

Ship

FREEDOM YACHTS
SAIL HANDLING HINTS

The following is an update on my thoughts for maximizing the efficiency of the Freedom rig.

Carbon Fiber Masts

Carbon fiber is to the freestanding mast what dacron has been to sails - a better material. By being lighter, stiffer and stronger than aluminum, carbon improves mast performance and simplifies the sailmakers task. Lear Jet recently introduced a commercial plane made largely in carbon fiber and Ford plans to use carbon for drive shafts. It is not an exotic material - just modern and better.

Sails

The sails are the engine and there is a wide performance difference between good sails and bad sails. Bob Adams of Ulmer Sails in the U.S., and John Oakley of England have taken the lead in developing better sails for the Freedom rig. We do not have any exclusive arrangements with these or any sailmaker, and we welcome inquiries or experimentation by others. However, experience suggests that it is best to start with a product of proven quality if you are at all concerned with performance.

Reefing

We have been all around the block on this one, but I believe that the latest rig is significantly better. It consists of a one line adjustment. You simply let off the halyard to a pre-marked length haul on the reefing line and that's it. On the 33 we have been able to reef a sail in 6 seconds and that's hard to beat.

Loads

Each one of the Freedom spars is designed to singly be able to lever the boat over - to cover the contingency that you might be sailing on just one spar. However, it would be far better from the point of view of sailing balance - and of distributing the heeling loads - to carry reduced sail on both spars - rather than loading up one.

Storm Sails

I highly recommend storm sails for any Freedom contemplating an open ocean voyage. These consist of heavy (8 oz.) wraparound sails that are rigged without the booms. They are in effect wraparound jibs - trimmed just like a jib with two sheets. They are for maximum conditions, the idea is to get the booms and regular sails down - and simply rig these two wraparound "spitfire jibs". By utilizing special bags these storm sails may be totally controlled while they are rigged to the masts - so there need be no danger of wildly flopping sails.

Windward Trim

The most common mistake is to overtrim the foresail. It may be helpful to consider the foresail as merely a vertical jib. Never trim in the foresail more than you would a jib - which is of course normally trimmed to the rail. To emphasize this, it is a useful exercise to hook up two "jib" sheets to the clews of the foresail. Set up some snatch blocks on the rail and - by passing the boom - simply trim the foresail as a jib. When I am seriously racing I drop the boom on the foresail for the windward legs - and simply trim the foresail like a jib. By sheeting the foresail to a winch I can flatten the sail more which is a definite advantage for heavy winds. Obviously this is too much bother for normal cruising.

Offwind Sailing

For reaching you just let the sails out, and the wishbone booms very effectively act as boom vang. Beware of over trimming. For performance sailing or more horsepower in light winds, staysails are the key. A blade staysail set off the mizzen mast can be used to improve light wind performance to windward or close reaching. The reaching staysail is employed for close or broad reaching. The "Flasher" or full staysail is used for broad reaching and downwind.

For sailing downwind in any sort of a breeze the best bet is to just wing out a sail on each side, pull up the board and relax. When the staysails are set in between the two masts - as is normal - you

can't sail dead downwind or the staysail will be blanketed. You must come up and tack down wind - sailing broad reaches to keep all sails drawing.

On this course it is often helpful to sheet the mizzen staysail through a block on the end of the mizzen boom - then back to the boat along the line of the boom, and then to a winch. Otherwise every time you trim the staysail you automatically trim in the mizzen.

Man Overboard Procedure

If sailing to windward - bear off immediately into a tight turn. With the wheel hard over, the boat will jibe itself in a tight circle, coming head to wind roughly where the man overboard is in the water. Release the foresail sheet and simultaneously trim the mizzen flat amidships. The boat will stay head to wind as long as the foresail swings free and the mizzen is strapped in hard. In fact, you can sail backward with this arrangement.

Anchoring Under Sail

When you make your final run, release the foresail sheet as you turn into the wind. Then strap in the mizzen flat amidships while the boat shoots into the wind. Ease the foresail outhaul, drop the foresail and as the boat stops its glide - drop the anchor. With the mizzen strapped tight, the boat will weathervane and eventually drift straight back.

To Sail Off An Anchor

Hoist the mizzen first, and strap it in amidships. This will keep the boat into the wind. Shorten up on your anchor line. Raise the foresail, raise the anchor. Back the foresail to the side opposite where you want to go - forcing the bow around - then sail away.

In General

Remember that trimming the mizzen and easing the foresail will automatically turn you into the wind. Easing the mizzen and trimming the foresail will automatically turn you away from the wind. Understanding how this works will help you balance your boat, and could

provide emergency steering as well. When sailing into a crowded anchorage it is best to keep the mizzen sheet in hand ready to ease rapidly. If you were passing close astern of another boat, a sudden puff would heel you sharply - creating automatic weather helm - which you can quickly counteract by easing the mizzen. Similarly if you wish to bear off quickly - ease the mizzen.

Remember you can grip the wishbone boom just like a windsurfer and by pulling it to one side or the other you can force the bow of the boat to go where you want.

Garry Hoyt