

LINES OF THE PRESENT SCOW MODEL, SO POPULAR ON THE LAKES OF WISCONSIN AND THE WATERS OF BARNEGAT BAY



The 25th National Championship -- a tremendous achievement. What's even more remarkable, though, is that while our national organization is in its silver anniversary year, our Class itself is about 60 years old tracing its origins to 1923-24 as the history this Reporter indicates.

I am pleased as Commodore to report that the Class is strong, finances are in order, and our prospects for the future are positive. In addition to the four regional organizations, we are working with the Southeast Scow Association to encourage their growth and development.

I hesitate to look forward the next 25 years because of the speed with which the past 25 years have gone, but I know that our future is bright. It is bright because our organization rests on volunteers. From those sailors who set down their names on our organizational papers -- Walter Smedley, Richard Turner, J.G. Klemm Harvey, Bruce Wathen, Gordon Lindemann, Nat Robbins, and Maynard Meyer -- to the many others since who have volunteered their time and effort to develop our publications, to handle our advertising, and the mechanics of regattas, and the literally hundreds and hundreds of hours of volunteered time.

The strength of the organization will continue to need that volunteer dedication. It is impossible to recognize all of those many, many people who have helped. It is those people who are now just starting to sail to whom the responsibilities of this organization will rest as we go forward with the object of strengthening competitive E scow sailing and developing it nationally and internationally. (We have had recent inquiries from New Zealand and Australie and Canada.) Let's remember and acknowledge those many people who have contributed in the past by raising a toast to our next 25 years. See you in Madison at the nationals.

Mauser



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In 1977 during the period of my withdrawal from the challenges of making a living, I spent a lot of hours rummaging in the stacks of the Library of Congress -- thanks to a partially obsolete ID which allowed me to read all the yachting press of the 1880's, 90's and into the first decade of this century. From the pages of Rudder and Field And Stream, the Reporter of "Summer 1977" got its outline of the birth of the scow type. Material from the various Inland clubs as well as the most thorough two volume history published by the Seawanhaka Corinthian Y.C. in 1965 was then drawn into the story, blow by blow. Hence this mostly reprinted tale to celebrate the twenty-fifth National E Regatta - our Silver Anniversary.

But this Anniversary number not only traces the scow genesis, it also presents the E story from Mike Meyer's own first hand experience and that of his immediate family -- how the E boat was conceived (center board and all) in 1923, born in 1924, and following considerable surgery became a successful offspring of the ILYA family.

Some of the ILYA club histories tend to portray scow development more in the eye of the beholder than the whole story justifies. John O. Johnson of White Bear and Jimmy Jones of Oskhosh were creative pioneers of our breed. But the hero of the scow world must remain Herrick Duggan, a Canadian civil engineer and bridge builder as well as an amateur naval architect with home waters on Lake St. Louis near Montreal. From 1896 through the season of 1902, Duggan boats held off challenges from all the top names of the eastern naval architect establishment, and the scow pioneers of the midwest as well. Each year Duggan added a new design feature which became a building block for the scow type after he proved its success.

Whomsoever combined canoe construction, bilgeboards and double rudders, a flat bottom with a small transverse sailing width -- all these features for the first time may not be so important as was the extraordinary wisdom of the succession of ILYA directors who took over scow development from the rest of the yachting world which had consigned the type as being freaky and unseaworthy.

To the ILYA therefore this Reporter is dedicated with the thanks of us E boaters who enjoy our rocket ships.

SAM MERRICK BH2



Prior to 1896 in the United States there had been a half century of sailboat racing as a form of recreation by American "yachtsmen". They started by using the workboats of the day. Getting to market early often meant better prices, and there were no doubt canny commercial captains who had learned how to get more speed out of their craft. But it took yachtsmen, with extra money, to study and evolve the elements which produced speed. Expensive materials, for example, lead instead of space-taking iron, costlier light construction necessitating skilled craftsmanship, sail area that needed more engineered support than a work boat required, all these improvements and many more were introduced as one yachtsman tried to beat his fellows in formal racing. Often they placed wagers on the outcome in the style of horse racing, where owners hired captains and crews and bet money on the outcome while they enjoyed the luxury of steam yachts, drank refreshing thirst quenchers amid female company protected from the sun by veils and parasols.



## The Seawanhaka International Challenge Cup —Midwife to the Scow—

Speed on water in its liquid form dependent on the power of wind alone - it is what sailboat racing scow fashion is all about.

