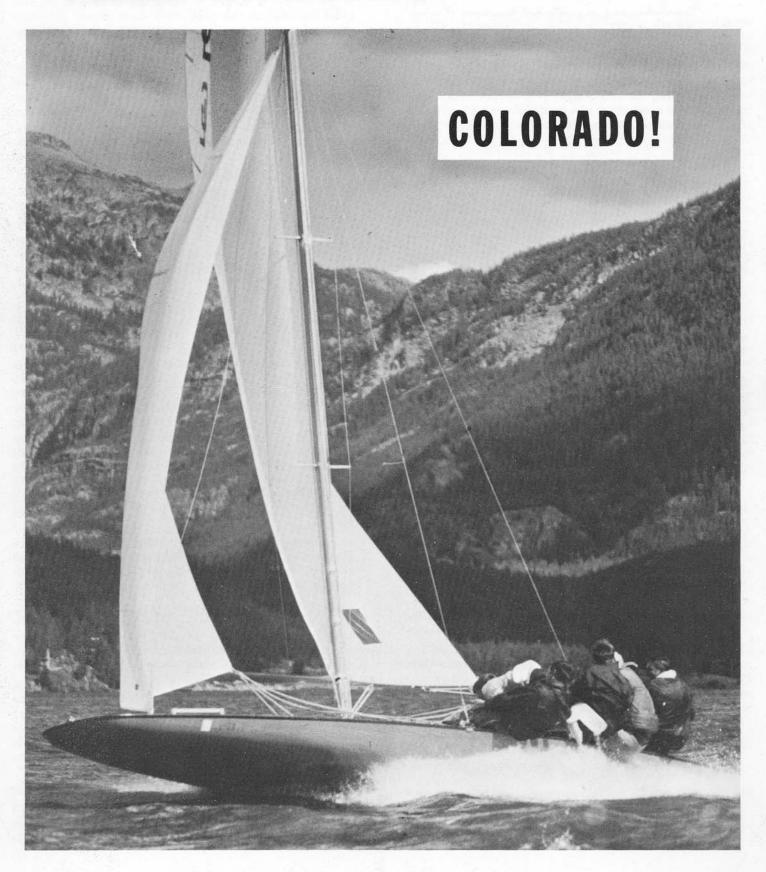


## REPORTER





The following letter was sent to Art Best, ILYA Commodore, and is published here since it sums up recent action taken by the NCESA board.

Dear Art:

Our NCESA Directors are quite concerned that our decisions with respect to scantling rules and other significant rules controlling the management of E-scows be made in as close concert as possible with comparable decisions by the ILYA. This has been the case in the last six to eight years.

The possibility of revised spar scantling rules in the next year or so poses a more difficult and vitally significant area in which our actions should be coordinated. We would like to review for your benefit what we have done recently and request your comment on this important subject.

In 1967, permission was granted for a thru-deck aluminum spar and an on-deck swivel aluminum spar under the NCESA Experimental Clause. Hartley Comfort sponsored the thru-deck experiment, known as Project Phantom. It was quite successful, as you have undoubtedly heard. The on-deck swivel experiment was started by Sam Merrick and carried through by me. Though less successful with respect to performance than the thru-deck design, the on-deck swivel appears completely viable, and very likely can provide a reproducable spar at less cost than our present wood.

The direction of our further deliberations on this subject at our New York meeting in January, 1969, was influenced by the ILYA decision immediately prior to allow aluminum thru-deck spars in 1971. With a two-year period in prospect, we felt that additional experimentation would be helpful to all concerned, and therefore encouraged additional ideas, along with approving Comfort's rig for an additional two years.

Our membership responded enthusiastically. Nine proposals were received by late February, which our Board acted upon on March 13. Our decisions were based on certain general principles, among which the following were significant:

1. Proposals based on wood were discouraged for two basic reasons: (a) wood is likely to be more costly on a production

basis than aluminum, and (b) there is likely to be more variation between production wood spars than aluminum due to the hand finishing necessary with wood. It is likely that the more time and effort spent on a wood spar, and hence the greater cost, will produce significantly superior performance. This was considered detrimental to the class as a whole. Actually, no proposals for wood spars were received, so the strength of this feeling was not fully tested.

- 2. We desired a number of variations of each of the two basic designs-thru-the-deck and on-deck swivel. Principle emphasis was on the cross-section of the spar and its rig. Spars from different manufacturers were encouraged.
- 3. With regard to rig, we felt that the basic "tripod" design was mandatory in which the mast is held in the boat by the two main side stays, attached some 15-18" aft of the mast line, oppose the jib stay (or jib luff wire). Proposals in which the jib stay is opposed only by running backstays and the action of the mainsheet through the luff of the sail were considered detrimental to the best interests of the class and therefore not approved.
- 4. As approved experiments are allowed to race with full rights (which we consider necessary to encourage serious experimentation), the number of approved projects was kept to a minumum.
- 5. There is nothing in our experimental clause which would prevent major deviations from existing design, such as a permanent backstay, change in sail plan, etc. However, all of our thinking and discussion since 1967 has been based on improvement of the present design, rather than a radical departure from it, and all proposals were submitted on this basis.

