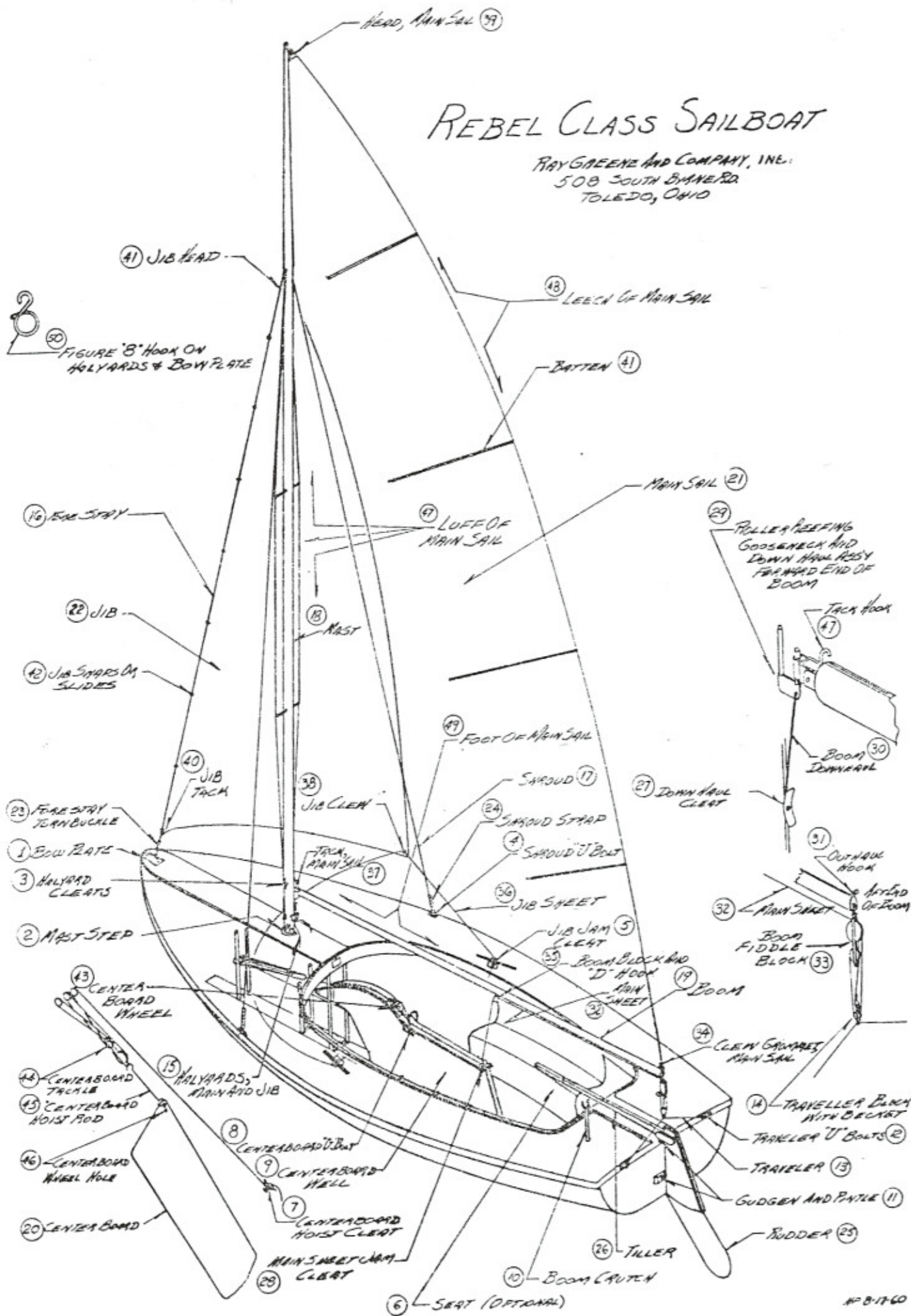


# REBEL CLASS SAILBOAT

RAY GREENE AND COMPANY, INC.  
508 SOUTH BANNER RD  
TOLEDO, OHIO



Winter '84

## RACING IN AN "OLD" REBEL

by Randy Blough

First the disclaimers:

- (1) I'll be using the term "old" to refer to all pre-Mk IV Rebels. In reality, Rebels are ageless — never old, always lovable. The same is true of Rebel sailors.
- (2) I won't be talking about tactics, starts, sail trim (not much, anyhow), and seamanship. These are all very important, but there is little in these areas I consider particular to sailing the older boats.
- (3) I hope this article will evoke further discussion and Rabble inputs. I'm counting on critical review and comment to correct any misconceptions I'm about to present.