The limits of speed are bounded by such factors as the perceived requirements for seaworthiness, the materials and methods of construction, the size and shape of the "sail" and the force of the righting moment (ballast, the lever action of the crew, their weight, their distance from the center of buoyancy). It is the function of the designer to produce a hull that will go faster than its competitors within the parameters and restrictions of these elements. Given complete freedom to design, there's no telling what kind of a vessel might be produced. But the story of sailboat design is a story of restrictions on excess — excess money, excess size of one or more elements of the whole product.

The crucial input of the Inland Lake Yachting Association is the extraordinary amount of wisdom used in developing these limitations for the purpose of fostering a type of high performance sailboat racing within the financial reach of many. However, it is the theme of this story that while the ILYA family (builders, sailors, clubs and officials) may take satisfaction for having perfected the scow and promoted its racing classes, much of the basic design work was done by others between 1895 and 1905 - especially a Canadian bridge engineer named Herrick Duggan and another engineer, lately from England, who was known for his abilities to use a slide rule, named Fred Shearwood. Duggan's energies in this period were directed to winning races for the Seawanhaka Cup. It was under the forced draft of the Cup's measurement formula that drew him year by year to design the scow in substantially it present form. That ten-year span, in which the ILYA itself was founded, started with active handicap sailboat racing all over the inland lake area sponsored by the many yacht clubs which mushroomed after the Civil War. It ended with the ILYA firmly controlling two large classes of scows raced boat for boat.



Thanks to its pre-eminence in the yachting world, the Seawanhaka-Corinthian Y.C. of Oyster Bay, Long Island, in 1833 came up with a formula which measured the waterline, added the square root of the sail area and then divided the result by 2:

Thus if you had a 20 foot waterline and put 625 square feet of sail, you had a measurement rating of 22.5. On Massachusetts Bay ratings were based upon waterline lengths alone with sail area not counted.

On Lake Geneva, the handicap was based upon the length of the waterline plus one-third the length of the overhangs. Apparently Lake Geneva felt nervous about basing handicaps on waterline alone, even though up to that time overhangs tended not to be more than a few feet in either direction. Like Massachusetts Bay however, Lake Geneva ignored sail area, so that the latest designs from the East under the Seawanhaka Rule were easy to beat.

As the development of sailboats became more the object of designers encouraged by well-off yachtsmen, more effort went into probing advantages that could be taken of the Seawanhaka Rule and its local variants. It was Nathaniel Herreshoff who led the attack with a succession of boats that measured short on the waterline (to get a big handicap) and long overall. So when such boats were heeled on their sailing lines, the waterline stretched. Since long boats are faster than short ones, the advantages of designing in this manner to take advantage of the Seawanhaka Rule were clear enough. Herreshoff typically equipped such boats with deep fin keels for the required righting moment.

As designers worked on this formula, overhangs (the length of a boat extending forward and aft of the actual waterline) became increasingly long, and construction became lighter so the short waterline could support more length. Ballast whether in the form of keels or otherwise was undesirable because it was heavy.

The longer overhangs became, the more difficult it became to measure waterlines, the basic element of the Seawanhaka Handicap Rule. Inland lake yacht clubs wrestled with this problem. The Lake Geneva history describes an addendum to its rules in 1895 which required the waterline to be measured **after** a race with ballast and crew aboard so that the handicap could be accurately computed. Chop or waves from steam launches added to the difficulty. Some yacht clubs built special tanks to measure the waterline rather than attempting the job dockside with the measurer hanging upside down with his tape. As we shall see, the ILYA belled this cat in 1902 by measuring length overall and eliminating waterline measurement entirely. In the East, baby and bath were disposed of together with the abolition of the Seawanhaka Rule.

The Seawanhaka Rule could be used as a basis for level racing without handicaps. Thus if it was agreed that a rating of 15 was the maximum allowed for a given "class" then a 12.5 foot waterline boat with a 306 sq. foot sail area could race boat for boat against a 15 foot boat with a 225 square foot sail area. This was the rating used in 1895 when the first contest was held for the so called Seawanhaka Cup.

The deed of gift for "The Seawanhaka International Challenge Cup for Small Yachts", the formal name for this famous trophy reads as follows: "Yachts shall be propelled by sails only, whose racing measurement or size shall not exceed the maximum limit of the so called twenty-five feet racing length class or fall below the minimum limit of the so called fifteen foot racing length class of the Seawanhaka Club as such classification exists at the date of this instrument" (1895). It was the incentives let loose upon the yachting world by this trophy that in ten years produced the scow — an outcome viewed with misgivings and finally widespread contempt by the yachting oligarchs of the club whose name the trophy bears.