The nine proposals can be described briefly: O'Malley (Barnegat Bay), Campbell (Barnegat Bay), Byrom (Little Egg Harbor) and Helms (South Carolina) all proposed thrudeck designs similar to Project Phantom. O'Malley and Helms had a basic "tripod" rig with variations in the rigging between them to control bend. Campbell and Byrom proposed a basic Star boat design dependent on running backstays, again with variations in the auxiliary rigging. All four proposed sections manufactured in England (not Proctor) for Sailing Dynamics, Helms using a section made for the Soling class and the other three a slightly lighter section.

Johnson (White Bear), VandenBosch (Western Michigan), Simons (South Carolina) and Stitzinger (Barnegat Bay) all proposed on-deck swivel designs with rigging similar to the present wood swivel masts. Johnson agreed to use one of

#### 

National Class E Scow Association Ives Building, Narberth, Pennsylvania

Commodore: W. Smedley, Jr. D. Vice Commodore: N. Robbins, Jr. Rear Commodore: Hartley Comfort, Sr.

Directors: Ted Brennan, Roy Mordaunt
Mike Meyer, John Sangmeister
Dick Turner, Bruce Wathen
Robert Cole, Tom Blais

NCESA Reporter Staff: Staff Publisher, Editor and Printer's Devil: Ted Brennan

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the Sailing Dynamics sections, Simons and VandenBosch proposed Gibbs sections (LaSalle, Michigan, similar to the Shark catamaran), and Stitzinger proposed conversion of an existing 5.5 meter mast.

Finally, McLain (South Carolina) proposed a fiberglass mast designed and constructed by Shakespeare Company.

The Board's action on each of these proposals was as follows:

Name	Approved	Disapproved
O'Malley	7	1
Campbell	4	4
Byrom	4	4
Helms	7	1
Johnson	7	1
VandenBosch	4	4
Simons	7	1
Stitzinger	0	8
McLain	0	8

One Director, Hartley Comfort, disqualified himself from voting on the basis of being an interested party.

The Directors discussed at considerable length the three tie votes in an effort to reach a more general concensus. This being out of reach, all Directors agreed unanimously that a tie vote was insufficient for approval of the proposal. Accordingly, the following proposals are approved, subject to further comments listed as follows:

ALL SPONSORS are subject to the general rules set forth in the Commodore's letter of February 4, 1969. Particular attention is directed to the obligation of each sponsor to provide full and frequent progress reports as outlined in paragraph 3.

O'MALLEY - Spar to be stepped through the deck, non-rotating. Section to be Sailing Dynamics 4-1/8" x 2-3/4"x .080" wall, 1.05 #/ft. Basic rig to be "tripod", i.e., main sidestays to have purchase approximately 18" aft of mast line to hold spar in boat without backstays or support from sail. Mast to be tapered and to be filled with foam or other suitable means for positive floatation. In other respects, design to be as described in Harjes letters of 2/14/69 and 2/20/69 including sketch.

HELMS - Spar to be stepped through deck, non-rotating. Section to be Sailing Dynamics 4.35" x 3.0" x .070" wall, 1.125 #/ft. as used on Soling Class. Basic rig to be "tripod" as described above. Mast to be tapered and provided with floatation as described above. In other respects, design to be as described in sketch dated 2/25/69.

JOHNSON - Spar to be stepped on deck, rotating, similar to existing wood spars, including basic rigging. Spar to be Sailing Dynamics, either the 1.05 #/ft. or the 1.125 #/ft. section described above, tapered and provided with floatation as described above. Authorized for use only on Johnson's own boat, "Yellow Jacket," '69, or replacement.

 $\frac{\text{SIMONS}}{\text{Gibbs section 4-1/2"}} - \text{Spar to be stepped on deck, rotating, aluminum.} \\ \frac{\text{Gibbs section 4-1/2"}}{\text{1.26 \#/ft.}}, \text{ with styrofoam floatation, untapered, rigged essentially like the existing wood spar, all as described in Simons letter of 2/13/69. Only one mast (or replacement) authorized for use on Simon's own boat.}$ 

The Board offers the following comments regarding those proposals rejected:

STITZINGER - Other more attractive on-deck swivel proposals were offered. This 5.5 meter mast appeared heavier than necessary. Further, lacking information to the con-

trary, the Board felt that availability and cost of such a design under production conditions would not turn out to be in the best interests of the class.

McLAIN - The Board recognized that information on fiberglass mast is desireable. This proposal, however, contained insufficient details of design and no estimate of cost or assurance of reproducibility. The Board will be pleased to reconsider this idea upon receipt of a more complete proposal.

