipper and crew.

#### APPLICATION

Each fleet will have absolute authority over rules used in their own regattas. The local Fleets may chose to follow the Capri 14.2 National Association Rules for their local events. However, this is not a requirement. National Association Rules will be in force for regional and national events.

#### 1 ELIGIBILITY

- 1.1. Eligibility to sail in a National Association sanctioned race, or series, shall be subject to the following:
  - (a) Owner of a Capri 14.2 (at least 50 % ownership is required). Purchasing a Capri 14.2 immediately before the event and selling it immediately thereafter is expressly prohibited.
  - (b) Immediate family members of an owner (see part a).
  - (c) Non-owners who have sailed in at least 3 separate Capri 14.2 regattas since the prior National Championships.

#### 2 GENERAL SAILING RULES

- 2.1 A Capri 14.2 may be co-skippered in a regatta. In the event that a Capri 14.2 is co-skippered in a regatta both skippers shall meet the criteria outlined in Section 1. The roles may shift as often as after each race in the event.
- Sail, mast, boom, rudder or centerboard shall not be changed during the entire series except in instances of damage and with the approval of the race committee, or Association.

- 2.3 If a skipper withdraws from a sanctioned race, or series, the boat shall also be withdrawn.
- 2.4 It is required that two persons are to be sailing the Capri 14.2. A Capri 14.2 need not have the same non-skipper crew for every race in a regatta.
- 2.5 Sanctioned races may be sailed in two (2) divisions at the discretion of the race committee or regatta committee, provided that each subdivision shall consist of not less than three (3) boats. If the minimum entry limit is not met for each subdivision, all boats shall race as one division (see Special Limitations for National Championship).
  - (a) Sub-divisions for National Championships shall consist of not less than five (5) boats each.
- 2.6 The National Championship Regatta may be sailed in two (2) divisions: Championship and Silver division, provided minimum entry limits are satisfied (Rule 2.5.a). And, if satisfied, each division shall be established based upon final point standings of a special qualifying series prior to the championship series. The resulting top 50 % of the fleet shall make up the Championship division, and the balance of the fleet shall compete in the Silver series. In the event minimum number for two divisions are not met (less than 10 boats total) the qualifying series and subsequent Silver series shall be waived and all boats shall compete in the Championship division.
- 2.7 Variations of divisions within a single fleet shall be at that fleet's discretion, except that territorial events greater than one fleet shall be organized and sailed in accordance with Capri 14.2 class rules.
- 2.8 Adjustment of hiking straps shall only be accomplished with approved factory installed hardware. Termination points shall not be altered. No other hiking aids of adjustors are permitted, except padding.
- 2.9 The headstay shall be properly attached to the upper and lower terminal points while racing and shall not be adjustable while racing. Use of supplemental devices, lines or fittings to increase or decrease headstay tension while racing is not permitted.
- 2.10 Use of elastic, cord or strap, shall be limited to the following:
  - (a) Support of hiking straps (not as extensions thereof).
  - (b) Tiller minder (tiller to hiking straps).
  - (c) Forepeak hatch holder.
  - (d) Securing personal gear.
- 2.11 Beaching rudders shall be secured in a "full down" position at all times while racing.

- 2.12 The centerboard shall be a factory supplied board.
- 2.13 Centerboard slot (with board in place) shall not be closed or restricted while racing.
- 2.14 The forepeak hatch shall be in place and latched while racing.
- 2.15 A bow painter shall be attached to the stem head fitting and shall not be less than six (6) feet in length.
- 2.16 Skipper and crew shall wear, or carry within the boat, personal floatation gear while racing.
- 2.17 A competitor shall not wear or carry any clothing or equipment for the purpose of increasing his weight.
- 2.18 Skipper and crew combined minimum weight with normal sailing clothing shall not be less than 300 lbs. Weight shall be added at the keelson in the forepeak compartment to make up any weight deficiency.

#### 3 CLASS SPECIFICATIONS

#### 3.1 GENERAL

For the purpose of these specifications, the following statement shall apply in relation to deviations from the standard boat as produced by the authorized class builder, or builders, from molds, patterns, materials and component parts approved by the designer and Association.

"Unless specifically stated as allowable or permitted within these rules, deviation from original configurations, materials, dimensions, locations, component parts, fitting, hardware, or control systems, as stipulated within the rules and shown on class specifications Drawings 1 through 4, are not permitted."

- 3.0.1 The Capri 14.2 racing sailboats shall be produced from molds, patterns, materials and component parts, fittings and hardware approved by the designer.
- 3.0.2 The Capri 14.2 racing sailboat shall be produced only by a builder, or builders, approved by the designer and the class Association.
- 3.0.3 In the event that hardware on the Capri 14.2 becomes worn or damaged, it shall be replaced either by factory equipment or by hardware of similar material, form, fit and function from another supplier. It is acceptable to switch from a plastic cleat to a metal cleat if its shape is similar.

#### 3.1 HULL - COMPLETE

3.1.1 The hull, deck assembly, and centerboard trunk shall be molded fiberglass construction and shall conform to the designer's specifications as adopted

- and approved by the Association. A fiberglass cutty insert in the deck assembly is permitted.
- 3.1.2 The complete hull shall include all fitting, hardware, and component parts as shown on class specification Drawing 1, and location of same shall conform to specific locations as shown.
- 3.1.3 Replacement of fittings, hardware, and/or component parts shall be only as the original boat was shipped from the factory, or designated changes by the designer and builder, or as allowed by Section 3.0.3.
- 3.1.4 Additional devices, control systems, or cleatage, supplementing of standard items shall not be permitted.

#### 3.2 RUDDER AND CENTERBOARD

- 3.2.1 The rudder and centerboard shall be provided by the authorized class builder and shall be produced from approved molds and materials of the designer.
- 3.2.2 The cross-sectional shape of the rudder and centerboard shall not be altered. Below the hull leading, trailing, and lower tip edges may be faired to eliminate construction joints, General fairing for elimination of highs and hollows is permitted provided the cross-sectional shape is not altered and shall conform to specifications per Drawing 2. Centerboard stops shall not lower board more than plumb to the hull at the forward edge.
- 3.2.3 The tiller shall be wood construction with an extension length that is optional.

#### 3.3 MAST, BOOM, AND RIGGING

- 3.3.1 The mast shall be non-tapering aluminum alloy extruded section as provided by the builder. The mast shall be extruded from builder's die only.
- 3.3.2 Mast dimensions, hardware, fitting, and locations thereof shall conform to the builder's specifications Drawing 3.
- 3.3.3 The boom shall be an aluminum alloy section as provided by the class builder.
- 3.3.4 Boom dimensions, fittings, hardware, and location thereof shall conform to the builder's specifications Drawing 3.
- 3.3.5 General sail control systems, mainsheet, vang, cunningham, and outhaul shall conform to class specifications. No other hardware, fittings or control systems are permitted.

- 3.3.6 A whisker pole 7-8" long between the clip eyes shall be permitted using only factory furnished ends. Pole materials shall be aluminum alloy tubing up to 1 1/4 " in diameter.
- 3.3.7 A black band on the boom 8' 6" from the aft edge of the mast shall determine maximum outhaul position of the edge of the mainsail. Black bands on the mast are placed 17' 3" apart and shall not be exceeded by the head or edge of the mainsail foot.
- 3.3.8 Running rigging shall not be replaced by wire. Wire may only be used on the clew of the jib where the whisker pole is attached.
- 3.3.9 With the exception of the length and diameter of the line, the traveler shall not be changed from the factory design. The traveler shall only be adjusted by shifting the knots. This precludes all rapidly adjustable travelers.
- 3.3.10 The spreaders shall be either 14 or 19 inches in length as indicated in Drawing 3. Shroud length may be altered to accommodate one or the other spreader length but shall not exceed 15' 8 3/4" as specified in Drawing 4.