The 1895 contest was precipitated by a British challenge received from a canoe racing enthusiast and amateur designer named Brand who brought over SPRUCE IV - a 15'9" waterline (23'3" overall) with heavy fittings and a heavy bamboo mast. ETHELWYN, the American boat chosen among a field of seven which were built for the trials, measured 15'8" on the waterline with only 196 sq. ft. of sail - 20.5 less than she was allowed. She was skillfully rigged and had hollow spars. Such spars were relatively new -- the product of a craftsman in New Haven who had a secret glue. W. P. Stevens, the designer, expressed some satisfaction that she did not gain sailing length when heeled. ETHELWYN easily won this first challenge, but it was the last time an American boat did so until 1905. It is interesting to note that one of the boats ETHELWYN beat in the trails was QUESTION - flat sided, square chines, a "barn door" boat without cockpit, a derivative of the so called New Haven sharpie in some respects the real forerunner of the scow. The sharpie had been developed over the years as a work boat by Long Island oystermen.

#### 1896

Late in 1895, the Royal St. Lawrence Yacht Club of Montreal challenged the Seawanhaka Club for the second contest, again under the fifteen foot rating class and, of course, using the Seawanhaka formula. As a tribute to the impact of the Cup's influence, an incredible twenty-seven boats were designed by the most prestigious naval architects of the eastern yachting establishment including Nathaniel Herreshoff, himself, Starling Burgess, Charles Mower and Clinton Crane. The latter's design, named EL HIERE, was selected. She had 240 sq. feet of sail and measured just under 15 feet waterline. In the Cup races themselves, EL HIERE was soundly beaten in three straight races by the Canadian GLENCAIRN, the sixth boat designed, one after another in preparation for the challenge, by Duggan.



HALF- PATER "ETHELLYNN DESENED AND SAILED BY WILLIAM P. STEVENS. (PHOTO ROSENFELD)

A comparison of the final two designs is instructive. No. 5 of the series (called SO THIS) had a SA of 285 with an upright waterline of 13, an inclined 18 deg. waterline of 15 feet 2". She went fast, but No. 6 turned out faster. GLENCAIRN had an upright WL of 12 ft. 4 in., a sail area of 300 with an effective WL of 15. The floor was flat, the top sides flat carried to a round bilge. GLENCAIRN when sailed presented a long narrow hull, 24 feet long and only 3 ft. 11 in. wide when heeled.



The Seawanhaka-Corinthian Y.C. history, which was written by W.P. Stevens, the designer of ETHELWYN, describes the product thus: "The end in view was the creation of a form which, when inclined to a normal sailing angle, would show a load waterline plane reasonably symmetrical about an axis nearly parallel to the centerline of the vessel; that this plane should show the greatest possible



LINES OF MR. DUGGAN'S SCOW, GLENCAIRN II



GLENCAIRN-CONSTRUCTION PLAN

gain of length over the upright plane, as measured under the rule; and that the center of buoyancy should shift well to leeward, giving a long lever, similar to the sliding seat of a canoe, for the crew on the weather rail."

Duggan's feat of designing a boat that beat the efforts of the rising crop of American designers received widespread and no doubt grudging acclaim even at this early stage of the Cup's competition. But wait!

## 1897

Immediately following the 1896 effort the Seawanhaka Club challenged for a return contest in the 25 foot class. After some discussion, it was agreed that the 20 foot racing length be selected with a limit of 500 sq. feet of sail. Although over 100 boats had been built by this time to the 15 foot rating, The Seawanhaka-Corinthian Club apparently was not pleased with its offspring which it was prepared to abandon for a larger boat. Says Stevens "The contests have produced a fleet of racing craft quite as extreme in design and construction as DEFENDER (America's CUP boat of 1895) herself and open to all the objections of extreme cost, fragile construction and limited utility ...'' (Harper's Weekly 1897). Stevens was probably thinking about the kind of boat which would be produced with Duggan's approach using the larger size than the 15 foot class. He had expressed satisfaction with the transportability and cost of the smaller boats.

The 1897 races were held on Lake St. Louis, a broad and often shallow body of water, formed by the confluence of the Ottawa and St. Lawrence Rivers just about Montreal. This is the "home water" for the Royal St. Lawrence Yacht Club which, as the winner of the Cup until 1905, designated this site as the racing location.