CAMPBELL, BYROM, VANDENBOSCH - All three of these close votes reflect the concern of the Board to insure the best interests of the class at large, and particularly of those sailors using rigs of current design in regattas for the next two years. It is expected that all approved sponsors will make every effort to compete in local, regional and national regattas. Further, the Board feels approval is deserved only by those proposals which it appears are likely to prove superior. Five experimental designs are now approved; three thru-deck and two on-deck swivel. Each of the thru-deck mast sections is different and are available from two sources of supply: Proctor "J" section, and Sailing Dynamics 1.05 #/ft. and 1.125 3/ft. (Soling section). The two on-deck swivel sections are different and are from different suppliers.

VandenBosch's proposal did not offer anything significantly different from Simon's. Assuming that Campbell's and Byrom's design would be changed to a "tripod" configuration (which the Board considered mandatory, and which the sponsors were understood to accept) the only difference between them and O'Malley's proposal was the detail of the rigging aloft.

It is true that additional experiments improve the credibility of the reported data. It is also true that the detail of the rigging aloft is an important part of a successful design. Certain of the Directors considered these variations important enough to be worth the cost of three more experimental boats sailing for keeps in the regattas. The balance of the Directors, however, felt that sufficient information would be available from the five experiments approved, and therefore made their decision on the basis of keeping the number of experimental boats to a minimum.

This, then, is where we stand now. It is our hope that field results from these authorized designs will produce significant information within the next year or two from which a definitive spar scantling rule can be written which will both protect the interests of owners of older boats and take full advantage of new materials and designs. As the scow family spreads in ever wider geographical circles, the need increases for scantling rules well enough defined to prevent major improvements within the rules which put the costs out of control and/or make existing boats obsolete.

We would greatly appreciate the comment of the ILYA to the philosophy expressed in our actions and the approach we have taken. In particular, we hope you will outline any further design variations which you may have had in mind when you approved changes in the spar scantling rule in 1971.

Sincerely yours,
WALTER SMEDLEY
Commodore



# COLORADO - GRAND TAKE & C



Richard C. "Dick" Campbell III very kindly provided the following information about the Grand Lake Yacht Club and the story and cover photography. Comments in parenthesis are the result of a telephone convers tion between Dick Campbell and the editor:

We are very happy to bring you news from the Grand Lake Yacht Club, which is the oldest yacht club in the Rocky Mountain area. Founded in 1901, the club is situated on Grand Lake, which is 100 miles from Denver at an altitude of 8,800 feet, on the western slope of the Rockies. We have eight E-scows on the lake at the present time.

by Dick Campbell's grandfather and Mr. Harry Bryant. Lloyd's of London were sent glowing reports of this extremely active, if fictional center of Yacht racing. Sufficient momentum developed from the hoax to produce genuine sailing activity, other than rowboats and the Grand Lake Yacht Club became a matter of actual record in 1901.)

Grand Lake is a natural crater lake with depths well over 350 feet. It is surrounded on all sides by steep hills and mountains, with ravines and gorges causing the most perplexing wind conditions imaginable. Rain squalls have produced winds exceeding 70 miles per hour, and the average

water temperature is around 55 degrees. The incentive to remain upright is powerful, but sometimes capsizes are unavoidable.

...(Grand Lake is the locale of abandoned gold mines and became favorite fishing and hunting grounds for Denverites also affording cool summers due to its altitude.)

Though yacht club sailors compete for several very



JIM & MARY LOU MUNN



beautiful cups, the club's most prized possession is an original Lipton Cup, given to the club in person by Sir Thomas Lipton in 1913. It is a handsome, irreplaceable trophy, and is competed for as a challenge cup every year.

trip, promoting Lipton Tea, they contacted Sir Thomas and invited him to stop off in Denver to be the honored guest of the posh Denver Club. No extravagance in the form of wine, whiskey, cigars, oysters and steaks was overlooked, and the Grand Lake Yacht Club members, wearing Admiralty-rank rental gear succeeded in fabricating an image of great Mountain lake racing fleets in Sir Thomas' mind, as the evening wore on. That there were barely ten nondescript boats available for competition was no deterrent to the grand banquet mood which resulted in the guest of honor presenting a magnificent trophy to the Colorado sailors.)

There are approximately 120 members in the yacht club and other classes are sailed besides the E-class. We have a regatta week every year, which starts about the 10th of August. There is also weekend sailing during the month of July and an annual invitational regatta, which this year will be held on July 12 and 13.

... (The courses now sailed are basically Gold Cup but in former years race committees set some complex courses involving between six to eight different legs. An early rule imposed on the fleet was quote: "The first boat to round a mark has right of way, regardless of respective tacks. This rule understandably provided some astonishing maneuvers.)

Top sailors in last year's competition were Dr. James Munn, Richard C. Campbell, Mac Ruske and Scally O'Donnell.

Along the local news front, we are remodeling our yacht club, which dates back more years than we care to remember. The principal feature of the new construction will be a fully enclosed crow's nest, which will afford more protection for the harried race committee on blustery days. We hope to have more news later, and wish all other E-scow fleets good sailing for the coming season.



