

15,500 lb displacement.

The screenshot shows the 'Sail Calculator' website interface. At the top, there are browser tabs and a navigation bar. The main content area is titled 'Choose a type of boat' and features several radio buttons: 'All Boats' (selected), 'Cruisers', 'Racers', 'Racer Cruisers', and 'Cruiser Racers'. Below these are two columns of boat models. The left column lists models from Catalina 30 to Catalina 315. The right column lists models from Catalina 310 to Catalina 36 MK II TR/Fin Keel. A 'MAKE CHART' button is located below the columns.

Below the boat selection, there is a section titled 'Part 1B, Enter Measurements For Your Boat'. It includes instructions on units and a note about metric conversion. A form is filled out with the following data:

Boat Name (e.g., Hunter 33.5):		Catalina 34 MK 1							
LOA Hull Length or Length on Deck (LOD)	34.5	LWL	29.8	Beam	11.75	Disp	15500	Sail Area Main plus 100% Fore Triangle*	564

Below the form, there is a 'COMPUTE' button and a 'SUBMIT DATA' button. The 'Part 2, Results' section displays the parameters of the selected boat. It includes a 'Name' field, 'Basic measurements', and 'Derived quantities'. The 'Basic measurements' section shows: LOA 34.5, LWL 29.8, Beam 11.75, Displacement 15500, and Sail Area 564. The 'Derived quantities' section shows: Displacement to LWL 261, Hull Speed 7.31, Sail Area to Displacement 14.52, LWL to Beam 2.54, Motion Comfort 28.6, Capsize Ratio 1.89, and Sailing Category cruiser. A 'Pounds Inch' value of 1251 is also shown. A text box explains the Displacement to LWL value: 'Displacement to LWL: A medium value would be 200, 300 would be high (Heavy Cruising Boat) and 100 would be low (Ultra Light Displacement-ULDB). Boats with low numbers are probably uncomfortable and difficult to sail.' At the bottom, there is a 'SEND TO A FRIEND' button and an email address field containing 'kevinat@sanrr.com'.

11,950 lb displacement

All Boats Cruisers Racers Racer-Cruisers Cruiser Racers

Catalina 30	Catalina 310
Catalina 309	Catalina 320
Catalina 309 (wing Keel)	Catalina 34 SR/Fin
Catalina 30TRBS	Catalina 34 Shoal Keel
Catalina 310	Catalina 34 Wing Keel
Catalina 320	Catalina 315
Catalina 34 SR/Fin	Catalina 350
Catalina 34 Shoal Keel	Catalina 355 (winged keel)
Catalina 34 Wing Keel	Catalina 36
Catalina 315	Catalina 36 MK II TR/Fin Keel

Select one boat in each column above, and press **MAKE CHART** to compare.

Part 1B, Enter Measurements For Your Boat: Note that length overall, length of waterline, and beam are in feet, displacement in pounds, and sail area in square feet. Do not use , ' or " in your numbers, which should be in the form, for example, 1000.50. Note that this site uses the American standard, with a period instead of a comma as a decimal delineator.

! You can enter your values in metric units (meters, square meters, and kilograms), if you follow each number entered with the letter "m" and then click on the page anywhere outside the entry box. Doing this will convert each of your entries to the native units (feet, square feet, and pounds!) used by the calculator. Thus, if you enter 1000m for the displacement in kilograms, it will be converted to 2204.6 pounds.

Boat Name (e.g. Hunter 33.5): Catalina 34 MK 1									
LOA Hull Length or Length on Deck (LOD)	34.5	LWL	29.8	Beam	11.75	Disp	11950	Sail Area Main plus	564

*One-half the vertical distance from the deck to the point on the mast where the jib sail attaches multiplied by the horizontal distance from the base of the mast to the bow.

Press **COMPUTE** to see the derived quantities displayed below in **Part 2**.

Click **SUBMIT DATA** to e-mail the data on your boat to Tom: **SUBMIT DATA**

Part 2, Results: This area displays the parameters of the boat selected. Do not enter values here. Click on any of the Derived Quantities boxes for an explanation of the box.

Name: Catalina 34 MK 1									
Basic measurements									
LOA	34.5	LWL	29.8	Beam	11.75	Displacement	11950	Sail Area	564
Derived quantities. (Click on each box for an explanation in the box below.)									
Displacement to LWL	202	Hull Speed	7.31	Sail Area to Displacement	17.26				
LWL to Beam	2.54	Monon Comfort	22.05	Capsize Ratio	2.06				
Sailing Category	cruiser/racer			Pounds/ft ²	1251				
Displacement to LWL: A medium value would be 300. 300 would be high (Heavy Cruising Boat) and 100 would be low (Ultra Light Displacement-ULDB). Boats with low numbers are probably uncomfortable and difficult to sail.									
After using the "compute" button send the full report to a friend's email address: kevelnat@san.r.com by clicking here: SEND TO A FRIEND									