The 1897 contest, between MOMO, designed by Clinton Crane, and GLENCAIRN II, was a repeat of the previous year. MOMO interestingly enough was sold after the races to a Mr. Dee Allen on Lake Pewaukee and did her share of winning races. It is odd that there is no record of Duggan's boats coming to the midwest, although many of the unsuccessful American boats did.

One sideline: The Canadians were incensed by new ballast wrinkles. It seemed that in heavy air, the American crew donned three heavy woolen sweaters and doused them with water. They also substituted heavy crew members for light ones. Such behavior was denounced as unsporting.



"MOMO" CRANE'S 20-FOOTER CHALLENGER.

Out in scow country on the many lakes a hodgepodge of boats were doing a lot of racing but they were not yet much like scows. Boat builders had already developed a capacity for excellent craftsmanship - a critical ingredient for the light weight construction needed for later scow development. John O. Johnson (the founder of the present Johnson Boat Works and grandfather of Skip) was already established on White Bear Lake. Johnson was later quoted as giving Herreshoff credit for instituting canoe construction in ALFREDA which he designed in 1897. This boat had ribs running across her full width and was built in the East for a White Bear owner named Milt Griggs. Other than Johnson, the most prominent of the builders at this early date were Gus Amundsen and F.W. Ramaley on White Bear, Andrew Petersen on Lake Minnetonka, the Palmer Boat Company, first located on Fox Lake, Illinois, then at Highland Park, then finally at Fontana at the western end of Lake Geneva. This list would be incomplete without Jones and LaBorde at Oshkosh of which Jimmy Jones was the leading figure. Jones was not only a builder but a talented helmsman and creative designer. He had been winning races on Lake Winnebago since 1876 and would play a prominent role in scow development until near his death in 1932.



J.O. JOHNSON AND GUS AMUNDSEN FLANK AN UNIDENTIFIED WINNER. [Photo: JOHNSON BOATCO]

There were a few "side walk" boats this early on White Bear Lake according to the pictures in the White Bear history. YANKEE, one of these, was designed by a New York designer, Charles Reed, who had already been involved in the Seawanhaka competition.

YANKEE was built by Ramaley, using the same canoe construction which Herreshoff had developed for ALFREDA. YANKEE was built for Lucius Ordway who, as we shall see, was one of the major figures in these early days of the scow's development. Johnson later described YANKEE as the first true scow he had seen. She was to become a test design against Duggan early in 1899.

In Wisconsin, the latest designs were short on the waterline, long over all but narrow of beam — hardly scows. They were dependent on ballast to carry their sail.

Perhaps the principal event of 1897 of interest to the scow family was the spadework done to form the Inland Lake Yachting Association at a meeting at White Bear Lake on August 24 with delegates from a number of lakes in Wisconsin and Minnesota.



## 1898

The ILYA was formally launched in Milwaukee on January 28 with representatives of nearly twenty yacht clubs from four states. It adopted two classes under the Seawanhaka rule for inter-lake competition without handicaps: 1) The 20 foot (racing length rating) class with maximum 500 square feet of sail and 600 lbs. maximum crew weight and 2) The 17 foot class with 350 sq. ft. of sail and 450 lbs. of crew. Since no ballast other than crew was to be allowed, it followed that the sidewalk boats were to be favored since beam was needed to permit the crew to carry the sail area. Bear in mind that if the maximum SA (you could go with less if you wanted) was to be carried by a boat built for the 20 foot class for example, the waterline might be short of 18 feet (because the square root of 500 is 22 plus). Since the overall length was unlimited and useful for more speed, there followed a period of intense building activity and experimentation for the purpose of making the boats lighter as well as longer. This process produced the boats known as "featherweights", and increased concern that limitations were necessary. But this gets ahead of our story.

The first ILYA Regatta was held on White Bear Lake. Each club was permitted one entry -- a subject of controversy for the following fifteen years, presumably to prevent local clubs from swamping visitors. MAHTO, a new boat built by Amundsen and looking very much like YANKEE, won the 20 foot class. Lucius Ordway was the skipper. Some evidence has it that in this same year, Johnson built WIERDLING for Frank Douglas, a White Bear helmsman. WIERDLING was to be one of the new light weight boats. Johnson wanted to put (or perhaps actually did put) bilgeboards into WIERD-LING, but Douglas thought she was radical enough already, (or so the story goes) and the boat appeared in public only with a centerboard. The Johnson claim for conceiving in 1898 what after 1902 became a scow characteristic will have to remain unsubstantiated until better evidence emerges from the shadows of history. As we shall see, Duggan came out with bilgeboards in TRIDENT as did Jimmy Jones with COMET in 1902.