The Protest Corner

Dear Mr. Smedley:

Being a relatively new E-boat owner and consequently a new member of the NCESA, I am wondering if any articles have been written in recent years regarding the handling of light sails on these boats. Having turned over trying to jibe a spinnaker, I would like to learn the right way to perform this maneuver.

Any light you can shed on the subject would be greatly appreciated.

Sincerely,

Bill Webb

ED.NOTE: The above letter was written in 1967 and Mr. Webb was forwarded material from past Reporters then available and by now is most likely tacking downwind with great confidence. It is a good indication, however, that the class could well use a handbook for newcomers.

Notice ....

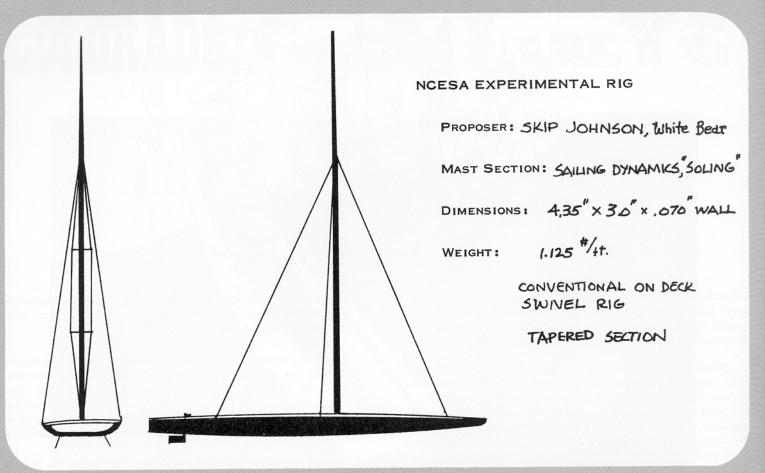
about NCESA affairs - send your opinions to "Protest Corner"

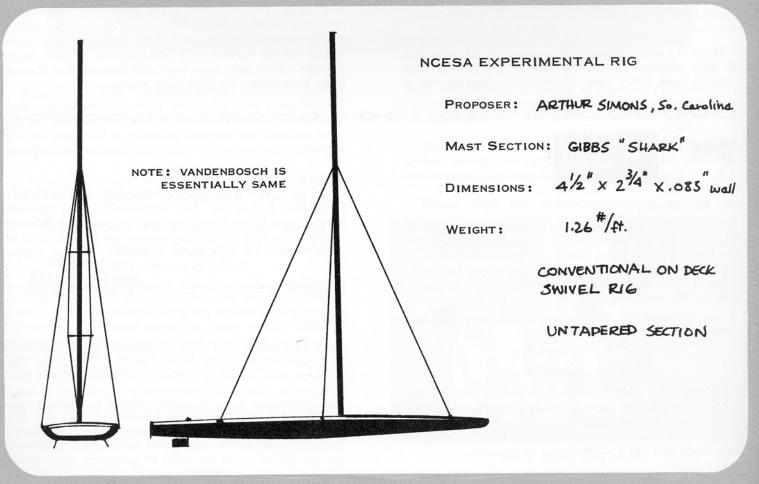
40 Ted Brennan, 1316 CHESTNUT WILMETTE, ILL. 6009

NOTICE. . .

The ILYA Committee to study the potential North American Scow Association met in Chicago on Feb. 14, 1969. The members were polled as to their desires concerning a new organization. The NCESA was strongly represented. A comprehensive report by this committee will be presented to the ILYA Board on April 26, 1069.