### Part I — The Boat

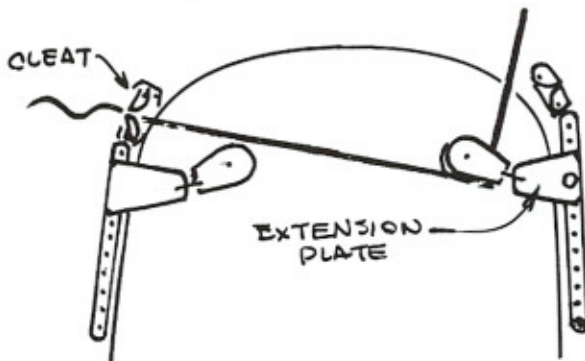
The belief that the Mk IV is faster than the older boats is widespread, and in my opinion, overstated. My current thinking is that the Mk IV may be a tad faster, but the difference is slight and is limited to a much narrower range of conditions than generally thought. In some situations the old boat may be faster. In my opinion, current comparisons are distorted by a generic imbalance in certain (non-vintage-dependent) attributes, including the following:

- (1) Smooth drag surfaces (hull, centerboard, rudder);
- (2) Functional controls for sail shaping and tuning, i.e., controls that can be readily adjusted while racing;
- (3) Optimal jib lead position (well inboard); and
- (4) Minimum weight.

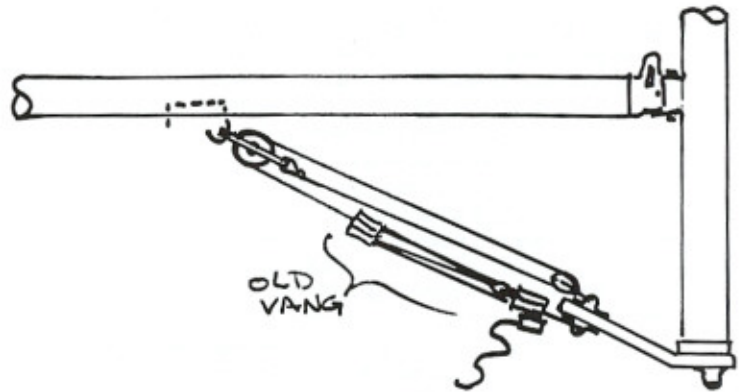
By my observations, the above attributes are more prevalent among new boats than old boats. You can't compare inherent speed among boats if such differences exist. My comment follow.

**Weight.** This is the least significant of the items listed. I don't believe the Rebel is very weight-sensitive. Thirty or forty pounds shouldn't make much difference. If you can't get your boat under about 740, you should evaluate whether it's hurting you and how important it is to you. If your total crew weight is relatively low, maybe you can tolerate some extra boat weight. At any rate, do what you can to keep the weight down. If your boat has a double bottom you should keep it as dry as possible. When not sailing, keep the inspection ports open to ventilate the area under the floorboards.

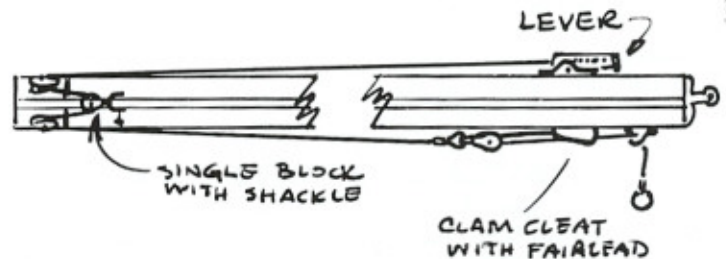
**Jib Leads.** Before this year's Nationals, I put extension plates on the jib slides of my standard (Mk I) racing Rebel to move the lead point to about 2 inches inboard of the cockpit combings. This roughly corresponds to the on-the-seat position of a Mk IV, which I believe is optimal for most conditions. I strongly recommend moving jib leads to this position if they're currently further outboard. This can be done by use of extension plates or by mounting the track on the inboard face of the cockpit combing. I use Hexaratchet jib blocks and have mounted the cleats on the windward side (Diagram 1). This facilitates uncleating in heavy air. In lighter air, with the crew to leeward, the jib must be hand held, but Debbie and I have found that the jib usually requires very frequent adjustment in these conditions anyhow.