But the big event of 1898 was Duggan's response to the Seawanhaka Club's second effort to get its trophy back from Canada. SEAWANHAKA designed by Clinton Crane and built by Canadian builders incorporated all the best of Duggan's thinking of previous years. SEAWANHAKA won the trials against AKABO (only two boats were built) designed by a talented proponent of the emerging scow type named Huntington. AKABO had a bow that appeared to be heading toward a normal point but sawed off, and a curious pancake-like stern. In the trials, SEAWANHAKA was so badly "beat up" and twisted out of shape that a new boat named CHALLENGER was using the same lines as SEAWANHAKA but built lighter.

Duggan designed four boats — three variations of the GLENCAIRN type but the fourth a radical craft that was superior to the others, named DOMINION. As the Seawanhaka Chronicler says, Duggan "had outdone even himself in beating the rule", an epithet which becomes a compliment when one's designer takes unsuspected advantages from the rule's soft spots. DOMINION was often called a catamaran (or worse, but she was only partway) — 17'6" waterline, 27 feet waterline length when sailing and 35 feet in overall length, with a tunnel down the middle 2½" above the waterline at the center but which curved upwards at either end. Although she almost had two separate hulls, DOMINION was fitted with a large steel centerboard and a single center-located rudder.



Duggan described DOMINION as carrying to a logical conclusion the principles of his two previous efforts designing a boat to sail in the inclined position paying heed to the vertical position only as regards measurement. In any breeze DOMINION was a run away; and she trounced CHALLENGER but not before all the furries of outrage were stirred up against her from the yachting establishment. DOMINION was not a beauty, for it would have to be reported DOMINION looked somewhat like a sled with runners poking out in front.

Writing in 1928, but reviewing what he had accomplished, Duggan said this: "It may be well to review the experience with the type as now developed. With the boats at a proper sailing angle, the ratio of midship section to effective waterline was so small that wave-making did not seem a serious factor, even at high speeds. At all events, divergent bow waves were not noticeable and the wave of displacement was very small compared to what one had been used to in the ballasted type with limited waterlines. Surface friction, therefore, seemed to be the largest retarding force, and effort was generally directed to getting a small surface or, at least, one of small transverse width. All of these boats with the flat floors were comparatively slow when not well inclined, probably due principally to the large area and poor form of the wetted surface and, in some measure, to wave-making by the short and steeper area curve. The hard bilge boat, with bilges closely approximating a sector of a circle, gave the smallest wetted surface and the best form when in the inclined position, but when sufficient inclination could not be obtained from the wind pressure, the crew to leeward, being little outside the centre of buoyancy, could not heel her sufficiently to develop her best performance and some flare was generally given to the sides." (from Sailing Craft - Edwin Schoettle, Editor)

All around Long Island Sound when the Seawanhaka rule was in effect came sounds of dissatisfaction and demands for change. Herreshoff, in a formal proposal to the Seawanhaka Club, suggested the use of displacement as a factor. The Seawanhaka Rule, they said, fathered a lot of "worthless boxes" "encouraging a type of craft more worthless and certainly as dangerous as the old gravel wagons" (i.e. sand baggers) which it had been the intention to replace because of their expense to run and hazard to sail.



OLD GRAVEL WAGON "E. Z. SLOAT" IN 1896 SIFTS ALONG WITH ABOUT 600165.0F SAND [photo: ROSENFELD]

At the end of the regatta, salvos of protests were filed and icy letters exchanged. The American crews found it necessary to attend the concluding dinner and hop in their private capacity.

Relations between the Canadians and the Seawanhaka, already bad over DOMINION'S rule beating shape became worse when the Inland Lake Yachting Association appeared to have the inside track for an 1899 challenge. A leading Seawanhaka Club member allowed himself to be quoted by a reporter to the effect "interest in the Cup would wither and die if it ever went to the lakes. No foreign country such as England would consider competing in that remote hinterland". Needless to say there must have been more than raised eyebrows over this example of Eastern myopia. Somehow the Canadians and the Seawanhaka Club were able to agree on the terms of still another contest but barring boats of the DOMINION type.



"WORTHLESS BOX" ODGROOK KITING ALONG [Photo: ROSENFELD]



SANDBAGGER "BANSHEE" SPREADS IT ALL ON WHITE BEAR LAKE IN 1895 [Photo: Johnson Boat Co.]