#### 3.4 SAIL

- 3.4.1 Capri 14.2 sails shall be produced by a sailmaker recognized by the National Association. "Recognition" shall be attained by contacting the National Association Measurer so that he/she can ascertain that the sails will be constructed in accordance with the class specifications. Sailcloth shall be sailmakers yard Dacron 3.8 oz. minimum weight. For sails produced by non-recognized sailmakers, the local fleet measurer shall determine the acceptability of the sails for use in a local fleet regatta.
- 3.4.2 Sail material and configuration shall be in strict accordance with class specification Drawing 4. Alteration of a sail, except for repair purposes, is prohibited. A sail may be subject to measurement or general inspection before or after a sanctioned race or series at the discretion of the Association or race committee.
- 3.4.3 The class emblem and number shall be affixed on both sides of the sail while racing. Upon winning fleet or national championship, a chevron with the year directly below may be placed upon both sides of the sail. Placement and color of all emblems, numbers, and awards shall be in accordance with class specifications. A chevron and two numbers of the championship year can be placed above the C-14.2 emblem. Gold color for the national champion and blue color of the fleet champion.

#### 3.5 OPTIONS

The following options are approved for sanctioned Capri 14.2 races:

A. One (1) paddle.

- B. Bailing scoop, can or hand held pump.
- C. Tel-tales; ribbons, mast-head fly.
- D. Ratchet block for mainsheet type optional
- E. Compass.
- F. Beaching rudder.
- G. Whisker pole 7' 8" eye to eye.
- H. Material and size of mainsheet and jib sheet control lines optional.
- I. Window in sail, per specification Drawing 4.
- J. Metal or plastic jamb cleat jaws.
- K. Pop, or quick release, pins for vang, headstay, and mainsheet connection to hull assembly optional.
- L. Snap shackle at clew outhaul, 2" maximum length. Use of snap shackle shall not relieve responsibility to limit inboard travel of the clew as shown in specification Drawing 3.
- M. Foam flotation in mast.
- N. Anchor.
- O. Protest flag.
- 3.6 No other options or changes are permitted by the Class Association or builder.

# Interpretations

The following interpretations of the Class Rules and Specifications have been made by the Board of Directors as provided under Article III, Section D of the Constitution and By-Laws.

1) Section 1 - Eligibility. A sailing club or other such organization that owns one or more properly registered Capri 14.2s and holds a current membership for each may be represented in a National or Regional championship regatta by its own members acting as skipper and crew. The non-owner skipper requirement (Section 1.5.c) shall apply as well as the other eligibility requirements. The club shall not enter more boats in any event than for which they have current registrations and memberships.

#### Notes

#### Sail Measurements:

Mid-girth measurement procedure: (1) Fold sail so that head and tack measuring points are together - mark mid-point on luff. (2) Place head and clew measuring points together - mark mid-point on leach. (3) Measure girth between mid-point marks.

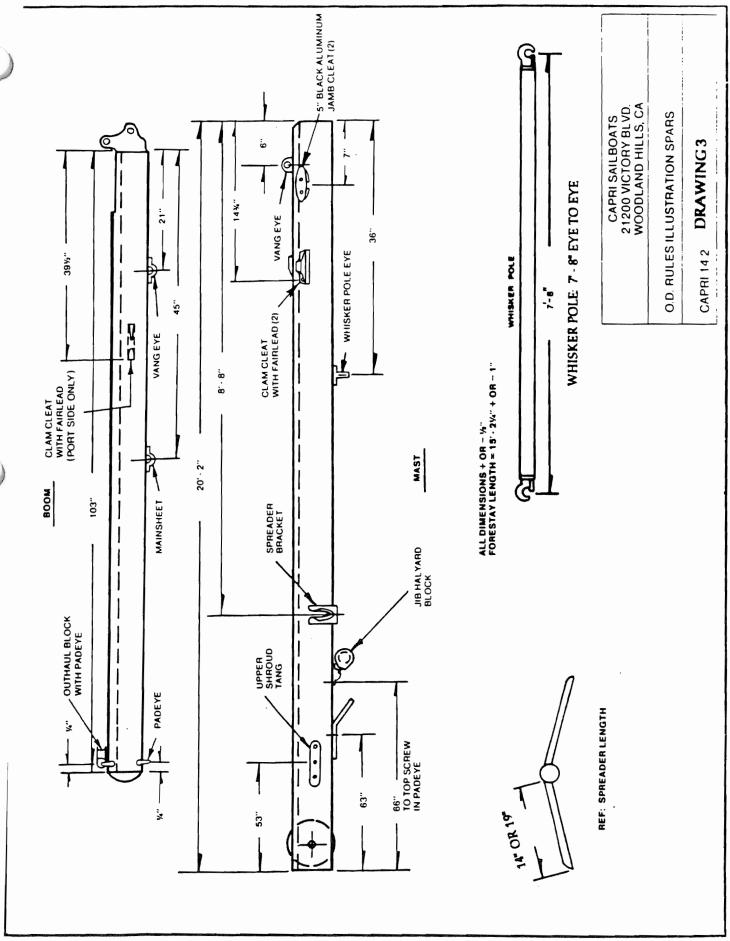
Upper quarter-girth measurement procedure: (1) Fold sail so that head measuring point and luff mid-point are together - mark quarter-point on luff. (2) Place head measuring point and leach mid-point together - mark quarter-point on leach. (3) Measure girth between quarter-point marks.