### NCESA Experime





# ntal Rig Requests

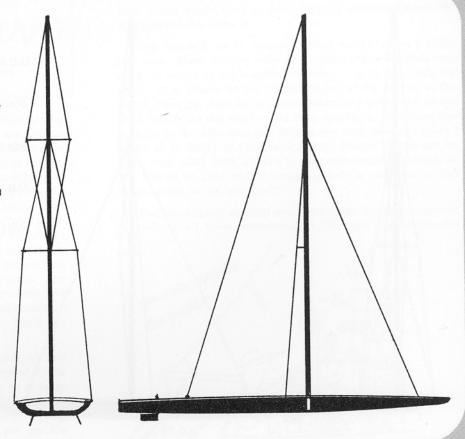
NCESA EXPERIMENTAL RIG

PROPOSER: ED O'MALLEY, Mentoloking

MAST SECTION: SAILING DYNAMICS

DIMENSIONS: 416 x234 x .080 well

WEIGHT: 1.05 #/ft



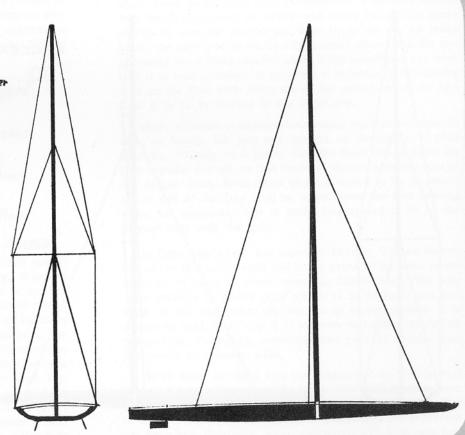
#### NCESA EXPERIMENTAL RIG

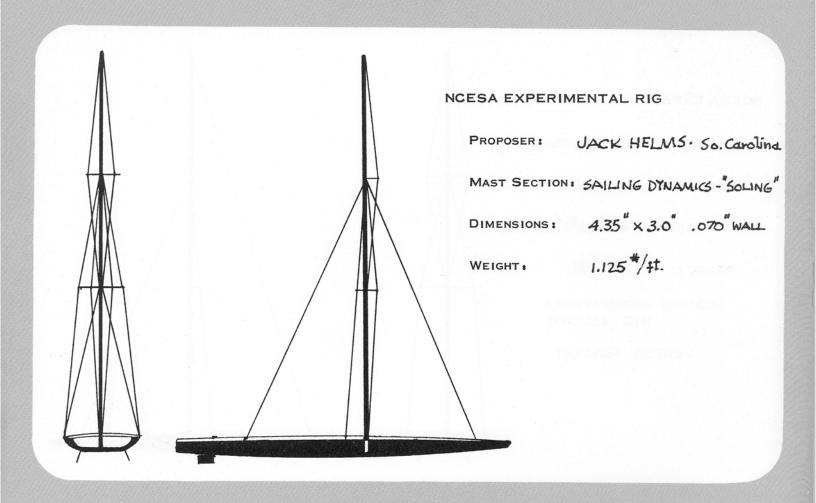
PROPOSER: CLIFF CAMPBELL, Tomis River

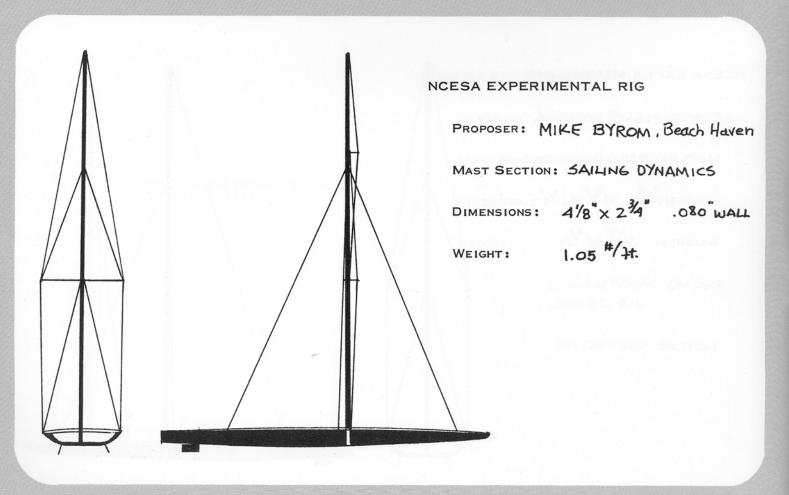
MAST SECTION: SAILING DYNAMICS

DIMENSIONS: 4/8" × 23/4" x .080" wall

WEIGHT: 1.05 4/ft







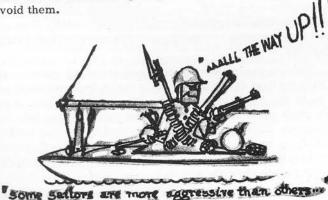


#### STARTING

By NAT ROBBINS

I should be the last one to write any material on starting techniques. If there has been any one aspect of my sailing which has deteriorated recently and which I am most dissatisfied with it is my ability to get consistently good starts. Yet, perhaps just my failure to do this may help others in analyzing what goes wrong when you have a bad start. If I were to come up with any one answer, it would be the lack of aggressiveness. Frankly, in a large fleet you have to be aggressive and bold to assure yourself that after the starting gun you will be among the boats that are in a position to forge into the lead. You cannot hang back and let people sail over you and under you and expect to get out in front. You have to be on the line going fast with clear air above and below you to make sure things will develop satisfactorily within the next few minutes after the starting gun. Let's examine how to achieve these three things.

First of all, you have got to time your heading off and your accelerating point so that you are at full speed at the gun. It takes approximately 10 to 15 seconds for an E Scow to accelerate to full speed in medium wind. To gain full speed you should accelerate while on a slight reach. Trying to accelerate while hard on the wind will not get you the speed necessary to get off the line in proper position. In order to allow yourself a little room for the few seconds of reaching, you must protect your leeward side. At the same time you must try to hold the boat up to windward of you and hope that the leeward boat will move down the line enough to give you this kind of room. You should also determine who is above and below you. Some sailors are more aggressive than others and won't give you this kind of room. Try to avoid them.