Since matters had been patched up for another Seawanhaka challenge thus depriving White Bear of the opportunity, a special contest was arranged as a kind of "High Noon" test between DOMINION and the best of the Inland Lake scows. The boat chosen for this purpose was YANKEE which to White Bear's satisfaction had proved her superiority over MAHTO, the ILYA champion of 1898. This contest was held in June and attracted a large crowd of spectators from ILYA country. DOMINION proved her clear superiority.

YANKEE, as we said, was designed by an Easterner and was considered by Johnson as the first racing scow he had seen. Duggan described her as an all out scow. YANKEE had a pointed bow, was 35 feet overall, 7'8'' beam, 6'' draft, 13'' freeboard, 3'' crown on deck, displaced 1300 pounds, oak ribs on 8'' centers, planking of 5/16'' cedar. She had a large steel centerboard.

Jimmy Jones was one of the midwestern spectators. It would have been instructive indeed to have been able to listen to the conversation which must have taken place between Jones and Duggan, the two amateur and leading designers of the then scow type. When Jones returned to Oshkosh with the benefit of his trip to Montreal, he set about building ARGO which two months later won the Inlands in the 20 foot class. The Neenah-Nodaway history recounts that Jones and "other experts" (one is tempted to read Duggan) agreed that the flat bottom of YANKEE and the long waterline of DOMINION underway could be exploited further; they discounted the double hull as a speed factor because one hull was always out of water.

In this same year ALGONQUIN designed by Crowninshield, a famous Boston navel architect was the first scow type to win Lake Geneva's famous Sheridan Cup. She had been bought immediately after she had lost to CONSTANCE in the Seawanhaka trials leading up to the Cup contest of that year. CONSTANCE in turn was beaten 3 races to 2 by Duggan's GLENCAIRN III in the Cup races on Lake St. Louis. In Duggan's view, CONSTANCE at least in heavy air was the faster boat.

At this point all three areas, Montreal, Long Island Sound and the midwest had approached a stage of near equality the product of using the Seawanhaka Rule and a sail area limit of 500 square feet. Only Massachusetts Bay which rated on the basis of waterline measurement alone with a maximum crew weight was following a unique course with longer and lighter boats carrying ever increasing sail area. For example, there were HOSTESS designed by Keith for the 21 foot class with 40 feet OA, 11 feet maximum beam (6 feet at the bow and 8 feet at the stern) and CARTOON (a "cruising" scow with a cabin) designed by William Gardner, 48 feet long and 10 feet wide with a fin keel. The extremes were still to come!





CRANE'S "CONSTANCE" ALMOST GOT THE CUP BACK -



SCOW "GLENCAIRN III TOOK "CONSTANCE" 3 to 2



SCOW "HOSTESS" DESIGNED BY ARTHUR KEITHIN 1899. 40 ft LONG, 6' WIDE AT BOW, 11' ETREME. S.A OF 1023 59 ft.

## 1900

In this year, White Bear Y.C. again challenged the Royal St. Lawrence Y.C. for the Seawanhaka Cup — this time not hindered by the Seawanhaka Club which had abandoned its effort to win back its now famous Cup. It was agreed to race under the 25 foot Racine Length Class, but with a limitation on the maximum sail area of 500 square feet. This was the same sail area used for the challenge the year before with the 20 foot class. The use of the 25 foot rating combined with the sail area limit, allowed a waterline length of 27'6'', considered likely to encourage a less extreme form of hull.

At White Bear, two boats were built, MINNESOTA and MINNEZITKA. MINNESOTA was designed and built by Gus Amundsen and sailed by Lucius Ordway; MINNEZITKA by John Johnson and sailed by Milt Griggs. After extensive trials, MINNESOTA was chosen although speed seems to have been near equal.

In Canada, Duggan designed four variations of the scow type represented by GLENCAIRN III and one of these, RED COAT, was picked because it was best all around boat.

A detailed description, together with photographs, of all six of these boats appears in a contemporary article in Rudder by C.D. Mower. Mower was a Boston naval architect who frequently covered scow racing for Rudder and designed many scows of the era.

A notable feature of the conditions for the 1900 contest was the specific scantling restrictions to prevent featherweight construction. This was a step that resulted in the Canadian boats still being sailed 28 years later.

Unfortunately for the White Bear cause, RED COAT won three straight races and retained the Cup for Canada.