41%" ± 1/3" 12%" 17%" ± %" 000

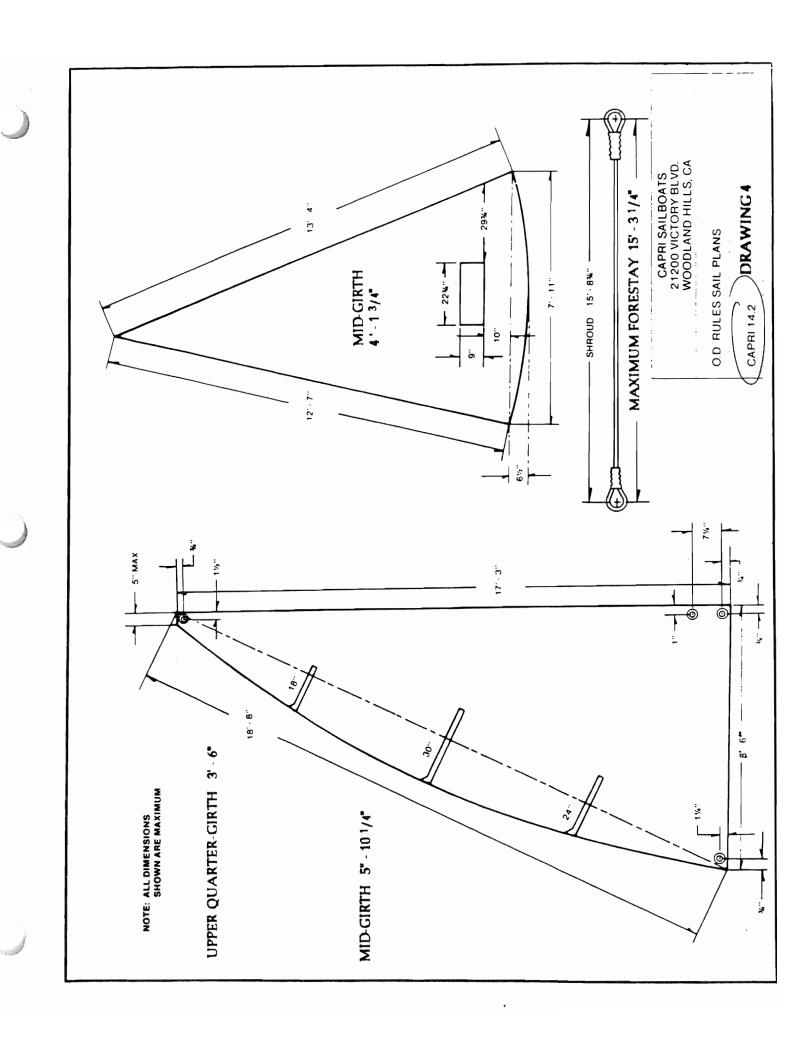
CAPRI SAILBOATS 21200 VICTORY BLVD. WOODLAND HILLS, CA

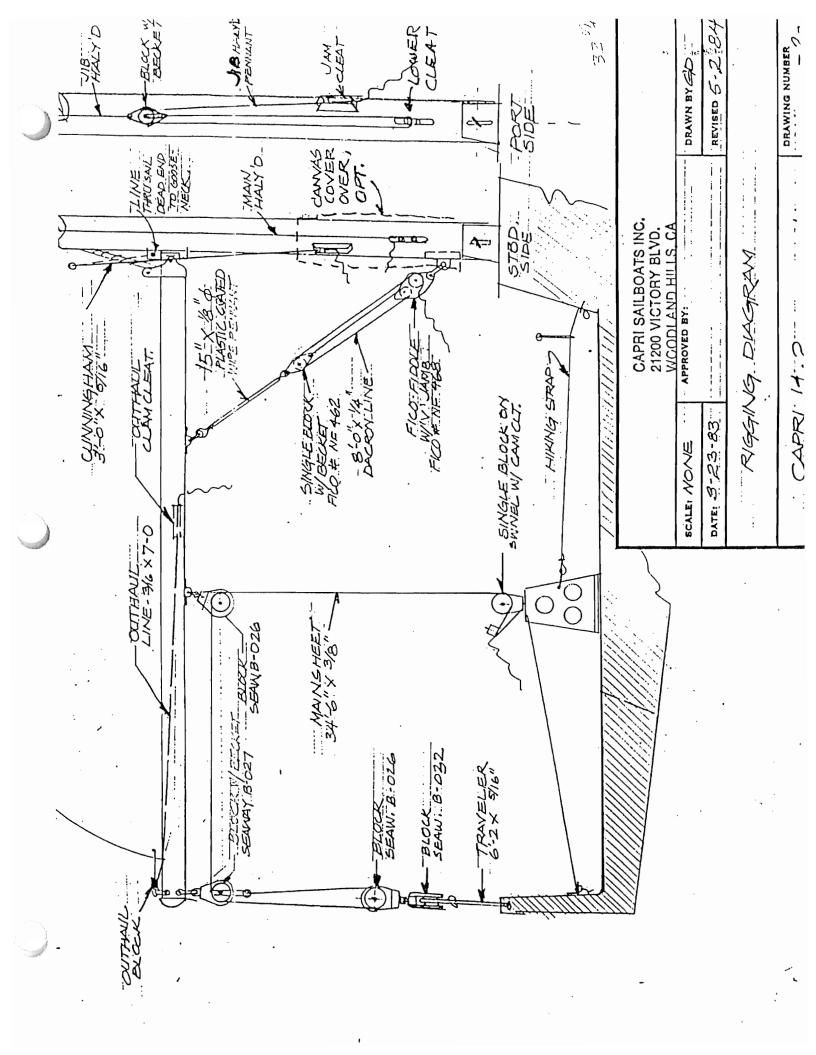
O.D. RULES ILLUSTRATION RUDDER AND KEEL

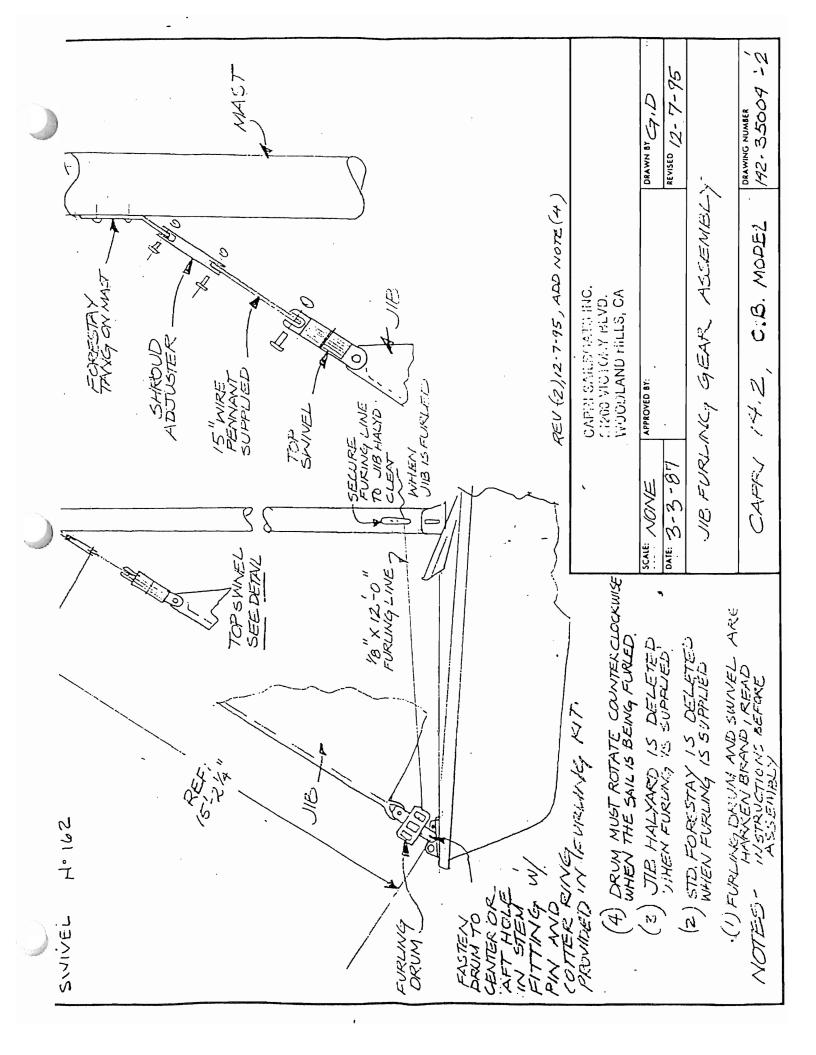
**DRAWING2 CAPRI 14.2** 



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	ITEM LENGTH	FURLING TIB //- 3"	FURL 1146, 518 12'-0"	VANGPENNANT 1'- 3"	54R0UD 15'-7"	FORESTAY 15'- 214"	FURLING SIB 13-6"	JIBHALME- 13 -0"	JIB HALTO: W/BLOCK 14'- B"	MAIN HALYBED 42'-0"	MAN/SHEET 34'-6"	JIBSHEET 38 '-O"	TRAVELER 7'- 6"	OUTHAUL 7'-0"	BOOMVANGE 9'-3"	C.B. CONTROL 9'- 0"	C.B. HOLD DOWN 4'-0"	CLINNINGHAM 5'-0"	
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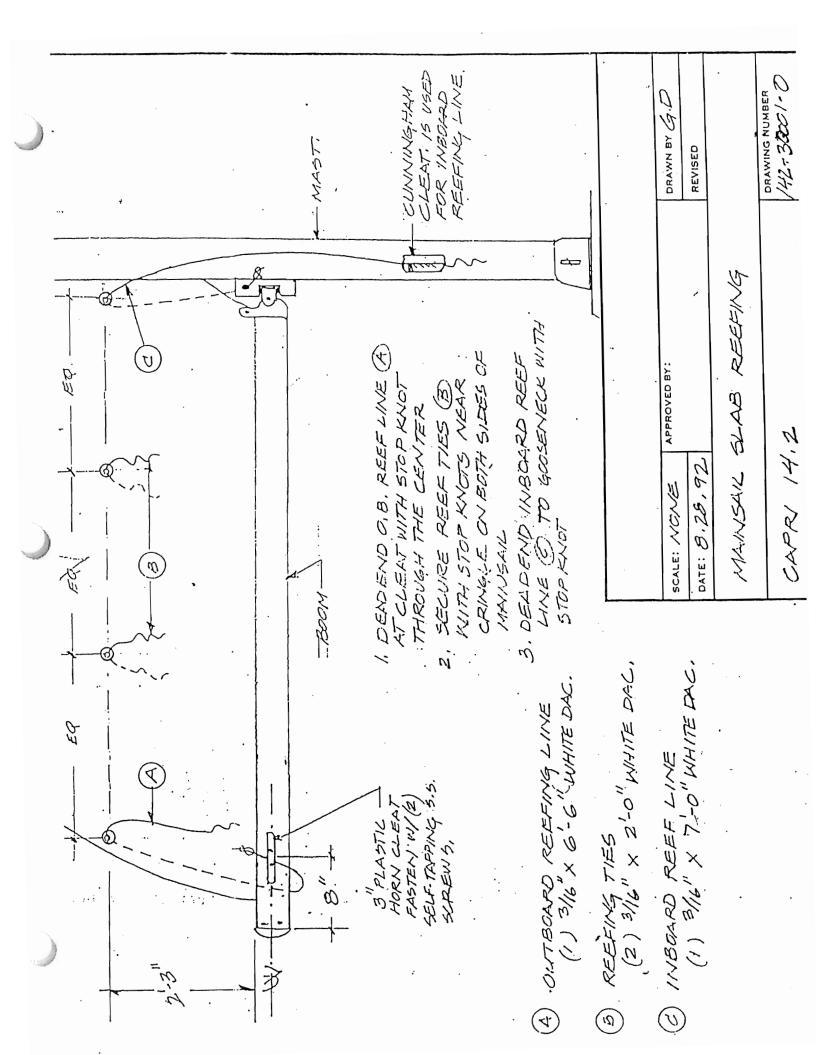
Note: The jib halyard and jib pennant are connected by a becket block.

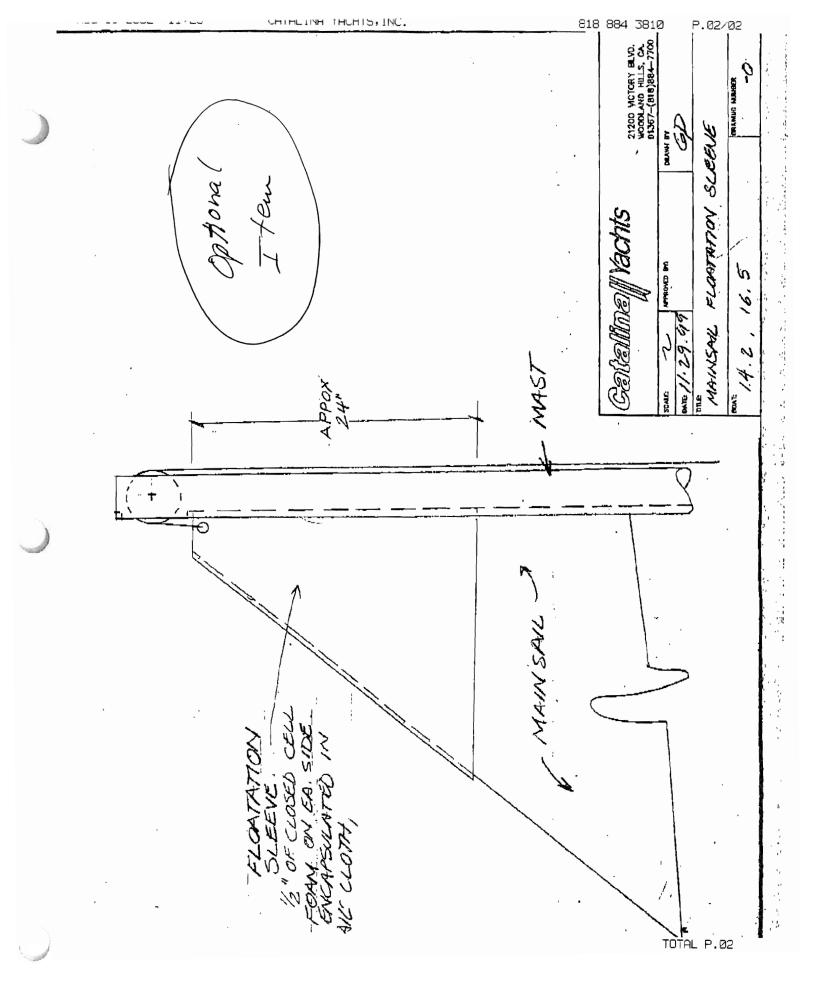
Dimensions are: Jib halyard (w/block) - 14' 8"

Pennant - 14' Diameters for both are 1/4"

Rig as shown in the Rigging Diagram. The pennant goes through the hole in the center of the lower cleat, back up and through the becket block, then down to the jam cleat.

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CAPRI SAILBOATS INC. 21200 VICTORY BLVD. WOODLAND HILLS, CA	APPROVED BY:		RIGGING LENGTHS	Q
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# Capri 14.2 Tuning Guide - Presented by Quantum Sails

At Quantum Sails we test and tinker on a year-round basis in an attempt to improve the speed, durability and ease of use of our sails. And we do our best to share anything we learn with other members of the Capri 14 class. Our goal is to give you the best combination of performance sails and information possible so you can most enjoy the sport of Capri 14 sailing.

Mark Reynolds and George Szabo Quantum Sails 2832 Canon Street San Diego, CA 92106 619-226-2422

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#### I. BOAT PREPARATION

Boat preparation is critical for success in the Capri 14 class. Sails, rigging, hull and blade fairness and mast tuning all share equal importance. Too often these elements are put off until next year, but the reality is that you will not reach your competitive goals until you tackle all these important factors.

#### A. LINE TYPE

The boat comes from the factory with line that is too thick. Almost every adjustment line must be replaced. The following recommendations are for the line size and type that we have found to work best:

- \* Jib halyard purchase, main halyard, outhaul- 3/16" XLS or Pelican
- Jib halyard, main cunningham and traveler- 5/32" Pelican
- Jibsheet- 5/16" Trophy Braid or 1/4" Melges Braid
- Mainsheet- 3/8" Trophy Braid

# **B. PLASTIC CLAM CLEATS**

The Capri 14 has too many of these cleats, which are not very durable and are not suited to handle the line loads on the boat. These should all be replaced with the aluminum version of the same cleat.

#### C. MAINSHEET/TRAVELER

You are encouraged to sail your boat with a single purchase in the mainsheet system. To do so you would remove the traveler block and attach the mainsheet directly to the bridle. This is best done by splicing the mainsheet and traveler together. The single purchase eliminates about 10' of mainsheet line that has to be pulled in at the leeward mark or eased out at the weather mark. There is also that much less line to clutter the floor of the boat. The downside to this system is in high winds, where the power of the 2-1 purchase may be necessary for some to adjust the mainsheet when the loads are high.

#### D. HULL AND BLADE FAIRNESS

Turn your boat over and fill any hollows in the hull. Follow the filling with a full hull sanding starting at 320 and take to at least 1000 grit sandpaper. Using a Teflon-based wax afterwards will seal the fiberglass pores and return the hull's shiny appearance. Occasionally resanding with 600 or 1000 grit and rewaxing may be necessary. A similar process must be done to the rudder and centerboard blades as well.

#### E. COMPASS

A compass is a very helpful aid in determining the favored end of the starting line or for tracking windshifts on the upwind or downwind leg.

#### F. TILLER SLOP

Any tiller slop in the rudder head is distracting and inhibits the need for smooth turning. To eliminate the slop at the tiller/rudder connection, insert shims so the tiller is snug within the rudder head. Though it may be inconvenient, it works well to screw through the rudder head and into the tiller. Also take note of the angle of the tiller as it extends forward from the rudder. It should be either horizontal or angled up slightly, which allows for much easier steering when using either tiller extension or tiller. A properly angled tiller will allow for much easier steering. Adjustments should be made to effect this change if necessary.