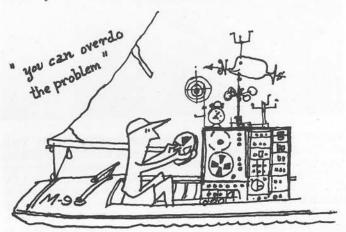


Once you have established the ability to be at full speed, you must also be on the line. Generally speaking, skippers will miss-estimate their proximity to the line and be farther from it than they expect. I have been on judges' boats where the fleet was well lined up before the start, but as much as a boat length or two behind. Yet, under these conditions, the skippers frequently thought they were all over. Conversely, I have been in a position where I thought the entire fleet was over from my position in the sailboat, only to find that everybody was well back. Therefore, take into account the fact that from your position in the boat you are more likely to appear to be on the line when you are well behind it than vice versa. In this regard, stay with the fleet. After it is

apparent that the whole fleet is right up on the line, you had better be there yourself. It doesn't do much good to be behind if the whole fleet is over. This is where boldness and aggressiveness come in.

The decision as to where to start on the line is a difficult one. Many factors have to be taken into consideration, such as where is the windward mark... is it truly into the wind? Is it closer to the starboard end of the line or to the port? Does the wind favor a starboard or a port tack on the first beat? As the wind shifts back and forth, how long has it been on the side that now favors one tack over the other? When is it likely to shift back again? Where should you be when this shift back occurs to take maximum advantage of it? Where is your major competition? Is one end or the other going to be crowded?

You can readily see that you need some kind of computer to analyze all these conditions. I think you can overdo the



problem. The most important thing is to get out in front going fast so that you can make decisions and do something about them on the first beat to windward. Generally speaking, the starboard end of the line will allow you a little more ability to tack off should you have to do so. On the other hand, the port end of the line frequently allows you the opportunity for a little clearer start if the conditions are such that it is less crowded. In general, it is better to be moving fast on the line with clear air on the wrong end of the line than it is to be buried in the right end.

Most of these considerations apply whether the wind is light or heavy, but just one thought on the impact of wind velocity. Usually in a heavy wind the fleet moves down the line rapidly enough so that there is almost always room at the judges' boat. Even those who are trying to hit the starboard end of the line tend to move down the line leaving room for somebody who is truly determined to be at the judges' boat with the gun.

In light winds just the opposite is true. The starboard end of the line is crowded and stays crowded because of the inability of boats to move down the line rapidly. The only other caution in really light winds is to be sure you are right on the line within the last two or three minutes. It is easier to hold back than it is to move up to the line during this period. Therefore, establish your position earlier than you would in a heavy wind.

While most of these tips are things that are fairly well known, I think it is in order to re-establish them in your mind and analyze your own failures or shortcomings. Try to correct them by an organized analysis of the problems you have had. Hopefully, these comments will also help me.

#### **VERBATIM FROM ONTARIO, CANADA**



YACHT BUILDER VIC CARPENTER MOVED FROM THE STATE OF MICHIGAN TO PORT McNICOLL, ONTARIO, CANADA ABOUT FIVE YEARS AGO, AND HAS FOUND THE SHELTERED WATERS OF GEORGIAN BAY IDEALLY SUITED TO SCOWS. REVIVED INTEREST FOR SCOW SAILING IN CANADA IS A NATURAL, SINCE SCOW-TYPE CRAFT WERE EVOLVED THERE IN THE LATE 1800'S AND A GREAT RIVALRY BETWEEN CANADIAN AND U.S. YACHTSMEN DEVELOPED IN THESE BOATS AT THE TURN OF THE CENTURY.

THE FOLLOWING ARTICLE CONSISTS OF THREE LETTERS WRITTEN BY MR. CARPENTER. THE LETTERS CLEARLY INDICATE VIC CARPENTER'S INTEREST AND ENTHUSIASM IN PROMOTING E-SCOW SAILING AND WE HOPE TO PERSUADE CANADA TO SEND PARTICIPANTS TO THE NATIONAL CHAMPIONSHIP REGATTA THIS FALL AT LAKE GENEVA.

Mr. Hartley Comfort,

Bob Fowler, whom you met at the E-scow Nationals, mentioned that your interest in what we were doing here about E-scow sailing and building. So, I will start at the beginning. About four years ago, after having had nearly 20 years experience sailing and racing many classes of sailboats, including Lightenings, Dragons, Flying Dutchmans, Thistles, 110's, Morc's Multihulls, etc., (nearly every class except the E-scow), I moved to Port McNicoll and there were only two other sailboats besides my 24' MORC. We tried to race these boats and more became enthused about sailing. By the next year we had over a dozen odd ball boats and I became quite concerned that no one was really going to learn to sail until we got a class going. I had only seen the E-scow sail but she always looked so fast and beautiful that I decided we should try the E-scow for these particular waters and I built my first one two years ago.

Bob Fowler crewed for me and last year ordered me to build him a hull which he is now finishing to be ready for early spring. This winter I am building another E-scow for myself and we will have three for sure in next seasons sailing. The way many are getting interested, we very well may have at least three more. We would like to get organized right and get to sailing good enough to be able to go to the US to some of your regattas. So any information you may have on the association, racing, type of course, etc., would be very much appreciated. We have such a fantastic sailing area here we would like to have invitationals for E-scows in the near future.