The ILYA Regatta of 1900 included a new boat designed by Will Davis with a tunnel hull — named CAROLINE. Davis was an amateur designer and able helmsman from Oshkosh with a long record of success. CAROLINE didn't win but she was fast enough to 'encourage the ILYA to adopt a rule requiring hulls to be no lower than their center point.



SCOW, "CARTOON" DESIGNED BY WILLIAM GARDNER. BUILT IN 1898 - 48 ft., 10' BEAM, FIN KEEL AND DISPLACEMENT OF 7168 165. NOTE CABIN.

#### 1901

Shortly after the first of the year in 1901, ILYA held a kind of landmark meeting which was to establish patterns for racing for a long time. There were three issues over which opinions were deeply divided: the locale for holding regattas, participation of professionals in the racing, and the need for scantling restrictions to prevent the construction of featherweight scows. The first issue was disposed of by agreeing to make Oshkosh in 1904 the permanent site after completing the round of yacht clubs already in process. Jimmy Jones' career as a helmsman was terminated by a rule barring from Inland racing all who received monetary gain from the sport.

On the construction problem, complete specifications were adopted covering the size and material of planing deck and ribs. Instead of using the Seawanhaka Rule, which incurred the troublesome problem of measuring waterlines, it was decided to designate two classes more or less equivalent to the two then sanctioned, but based upon an overall measurement. Thus, Class A would be 38 feet long with 500 square feet of sail area and replace the 20 foot class. Class B would be 32 feet overall with 350 square feet and replace the 17 foot class. It is a fair observation that Class A closely resembled the type of boat which had been built for the Seawanhaka Cup Races of the year before. The lightweight boats were "grandfathered" and remained competitive, but the scow type was so rapidly developing that new boats took over despite their additional weight.

Since the waterline no longer counted, the tendency to have ends higher in the water which had long earned the sobriquet "sow belly" was no longer necessary. The ends were thus to get closer to the water and thus make more effective the overall length when the boats were sailing in their proper inclined position.

It is worth speculating whether these sound decisions had they been adopted for small boats by the Seawanhaka Club or among the crazies in Massachusetts Bay might not have encouraged the scow type outside the midwest. It would have to be conceded that the heavy seas on Long Island Sound might be too unfriendly, but the yachting establishment failed to adopt the ILYA'S sensible decisions in part at least out of the experience of being so soundly beaten in competition.

The Seawanhaka Cup competition of 1901 was not newsworthy. The races were held under the 25 foot rule (as in 1900). The challenge came from the Island Sailing Club of Cowes (England) which built 3 scows, the best of which GREYFRIAR, was brought over.

The Seawanhaka Club's chronicler, when viewing afar what manner of racing the Cup was promoting, fairly shivers with scorn at the necessity of having to keep "these skimming dishes on their feet" by getting on the windward rail and having to weigh the crew members "like jockeys before a horse race."

The 1901 Inland was conducted on Green Lake after an active period of boat construction under the new rules. In Class A, seven boats were entered that were built by Jones and LaBorde, three by Amundsen, and one by Johnson (his first), the two year old MINNEZITKA. The winner was a brand new Jones boat named EMANON. The detailed eight page description of each of these boats in a Rudder article by Mower is typical of the coverage the scow world was receiving in those days.

It was in 1901, parenthetically, that the nearest thing to a scow was built for America's Cup competition. INDEPEND-ENCE (141 feet long, 14,000 sq.ft. of sail, 24 ft. beam) was designed by Crowninshield. She turned out to be a brute to sail and was often unmanageable — therefore not selected.



CLASS B "JOLLY TAR" ON LAKE GENEVA

## 1902

The Inland sailors' thirst for winning the Seawanhaka Cup was not in the least frustrated by the fact that the Canadians accepted a challenge (again under the 25 ft. length) from the Bridgeport Y.C. (Connecticut - north side of Long Island Sound). Bridgeport announced it would hold trials open to all outsiders. The line-up was this:

BOAT NAME	CLUB	SKIPPER	DESIGNER
TECUMSEH	Bridgeport	Jimmy Jones	Jimmy Jones
MASSASOIT	Bridgeport	Unknown	Crowninshield
FRONTENAC	White Bear	Milt Griggs	Unknown
CRUSADER	White Bear	Lucius Ordway	C.D. Mower
SEERESS*	Manhasset Bay	C.D. Mower	C.D. Mower
MONSOON	Boston (area)	Unknown	Starling Burgess
FILIBUSTER	Boston (area)	Crowninshield	Unknown
NUTMEG	Bridgeport	Huntington	Huntington

\*She was to become Class A Champion at White Bear in 1903.