**Functional Controls.** You ought to be readily able to adjust the cunningham, outhaul, boom vang, traveler, jib cloth, centerboard, and, to a lesser extent, the jib halyard, while racing. I thought about the controls on my boat and realized that I didn't adjust some things because the adjustments were either too hard (e.g., vang) or took too long (e.g., outhaul). The vang problem was a lack of mechanical advantage. My 4:1 system required sails luffing and one foot on the deck to tighten it for heavy air! So I upgraded to 12:1 by hooking my 4:1 to the end of a 3:1 (Diagram 2). Now Debbie can easily adjust the vang, and I'm trying to learn to use it!



My outhaul was an old winch with an oversized, removable winch handle. It worked fine but was slow. I replaced it with a manual 4:1 system plus a 2:1 Hyfield lever (Diagram 3). I have the lever set to ease the outhaul about 1 1/2 inches.



The other controls I considered acceptable were:

- Cunningham — 2:1 w/V-jam mounted low on mast (I have also used a 4:1 in the past and have no real preference.)
- Jib cloth — 1:1 w/deck-mounted cam cleat beside the mast. I have since changed to 2:1 to allow more precise control, i.e., if the line slips 1/8" while cleating, only a 1/16" change occurs at the tack.
- Traveler control — 1:1 w/side-mounted cleats just aft of the skipper's position. (Having tried 2:1, I felt the line got tangled more, and the mechanical advantage wasn't necessary.)
- Jib halyard — small winch. This provides good mechanical advantage. Since we adjust infrequently and over only a small range, its slowness is not a drawback.

My centerboard control needs work, so I won't mention it. Except for the traveler, all controls are led for the crew (based on the way Debbie and I have divided up responsibilities), and aren't necessarily designed for adjustment while hiking (a cost vs. benefit decision). While there are many new boats much more expertly rigged, Debbie and I no longer feel at a significant disadvantage in this regard.

6/77

Spring Meeting cont.

Dave Flanigan gave the Financial Report (see attached), followed by a Membership Report. A new Fleet has been chartered in New Hampshire No. 34. A new Constitution and By-Laws including a Membership Roster has been printed. All 1977 members will get a copy and extra copies will be \$2.00

Vice-Commodore Helphinstine gave the report of the National Race Committee. (See minutes of the Board of Directors) The 720 rule will be used as amended. There was no added discussion following the report.

Don Musselman gave the report on the Nationals. Three past National Commodores are lending their expertise to make this Regatta -- the 25th -- one to remember.

The report of the Nominating Committee was made by the Chairman Bill Wofford. (See Board of Directors Minutes.)

Ken Mowbray gave the report of the Technical Committee. The corrections to the Official Plan will be printed in the Rebel Rabble. (See B. of D. minutes.)

District II Commodore Julian Magnus offered the bid of Fleet 19 to host the 1978 Nationals.

Jack Campbell of REBEL INDUSTRIES told us Rebels were in several Boat Shows, winter business was slow, but orders are coming in. The Rebel will be used for the Bemis Competition in 1977.

Commodore Miller announced the Holcombs had donated a 2nd Place Husband and Wife Trophy.

Lou Herndon expressed thanks to Yvonne and Carol for the new Rosters -- "Something the Association has really needed". Lou then said Peasie Herndon felt skippers did not try hard enough for the Championship Flight, so through her efforts the following trophies were donated:

- |                         |                                  |
|-------------------------|----------------------------------|
| 11th Place Chris Patton | 14th Place Rest of Herndon's     |
| 12th Place Duane Slater | 15th Place Mary & Peasie Herndon |
| 13th Place Bill Kessler | Anchorman Charles Toberman       |

Bob Pisuk asked for News of Regattas to send to Sailing Magazines. The Meeting adjourned at 9.45.