I am enclosing photos of my first E-scow. She is Western Red Cedar strip planked and varnish throughout. The sails also were made by me. You may keep the photos. Also enclosed please find check for E-scow membership. By the way, our E-scows sell for \$2950, Canadian funds.

After sailing the E-scow for two years, I am convinced it is the boat for me and my wife agrees. She said, "why did we waste ten years on the Lightenings when there was such a fantastic boat as the E-scow?" There is only one thing I would like to do more than sail the E-scow. A sail on the Mighty A-scow with spinnaker flying. What a sail that would be. As for class racing, family sailing and island hopping, I think the E-scow is here to stay.

Thank you so much for your interest and we hope to be sailing against you all in the future.

Sincerely, Vic Carpenter

Dear Editor,

Many thanks for your recent letter and the information on E-scow mast rules, etc. Each time I receive anything about the E-scows I send it from sailor to sailor here and they all seem to be becoming more and more enthused about E-scows.

I see no reason why our E-scows would not measure in. I built the first Flying Dutchman in the US from the mold on; I build the first Dragon "Yankee Doodle" to be built in the US which remained the first for ten years; I have built top Penguins, Lightenings, Stars, etc., and never had trouble qualifying any of these boats for measurement. However, we do believe in gaining all we can with the allowable tolerances to gain in performance.

I am very much interested in experimenting with step thru deck foil shape mast.

Our E-scows are Min. weight, Max. length, Max. Beam and our spars are light. And, as for appearance, we have no worry there, that ours will compare favourably with other E's. According to a report brought back by two of our local sailors who went to your Nationals at Muskegon as observers, we have very good looking E-scows here.

We also would like to have a Canadian entry at the 1969 Nat'l E-scow regatta and we will have to see how well we all do this summer and how much real practice we can get. I realise that one can have the best and fastest boat in the world but without a capable skipper and crew one cannot do the boat justice.

Any chance of the loan or rent of movies on E-scowracing?

Very truly yours, Victor A. Carpenter



Dear Editor:

I am most pleased to have received your letter but have held off writing in the hopes of getting a few more photos of our E-scow, which never materialized. I am also glad to hear of our E-scow sailing and interest in the Georgian Bay area, getting a plug in the NCESA. I moved here from Michigan four years ago and am pushing the E-scow in spite

of about 30 other classes of which there are one or two of each boat at the most. After seeing the E-scow's performance last summer there has been a lot of interest shown. Next spring we will have at least four scows at the starting line in the Sunday races. In four years we have increased from one DN (mine) to 14 DN ice boats sailing out of this area, so I have great hopes that once we establish an E-scow fleet and have competitive racing, many of the sailors from Hamilton and Toronto will be joining us as it is only about 85 miles distance for them and we have much better sailing conditions here. We have miles and miles of clear blue water and the winds are usually medium to light. Although we can get some real wild winds at times, which makes it all the more interesting.

Our E-scows are cedar planked 1-3/4" strips, of maximum length and beam and minimum weight. Boards are 5/16" aluminum alloy. Rigging is all dacron and stainless steel. Masts are Sitka spruce weighing 60 to 64 pounds fully rigged. Boats are varnished throughout. We use epoxy resin glue for all gluing purposes.

My hope is to spark interest in International competition and in ayearly invitational regatta. A regatta would be good here in respect to the location between the Eastern and the Midwestern Fleets. Sailors from both areas could come with a minimum amount of traveling.

You have my permission to quote from these letters and to use the photos. If I can give you any other information, please feel free to write. Also, we would be very much interested in back issues of the Reporter.

Sincerely yours,
Victor A. Carpenter





Since winds of 15 mph and up drastically transform the behaviour of true planing boats, such as scows, the Reporter intends to publish a sustaining column on "Heavy Air." We are indebted to Nat Robbins, Jr. for leading off with a couple of situations requiring boatsmanship expertise and his solutions to these typical heavy going "moments of truth." It is hoped that Nat's observations will spark other sailors to contribute their variations or departures from Nat's technique as well as submitting helpful hints for things that happen to you when you wish you were back at the

Please send your finest secrets to:

(Editor) Ted Brennan -- 1316 Chestnut

Wilmette, Illinois 60091

Handling the E Scow in heavy air has some tricks that should be passed on. Actually, our boats can take extremely heavy winds. I have sailed them in winds I am sure up to 40 mph and generally have been able to handle the boat readily. The only problem is, when under those conditions, the wind is unsteady in either direction or velocity. It is the sudden gusts that hit you from the side that make the boat hard to handle. In a steady 30 mph wind, it is fairly easy to get the thing in the groove and make it move fairly well.