#### G. SHROUD TELLTALES

The use of telltales on the shroud will improve your ability to read the wind when sailing downwind. When placed about five feet up from the deck the telltales are high enough to get the true breeze but not so high as to have to strain to look up to them. The mast head fly is another option, though it is difficult to read as it can strain the neck to observe it often.

#### II. RIG TUNE

Tuning the rig for the Capri is fairly simple and can be measured and adjusted quickly. The boat carries the shrouds *very loose*. We have found this to be an excellent compromise for the upwind and downwind needs. After you raise the mast the next step is to check to see if the shrouds are set correctly. The manner in which you measure this is by taking the main halyard shackle and attaching it to the end of a tape measure (at least a 25 footer). Hoist the main halyard all the way up until the shackle is up against the sheave and then cleat it.

#### A. MAST RAKE

The Capri performs best when the mast is set with as much rake as is permitted. It is critical that the actual forestay wire length is as long as the class rules permit (15' 3 1/4" max.) This measurement is taken from the bearing surface of the thimbles at each end. If your forestay is short you must either replace it or increase its length by adding shackles. To achieve the maximum rake setting, place the lower end of the forestay at the very top of the bow adjuster plate.

#### **B. SHROUD TENSION**

It is necessary for the shrouds to be set up fairly loose to allow the mast to rock forward for fast downwind speed. To measure this have someone at the bow pull on the forestay so the mast is "resting forward" against the shrouds. With the mast pulled forward, take the tape measure to the middle of the stern and check the measurement at the top back edge. The desired measurement range is between 21' 10 1/2" - 21' 11". As the vertical holes in the shroud adjuster plates do not offer you the ability to fine tune the shroud length, you will want to place the shroud in the hole that gets you the closest to this measurement.

#### III. SAIL ADJUSTMENT GUIDELINE

The sail adjustments for the Capri 14 all have simple rules to set them correctly. By following these rules, you will be able to set your sails quickly and accurately for each wind condition. These rules will minimize the time spent on sail adjustment, allowing you to concentrate more on the race course and the competitors.

#### A. SAIL ADJUSTMENT FOR THE JIB

# 1. Jib Halyard

Since the rig relies on the forestay to support it, the jib halyard is used to properly maintain the jib's sail shape position through the different wind strengths. The rule to follow is to tension the jib halyard so as to have **very slight** "crows-feet" emitting from the bottom three jib luff snaps (the other snaps will be almost smooth). The stronger the wind, the tighter the halyard will need to be to maintain this trim.

#### 2. Jib Leads

Due to sail size and class rules, your jib leads must be in the maximum forward position all the time. This should not produce any problems as the sail is designed for this consideration.

#### Jib Trim

a. Upwind- The jib is designed to be sheeted quite tight. Since the leads are set very far outboard, it is necessary to trim tightly so the jib has a decent angle to the wind for going to windward. The rule for jib trim depends on the amount of wind, with the jibsheet getting trimmed tighter as the wind increases. Our gauge here is the amount of foot curl in the jib. For very light winds the jibsheet is eased to keep the foot full with no foot curl kicking up. In winds from five to seven knots the foot of the jib should

be barely tight, causing the foot curl to *just* kick up. In medium wind the jibsheet is tight enough to get the foot curl to kick up but without any crease from clew to tack. In strong wind the sail should be sheeted in tight enough to get a slight crease. Too tight would cause the foot to kick up and then reverse, with the foot probably flapping. Older sails will have stretched out along the foot which will allow them to reverse earlier. For older sails, correct trim in heavy wind may have the foot reverse. Regardless of wind strength, the jib should be constantly adjusted to keep pace with the changing wind conditions and boat needs. Ease the jibsheet an inch anytime the boat feels like it needs a power boost. If at top speed, sheeting in tight will give optimum pointing ability. Successfully combining the two is the secret.

b. Reaching- If the wind is light enough to afford the crew's weight to the leeward side, have them hand trim the sail. With the apparent wind back, the lead needs to be both farther forward and outboard than the fixed lead allows. By hand trimming the crew can pull down on the sheet to keep both the upper set and the lower set of telltales flowing. The rules for how far outboard the sail should be held are

less clear. If it is held too far outboard the foot will get too flat and when trimmed from the rail the foot is too full. Your goal is to find an area in between these two extremes which will give the sail moderate foot fullness.

c. Running- As the apparent wind swings aft of the beam the whisker pole must be used to better project the sail. When broad reaching pull the pole back as far as you can without the leech (which now acts much like the luff) collapsing. When running be aware that you can pull the pole back too far. The pole should be pulled back only so far as to place the clew of the jib just behind the bow of the boat. When sailing by the lee pull the pole back a bit farther than this. The goal is to attain maximum projection of the sail.

#### B. SAIL ADJUSTMENT FOR THE MAIN

# 1. Main Cunningham

The main cunningham is adjusted much like the jib halyard. The guide to follow is to tension it just enough so your main has "speed" wrinkles coming out from only the bottom half of the luff (the sail should be fairly smooth above this). The only exception is in winds under five knots where these wrinkles should extend up for most of the luff and in strong winds where the luff should be smooth. These wrinkles come out horizontally from the luff and their size increases at higher wind speeds. As the wind

the changing conditions. A general setting for upwind sailing is to maintain a top batten position that is either parallel or just hooking to weather of the boom. Be aware that in light air the weight of the boom will prevent the top batten from opening. When this occurs you should ease the main out to get the top batten parallel to the centerline of the boat. As the wind builds you will gradually increase mainsheet tension to maintain proper top batten alignment. Many people find that a telltale placed on the top batten is helpful for trimming the main. Though this does not provide a consistent guide, the main does

seem to set well with this telltale on the verge of stalling. In a lull or when you need to increase speed you should ease the sheet and in heavy air or when going fast you should tighten the sheet. Like the jib, the secret to proper mainsail trim is the correct combination of both power and pointing.

b. Offwind- When reaching ease the main out as far as it can go without luffing. When sailing downwind, the main must go out until the boom just touches the leeward shroud. The vang is then used for proper leech trim when reaching and running.

#### 5. Traveler

The goal is to rig the traveler so it enables the boom to be trimmed as close to centerline as is possible when sailing upwind. First, restrict the traveler block's movement by tying it in the middle of the traveler. Next, the traveler bridle height must be set correctly for every given wind strength. Ideally the bridle will be high enough so when the mainsheet is trimmed correctly, the back boom block will be almost touching the traveler block. Since the mainsheet must be trimmed tighter as the wind increases, the traveler height must be reduced. An approximate light air traveler height is 28", which is measured from the top of the stern to the apex of the traveler bridle. You will need marks on the traveler tails so you will have consistent height settings for light, medium and heavy.

# IV. BOAT HANDLING

This section is designed to offer some tips which should help improve your sailing. If you have any ideas to add to this section, please let us know.

#### A. ROUNDING MARKS

# 1. Weather Mark

Listed is the order in how you must approach the sail trim adjustments when rounding the weather mark to go offwind:

increases, you will need to gradually tighten this adjustment to maintain our guide. The important point is to not have it set too tight, which is much worse than having it set too loose. The cunningham should be completely eased when you are reaching or running.

#### 2. Main Outhaul

This adjustment offers you the ability to change the fullness in the bottom half of the sail. When the outhaul is eased the sail becomes fuller and when tightened it becomes flatter. Since this is not an easily changed adjustment, it is important to set it correctly at the beginning of the windward leg.

The rule upwind is to keep the sail as full and powerful as long as you can. For winds below 8 knots, trim the outhaul so the foot wrinkle is just removed. From 8-12 knots tighten it so there is a slight foot fold over the boom and in winds above that trim it even harder for a definite fold over the boom.