Dave Flanigan - Secretary/Treasurer

### REBEL 1752 SE\*

by Ko Uyeda

Fig. 1 shows an overall view of the adjustment lines for jib luff tension, cunningham, and traveller. The control panels are mounted on both sides of the cockpit where the skipper can conveniently reach them.

The set-up is as follows:

#### I. Jib luff adjustment:

A shackle with a wire is attached to a double Harken bullet block (A). There is a cluster of single blocks attached to a piece of wood (B) which is mounted under the deck slightly forward of the mast base. The lines from A are run through three of the blocks and then to two double bullet blocks at points C, another double bullet at D, then to the first cleat (the line goes through a thru-the-deck-bullet block).

#### II. Cunningham:

Fig. 2 shows the general set-up of the cunningham above the deck as well as under the deck. The line then leads through blocks B,C,D, and to cleat No. 2

#### III. Traveler:

The traveler is a piece of line attached to two U-plates which

\*Special Edition

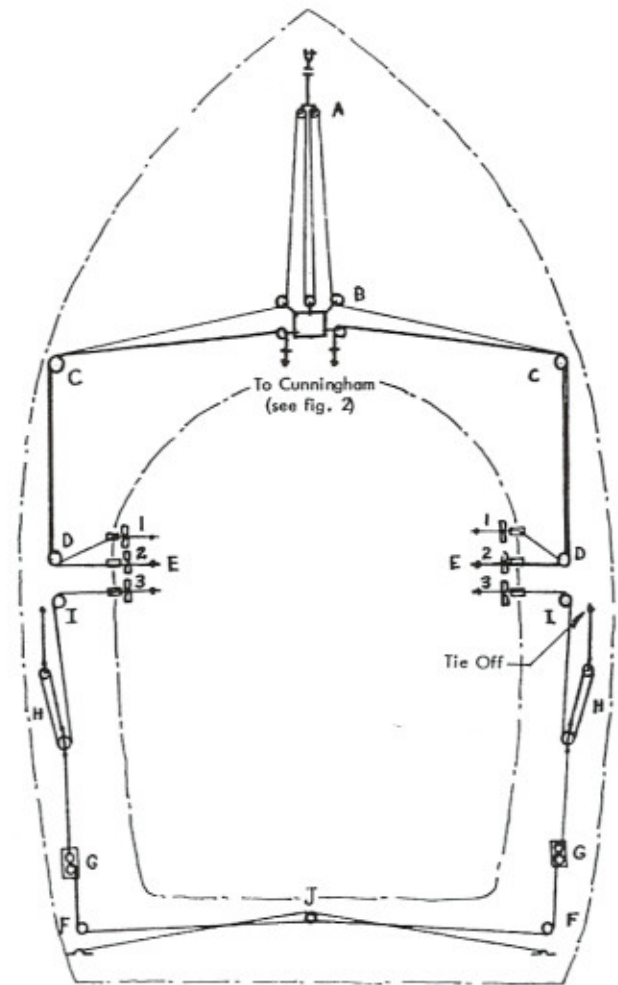


Fig. 1

are attached to the deck. The adjustment lines are attached to block J and run "through deck-mounted bullet blocks" (F). There are two "in-line-thru-the-deck bullet blocks" (G) mounted in the deck and the adjustment line passes through that to a single bullet block with becket (H). At H there is a 3:1 purchase system which includes a single bullet and the one with the becket (the single bullet is attached to a length of line which is run through a hole in the seat walls and tied). The adjustment line then passes through bullet block I and then to cleat No. 3.

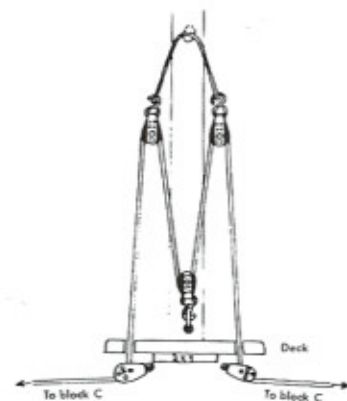


Fig. 2

Rebel 1752 was formerly owned by J. W. Jones who designed and installed the control system that Ko has described. I have sailed the boat, and she is a real pleasure to handle. Thanks to Michael Uyeda for the diagram. --Ed.