## by Nat Robbins Jr.

One of the toughest problems in handling the boat is in rounding a leeward mark when the wind is blowing very hard. One of the tricks I have learned in recent years which seems to be very helpful and yet so simple I am surprised I did not see it many years ago. That is, when sheeting the sails in after rounding the leeward mark, coordinate the jib and the main so they come in together and thus keep the boat balanced. Because of the amount of line that has to be taken in, it is generally easier to get the jib all the way in before the main. This causes the boat to pull off and makes it difficult for the skipper to handle it while trimming the main. The best method is for the skipper to head the boat in the direction he wants to go and hold it there with his foot while he sheets in the main with both hands as rapidly as possible. The jib man then coordinates his trim with the main so they are both in hard at the same time. One final point - because of the speed of the boat during the downwind leg, a sharp rounding maneuver at the leeward mark tends to force the boat over more than ordinary. This is caused by the centrifugal force on the mast. To counteract this, make sure that all the crew members are well established in their hiking positions on the windward side prior to the rounding of the mark.

Coming about in extremely heavy wind also requires a few different techniques. The speed of the boat through the water in a very heavy wind is not great. Because of this and because of the enormous drag of the wind on the sails when head-to-wind, it is important that the boat be tacked as rapidly as possible. Under no circumstances "gentle" the boat around. Prepare the crew adequately and then push the tillers to the lee as hard as possible, and keep them there until the boat is full and by on its new course. Make sure that the jib man gets the jib in tight as soon as the boat has passed head-to-wind so that the bow will be pulled around and the jib will pull you under way while the main sheet, which has been slightly eased, is trimmed.

One final trick. Just prior to tacking, head the boat up slightly so that it is not healing as much as previously, thus allowing the crew to be better prepared for the come-about. It is difficult for them to perform their tasks rapidly, as they must, if they must go from a far hiked out position on one tack to their new position on the other tack.

When tacking in extremely heavy seas be careful to time the come-about so that you do not hit a big wave head on when the boat is head-to-wind. An inordinately big wave at that point in the tack could stop the boat dead and give you trouble getting under way. Thus, there is an additional consideration in heavy wind when there are big waves.

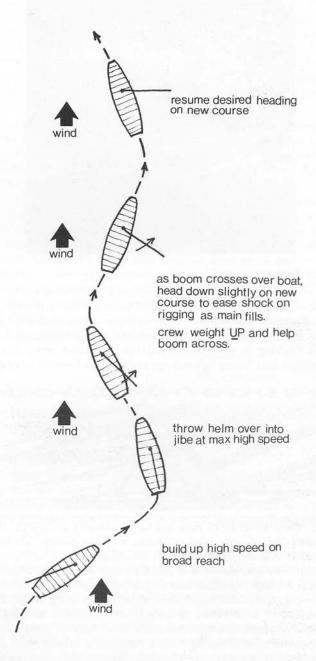
Generally, there are two or three tuning items that are necessary for heavier wind. Most of the top skippers will drop the mast backwards by hoisting the jib one or two notches less than normal. Basically, this opens the slot between the jib and the main slightly, it lays the mast over a little causing more compression and bending of the mast. Since, under these conditions, the boats are sailed with a fairly large luff in the main, the balance of the boat is not affected appreciably. The boards are raised or lowered to provide the final balance, but frequently under these conditions, the board may have to be lowered some to provide good balance, whereas you might expect the board would have to be raised to swing its center of effort backwards to coincide with the more after position of the mainsail.

The main travelers should be let out as much as necessary to control the boat. If the wind is extremely heavy, the travelers should go out all the way. The jib fairleads should also be moved outwards in order to open the slot. Finally, The jack stays should be loosened slightly, depending upon the cut of the mainsail.

All of these adjustments can be made while under way. Adjusting the mast rake may be a little difficult but it can be done downwind. You must be able to change these adjustments if the wind velocity should change. It is very important that you should be able to react with a change in wind because of the effect on boat speed. The main traveler, forinstance, may be adjusted several times, thus the best gear for this adjustment is some means whereby the crew can adjust the traveler from their normal sitting position on the deck.

In very heavy wind sailors are frequently afraid of jibing. We had a chance to perfect this technique during the E Invitational at White Bear when there was an extremely heavy wind and the course was such that several jibes were necessary. I found that the easiest way to perform the jibe safely and consistently is to build up a considerable amount of speed on a broad reach, then throw the boat over into the jibe while the high speed is being retained. As the main

boom crosses the boat, and still with a certain amount of speed, head down slightly on the new course. This takes some shock off the equipment as the mainsail fills on the new tack. The best way to show you is by this little diagram:



In summary I can truthfully say that our E Scow will take an enormous amount of wind. It does require some experience and certainly good judgement in keeping lines clear and unfouled under all conditions. If everybody is concentrating on their responsibilities, however, the possibility of capsizing is enormously diminished and you find that you can sail through almost anything.

(Ed.note) We had intended to use an article
by Mike Meyer for this issue's "How To" but
Nat's was all set up and time was short -So - look for Mike's in next usue - I