Offwind the outhaul is eased so all foot folds are gone, with the sail curving off smoothly from the boom. The outhaul is never eased so much as to have vertical wrinkles coming up from the boom.

# 3. Boomvang

The boomvang is used both upwind and downwind. The vang is used upwind to maintain leech tension when you have to ease the mainsheet in overpowering puffs. Preset the vang for these conditions by sheeting the main in correctly and then taking all the slack out of the boomvang. This way when you dump the main the vang will help keep the boom down and thus prevent the leech from spilling way off. In big breeze you will need to apply slightly more tension than the above rule.

The vang will need to be eased for offwind sailing. When reaching enough vang tension should be applied to keep the top batten parallel with the boom. For running the top batten should be trimmed in the same manner or twisted off a touch. When sailing by the lee adjust the vang so the top batten twists off a few degrees. The boomvang is an important too which must be adjusted constantly as the wind fluctuates in velocity and direction.

#### 4. Mainsail Trim

a. Upwind- The mainsheet is the most important adjustment on the Capri and should be constantly adjusted on all points of sail to keep pace with

- a. Ease boomvang before mark if tensioned hard
- b. Ease mainsheet and jibsheet at mark
- c. Put pole up (if appropriate)
- d. Centerboard up
- e. Check boomvang tension
- f. Main cunningham off
- g. Outhaul off
- Leeward Mark

The order in which you approach the sail trim adjustments when rounding the leeward mark to go upwind is the exact reverse of the weather mark section.

#### B. CENTERBOARD TRIM

Once on a tight reach, the centerboard is needed less as a preventative to slide-slipping and can be raised to eliminate drag. The farther the wind is behind the boat, the higher the board can go. Always try to get the board as high as possible while still having the boat track well. When sailing dead downwind the board should be all the way up. Lower slightly only if you need to turn hard to avoid other boats.

#### C. REFERENCE MARKS

To support the guidelines for sail trim, all the adjustment lines should have reference marks and number scales to allow you to set the adjustments consistently. When you find that you are going fast with the outhaul on #3 in 8 knots of wind you must put it on #3 every time you have the same wind and sea conditions. This system should be used for the halyard on the jib, the downhaul and the outhaul on the main, and the centerboard. Reference marks can also be used on the jibsheet and the mainsheet.

#### D. ROLL TACKING

With the round hull shape and the deep centerboard, the Capri 14 can be very effectively roll tacked. This should be done aggressively, with the crew starting later and rolling longer than the skipper to help kick the bow around to the new tack. The jib is backed just long enough to help the bow through to the new tack. The mainsheet is tightened three inches just

before the tack to help the boat round up. During the tack the mainsheet is eased around six inches and then brought back in once up to speed on the new tack. To correctly steer through the tack, it is important that the tiller is held on to throughout the maneuver.

#### E. CREW WEIGHT PLACEMENT

In light air beating the skipper is sitting on the seat with the jib leads at his back. The crew should be all the way forward on the leeward seat. It is recommended to keep the crew off the leeward deck if possible as this will move their weight too far aft and and offer up too much windage. As the wind builds, the skipper will move to the rail and just behind the jib lead. At the same time, the crew will be moving to windward, ultimately sitting just in front of the skipper. Skipper placement for light air reaching is the same as light air beating, with the crew forward on the leeward seat. As the wind builds both will slide to weather and back, ultimately getting aft to the mainsheet barney post in strong wind. With the pole up, the skipper sits over or just behind the jib lead with the crew forward on the side deck.

#### F. HEEL ANGLE

Upwind the boat is almost always sailed with a slight heel. This makes the boat easier to steer and more forgiving in big shifts. In light air the heel assists in keeping the sails full. Leeward heel also helps the hull get through chop or sloppy seas. Only when there is a very steady breeze and smooth water can the boat be flat. You should sail with a slight heel for light air reaching, but the boat must be flattened quickly in the puffs and then sailed flat once the wind is at seven knots or more. For downwind sailing in very light air, you will want to sail with leeward heel. As the wind builds the boat should be flattened out and then heeled to windward at around eight knots and more.

#### G. STEERING

Regardless of what point of sail you are on, you always want to steer smoothly. Upwind you want to steer so the windward jib telltale is just kicking up but not so the sail is luffing (unless you want to squeeze it up for a quick moment). Upwind and offwind steering must be done in conjunction with boat heel. If you need to head up, heel the boat to leeward. If you need to bear away, flatten or heel the boat to windward. This will limit the amount you will have to turn the tiller, minimizing rudder drag and thus any speed lost by turning.

#### H. SMOOTH TEAMWORK

A factor which contributes to good boat speed is smooth teamwork. Because there are many areas on the Capri which are sloppy (rig, centerboard, rudder, etc.), the less the team does to disturb them the less the boat will slow down. If both skipper and crew move smoothly in the boat, it will keep these areas working for you instead of letting them rob the boat of speed.

We look forward to hearing any input or questions that you may have. Please feel free to contact us anytime. Good luck and good sailing!

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Outboard Motor Options for the Capri 14.2

There are several factors in considering which is the best motor. These are power, weight, cost, shaft length, integral or external fuel tank, gear shift, and 2 or 4 stroke.

Power - In my opinion, 2 hp is more than enough for a 327 lb. Capri 14.2. I once owned a 22' keel boat, weighing in at 2500 lbs, and my 4 hp motor was fine for that. So lets say 2 hp is OK for the Capri.

Weight - Anything under 30 pounds should be easy to mount and unmount.

Cost - For discussion puposes, lets shoot for \$800 or less.

Shaft Length - If you want to mount the motor on top of the transom (see more on this below), then a long shaft (25") is essential. (Shaft length is measured from the top of the bracket to the tip of the shaft.)

Fuel Tank - My choice for simplicity is one with an integral tank, mainly because there's no good place to put an external tank in the Capri 14.2 cockpit.

Gear Shift - Although a shifter is useful, I don't think it's really needed for just a simple, get-me-home motor. This is not a keel boat, where you sometimes must throw a powerful engine in reverse just before crunching a dock. So I say no shifter. Just come up slowly, kill the power, and drift up to the dock. This ain't the Titantic, dude.

Two Stroke or Four Stroke - Definitely four stroke. Have you used one? They're wonderfully smooth, more fuel efficient, quiet, and much less polluting than 2 strokes. And you don't have to mix the fuel.

Da Bottom Line - So let's open the envelope and see which motor meets these criteria. Okay...ta da...the <u>only</u> one is the <u>Honda!</u> (Model BF2) It has 2 hp, four cycles, weighs 27 lbs., has a shaft length of 20" or 25", costs \$809, has no shifter, and has an integral tank.

Motor Mount - What to use? Catalina will sell you a fancy mount, but I don't think it's needed. You can mount the motor on top of the transom, on either the port or starboard side. (Steer with the tiller.) Make sure it's far enough to one side so the rudder can't touch the prop. Only don't clamp the motor right to the fiberglass transom. I'd glue and/or screw a pair of thin (say 3/8" or 1/2" thick) oak pieces to the transom on each side of where the clamps would go. This gives a more secure grip for the clamps and doesn't screw up the fiberglass. The width and height of the oak pieces depends on the motor and clamp configuration, but they will probably end up measuring about 5" x 10".

# Trailering Tips -

Wheel Bearings - Make sure the bearings are packed! It's easy if your wheels have built-in zerk fittings on the hubs. Most do, but if yours doesn't, you can take it to a trailer shop and have them installed. When launching, try to avoid immersing the hubs. But if you do immerse them, shoot some more grease in the bearings ASAP.

Bearing Buddies are a better way to prevent bearing failure and ease bearing maintenance. And they also make it possible to duck the hubs if you need to. They maintain a positive pressure inside the bearing area to prevent the ingestion of water. They also provide a visual indication of the amount of grease in the bearings.

Lug Nuts - They should never be greased. Ever. This can lead to axle stud failure due to high torque or loss of the lug nut. You should check the torque on the nuts annually or more frequently. Never lubricate a vehicle's lug nuts.

Rinsing - You should rinse the trailer in freshwater after each time the trailer is exposed to salt water. Of course, if you have a galvanized trailer this isn't essential, but it can't hurt.

Tie Downs - You can't tie the boat down too much. I use two tiedown straps. One just forward of the jib cleats, another further aft. At the bow, I don't trust the winch rope to hold the boat attached. These can easily break, so I put an extra piece of line from the bow to the vertical post that supports the trailer winch. I also double up on the lines that strap down the mast to its holders.

Boom - A clever way to keep the boom from bouncing around is to turn it upside down, then use the mainsail tack bolt to attach the front of the boom to one of the holes in the mast step. Wrap an old towel around the aft end of the boom to keep it from scarfing up the bottom of the cockpit.

Standing Rigging - Secure it all with tape, etc., so it won't go adrift and drag behind on the pavement! (This happens.)

Lights - Check them before each trip. If they don't work, the bulb contacts are likely rusted. Sandpaper will fix that. Coat the sockets with a dielectric grease. (WD-40 evaporates in minutes, not good.)

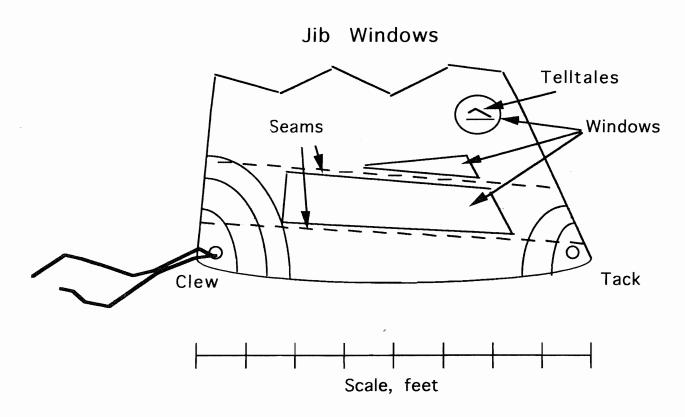
Cover - Don't trailer with the cover on. A 65 mph wind will soon destroy your cover.

Tips - Don't forget the boat is back there! Sounds silly, doesn't it? Only I once did. Then I made too sharp a turn into a driveway with disastrous results.

Ever notice how hard it is to see under or around the jib? The factory jibs have windows that are made to the old Capri 14.2 rules, and are way too small for safety. After many collisions, Rule 3.5, Options, was changed in 1995 to read: "Window in jib. To be made of a non-woven material (i.e., mylar or plastic). A single window or multiple windows may be used. Total window area not to exceed 7 square feet."

Starting from then Southern California racing fleets have transitioned to large jib windows and collisions have dropped markedly. For this reason, new sails made by North, Sobstad, Ullman, and Scott all have large windows. We have encouraged Catalina Yachts to follow suit and hope they will soon do so.

Even if you don't race, there's a good chance of having a collision with the old window design. For a nominal amount, typically \$50 or less, most sailmakers will add a large window to your existing jib. Here's a sketch of the layout used by North:



The width of the window across the bottom is 56 inches. The height on the aft end is 12 inches, and the overall height at the forward end (both upper and lower segments) is 20 inches.

The configuration varies from sailmaker to sailmaker, since each has a different layout with the seams, etc. The reason this window is in two segments is because it was necessary to have a seam right where we wanted the window.

The diameter of the telltale window is 8 inches. This is a handy addition, since it makes it easy to see what the outside telltale is doing. But be sure to use different color telltales! (I use green and red.)

Ed Jones

Say Goodbye to the Jibcar Blues - Here we're using the term "jibcar" to mean the entire assembly, including the part that slides back and forth as well as the jibcleats.

There are basically two problems. One is with the knurled knob. This is a magnet for pants, and cheerfully rips them unmercifully. Plus the jibsheets have a tendency to get wrapped around the knob. This can be a disaster when tacking in a strong wind.

The other problem is with the U-shaped strap over the cams, used to guide the sheet into the cams. What happens is that the sheets often will fall right back into the cams before they snap shut, again a disaster in the making when tacking in heavy air.

Let's address the knob first: Start by removing the jibcar. Move it all the way forward, then take out the aft three machine screws that hold down the track. Pry the aft end of the track up a little while sliding the car free.

Second, cut off the knurled knob, leaving a bare post that sticks up about 1/4 " when fully screwed down. Grind the top of the post to remove the rough cut edges.

Third, use a hacksaw to cut a groove in the top of the post to allow adjusting with a screwdriver.

Fourth, re-install the car, returning it all the way forward.

Fifth, put a dab of silicon sealant around the bottom of each track screw as you re-insert it, so rainwater won't get in around the screw threads.

Now you must adjust the position of the car with a screwdriver, but this isn't a problem, because, with few exceptions, the best postion of the car (with most Capri 14.2 jibs) is all the way forward. So just lock it there and leave it.

Now let's address the guide strap. This can be removed while the car is on the boat. But here's the tricky part: The cams must be held firmly in place while you take out the screws, remove the strap, and put the screws back in. Otherwise, you'll have little ball bearings jumping all over your boat! So have someone hold the cams in place while you do the surgery!

With the strap removed, here's how you tack. (See Figure 3) Uncleat the jibsheet, and lay the sheet on the back side of the cams. That way it's impossible for the cams to re-engage the sheet. Note the sheet isn't going anywhere--the large oval guide keeps it in place. That's why the strap is totally redundant.

For you folks with older boats that use the old circular guides, you're stuck unless you want to buy a whole new set of jibcars. A way to reduce drag on the line is to use a 3/16" dia. line instead of the monster 1/2" line that comes with the boat. (This is true for all 14.2s, new or old.)

Say Goodbye to Turtling - A fleet in Wichita, Kansas was concerned about turtling, as they routinely sail in winds of up to 25 knots. (Kids, don't try this at home.) Turtling sometimes follows a capsize in strong wind. It's caused by the wind pressing against the bottom of the boat as it lies broadside to the wind. This fleet solved the problem by adapting streamlined Hobiecat floats to their mastheads. It provides 32 lbs. of lifting force. (Cost: \$88.50, Hobie Part Number 30155) So far there has been no more turtling in that fleet.

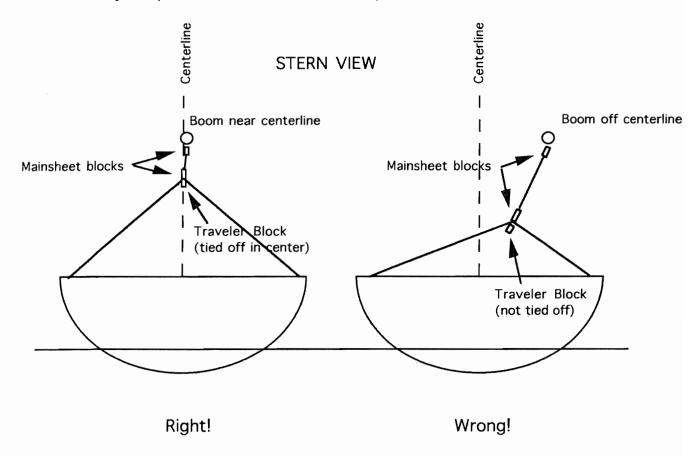
And now Catalina Yachts has announced an anti-turtling option that consists of a sleeve that fits over the top of the mainsail. It contains 1/2" of closed-cell foam on each side which will provide, according to our calculations, 17 lbs. of lifting force. The beauty of this device is it can be easily removed for racing. It sells for \$125. Call Catalina yachts at 818-884-7700 and ask for Parts.

Note there are no guarantees either device will prevent turtling.

The Three Dollar Fix - Would you like to greatly improve your Capri's ability to sail to windward--for the cost of an eight-foot piece of line? Here's how...

When you bought your Capri, the traveler line was just that, a piece of line that enabled the traveler block to slide back and forth a foot or so above the transom. What's wrong with that? Everything. It took racing sailors about seven milliseconds to see that it was a lousy arrangement because the boom was too far from the centerline when beating to windward. And if you tried to bring in the boom with the mainsheet, it would just stretch out the leech. (Bad!)

So, as far back as 1985, the racers started tying knots on each side of the traveler block, to lock it into position. They also replaced the line with a longer one, one that would position the traveler block just 2-3 inches below the mainsheet block when fully sheeted in. They were amazed at the improvement in the boat's ability to point. Wow, what a concept.

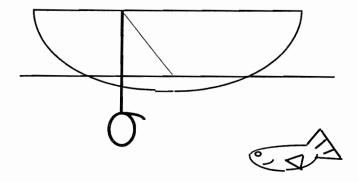


You can do the same. Throw away the factory-supplied line. Buy an eight-foot piece of quarter-inch (yes, it's plenty strong enough) dacron and thread it through. Tie knots right <u>next</u> to the traveler block. Then put in knots under the edge of deck so as to get the traveler up high. This will take a bit of experimenting. The ideal is to have the traveler block separated from the lower mainsheet block by just a couple of inches in a brisk breeze. So it will take a bit of trial and error to get it right. As a rough first cut, you can pull the traveler down (do this on the trailer!) below the transom and adjust the underdeck knots so that the apex of the line is about 6 inches below the bottom of the boat.

Poor-Man's Boarding Ladder - Ever been stuck in a drifter, and wanted to take a dip, but afraid it would be too hard to get back in the boat? Or capsized, righted the boat, but found it a real killer to get back in?

Here's a tip to make it easier to get back in the boat: Take a piece of line, about 6' or so, and tie one end of it to where the hiking strap attaches to the transom. Tie a loop in the other end of the line, and adjust the loop so that if the line were to dangle over the transom the loop would hang in the water just below the bottom of the boat. Then leave the line lying on the seat. If you ever go over, simply reach into the boat, pull the line into the water, and use the loop as a step for one of your feet. This makes it easy to haul yourself up and over the transom.

Shown below is a fish eye's view of the back of the boat.

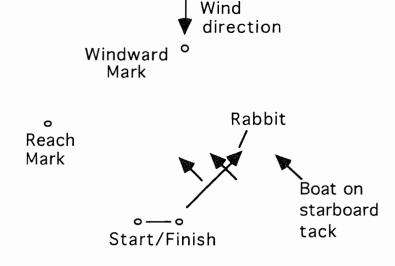


# Just for Fun Racing

Let's say you have the nucleus for a fleet, say three to five boats. Lets also say you live in the boonies and *don't* have access to a yacht club which has a racing infrastructure. And in your group you've got sailors who've never raced and some are uncomfortable with the idea. But you still want to race. What to do?

Okay, let's try something easy and simple. Invite your sailors to come to your favorite local lake. Tell them you are going to have some easy little fun races, on a "micro-course" right off the beach. Having previously made some markers (with clorox or antifreeze bottles, some cord, and some weights), set a triangular course of about 100 yards on each side. Before going out, brief your sailors on how to do a "rabbit" start. (See below.) Then sail two or three races, stop, eat lunch, drink beer, swap stories, then do a few more races. Be sure to have some little "trophies" for the winners, which can be nothing more than candy bars or six packs. Keep it simple and fun. The nice thing about this format is that the sailors can bring along friends and/or family who can relax on the beach and watch the action. In other words, get the whole family involved.

Here's how to do a rabbit start: The rabbit starts off from the start/finish line on port tack. The racers, who are waiting upwind on the right side of the course, cross the rabbit's transom while sailing on starboard tack. Naturally they should do it one by one. After everybody has started the rabbit is then free to tack onto starboard tack and head for the windward mark.

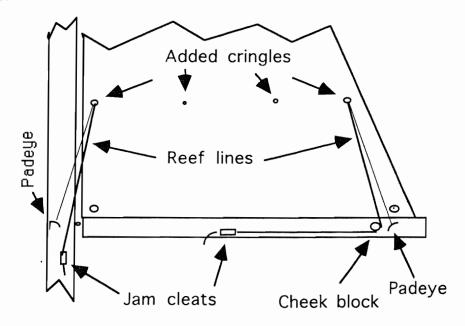


You don't need a crowd of boats to have a race. All it takes is two boats! Lastly, remind your first-time racers to just relax and have fun with it. The America's Cup it ain't!

Quick Reefing For The Capri 14.2 -

Say it's blowing 20 knots but you still want to go sailing. Can it be done safely? Well, nothing's completely safe in small boats, but being able to reef sure helps. A very simple way is to add roller furling to the jib. Just pull the retrieve line, and the jib can be furled partly or completely. For more info on this, see your local Capri dealer, who can outfit you with a standard package from the factory. Installation is a snap.

Want even more reefing for the *real* nasty stuff? Shown below is how one owner added jiffy reefing (also called slab reefing) to his mainsail. His local sailmaker added extra tack and clew cringles, along with some sail reinforcement, about four feet above the foot. He also added a couple of small cringles in between, along the same line.



New jam cleats on the boom and mast, a couple of padeyes to attach the reef lines, and a cheek block were all the additional hardware that was needed. (Note that the padeyes are on the starboard side, and the jam cleats and cheek block are on the port side.)

To reef, the main is lowered until the upper tack cringle is at the boom, then the halyard is re-secured. Then the reef lines are hauled in and tightened in the jam cleats. For neatness, short pieces of line can be fed through the middle cringles and around the boom.

# CATALINA YACHTS RETAIL PARTS LIST CAPR1 14.2/CATALINA 14.2 (818) 884-7700 (Call for prices)

	γ,
CATALOG NO.	DESCRIPTION
30227 10615 J30279	Boom end casting Boom vang Jam cleat
SAILS	
10997 J37461	Batten set (white sails) Sail bag
TRANSOM	
10617 11068 91040 11100 11101 30471 50017 11068 80280 80469 24347 91083 24068 24520 10129	Rudder complete (Kick-Up) Rudder blade (K/U) Rudder casting (K/U) Pintle short - Std Pintle long - Std Rudder lock tang Rudder locking handle Rudder head (K/U) Tiller and hiking stick Tiller Hiking stick 24" Gudgeon Drain plug Rudder blade W/PNTL Std Pintle strap (K/U)
MISC	
J24509 30328 24836 16037 15167	O/B Bracket Cam cleat Riser flat for cam cleat Triangle strap barney post Boat Cover (Mast up, blue only)

COCKPIT		
J11067 J11091 85034 J30049	Centerboard Centerboard bracket set Centerboard gasket set Centerboard shackle	
J1060 80231 J24097 J24072 J15166 J40113 J91128	Hatch insert w/canvas Canvas hatch cover Metal barney post Main cleat w/swivel Hiking strap set Cubitainer 2 1/2 gal Cubitainer 5 gal	
MIDSHIP		
24969 J10122 J20651 J24053 J30363 J24055 J30102 J24158 J24109	Grey Bomar hatch (cuddy) Rubrail - old Rubrail - new Bowplate Maststep Shroud base Chainplate adjuster Jib track Jib car w/cleat	
RIGGING		
J10608 J80015 J30359 82059 80240 or 82060 J24154 J30590-1 J30014 J6080 J30378 J30112 J6120 10613 J80043	Mast complete Mast extrusion Mast head sheave Forestay Shroud Jib halyard pulley Spreader Spreader bracket Spreader - Old N/A Mast - foot Boom stop Vang fitting, mast Boom complete w/o blocks Boom extrusion	
	- Contraction	

10614	Gooseneck complete
J30205	Gooseneck casting
J30098	Tack pin
'J30378	Mast foot casting