TECUMSEH won the privilege of going to Canada in trials conducted mostly in light air. She was clearly the fastest boat, in light air, but not until Jimmy Jones was brought as her skipper after earlier failures. Her choice, a Bridgeport syndicate boat by the Bridgeport Committee was critically viewed. This excerpt from Rudder's extensive coverage is glowing evidence of how skillful midwestern sailors had become: "It has been the custom to decry western yachting and to picture fresh watermen as a lot of lubbers. But though they may be guilty of breeches of etiquette, hoist two flags on one string, fire guns on Sunday and wear the names of their boats on their caps, when it comes to racing scows they know more about the game in one minute than we Eastern people do in a month. It will be a bitter dose for the Easterner to swallow to have to go to the West to learn what he fondly considers to be his own game, but if the West is to be beaten at scow racing, it can only be done by studying the fresh water-man's methods."



Jimmy Jones, by this time branded as a professional in the ILYA, and a crew from Oshkosh, plus one from Bridgeport to give additional color to the Bridgeport nature of the challenge, arrived on Lake St. Louis to find Duggan's last contribution to scow development in the form of TRIDENT equipped with bilge boards. Duggan had left the scow scene for Nova Scotia and other interests, but he had designed TRI-DENT first. He wrote this: "TRIDENT was so named because she originally came out with a box for a centreboard and a box in each bilge inclined something over 19 degrees to the vertical. Experiments with DOMINION demonstrated that with a centreboard of 20% less width than GLENCAIRN her lateral plane was more effective, due no doubt to her small angle of heel. Early consideration was given to the introduction of bilge boards, the lee one of which would be practically vertical when sailing, but owing to the discussion over DOMINION, it was not thought well to introduce them and it was not until 1902 that they were tried. TRIDENT was built with three boxes. now as some suppose, because there was any doubt of the efficiency of the lee boards, but in case the use of bilge boards should be disputed as not being within the spirit of the rules."

Except for one race in light air, TRIDENT was markedly superior — thus proving again that Duggan was ahead of all his competition.

The credit for introducing bilgeboards must remain with Duggan and TRIDENT despite the appearance just before the Inlands of COMET designed and built by Jones and LaBorde. She was not allowed to compete because she had not been ready to participate in the qualifying races on her home lake — Pewaukee. It stands to reason that Jimmy Jones put the bilgeboards into COMET **after** finding TRIDENT using them. Otherwise, he would have had this feature in TECUMSEH. Unfortunately we may never run this sequence of events down.

While the scow was undergoing healthy development elsewhere, it had been getting unbelievable in Massachusetts uninhibited by any limit on sail area. The Quincy Cup racing, started in 1898, was the force behind these ever larger, one-season racing machines. The Rudder of 1902 contains a full page picture of OUTLOOK, designed by Starling Burgess -- 52 feet long, 25 on the waterline, 16 feet beam, 1800 sq.ft. of sail. This improbable object was built around a central steel truss which extended well above the deck. Much of her deck surface was cloth so the crew had to be careful not to step in the wrong places. Tacking meant going through the truss or hurdling it. OUTLOOK beat FLASHLIGHT, another monster 55 feet long, for the Quincy Cup of that year. FLASHLIGHT sailed the series with a crumpled bow. Such were the products of a waterline measurement rule, a crew weight limit of 850 and otherwise no other limitation.



## 1903

In the next chapter of Seawanhaka competition, this time from the Boston area, Starling Burgess was the designer of KOLUTOO sailed by Dick Boardman. THORELLA II like TRIDENT from the year before but with two small (9 x 12 in.) rudders as well as bilgeboards was the defender — designed by Duggan's long-time partner Fred Shearwood. Going to windward, her windward rudder was described as always out of water, wiggling in the air like the foot of a duck. KOLUTOO had a single board and rudder and she offered no competition. Her best performance was 12 minutes behind at the finish.

Back in scow country many more new boats were being built under the new class designations. All of them had bilgeboards. COMET II built in secret by Jones and LaBorde for Fred Pabst showed up at the Inlands with two rudders. This feature entitled her to be widely described as a freak a freak which won the Regatta. Once again, we can speculate, and must, as to whether Jones or the Canadians first came up with this characteristic scow element.

The Inland meeting after the season again struggled over professionalism. It seemed to have turned on the nagging problem of scarce crew especially in view of the weight limits. Why not, it was asked, could not one employ his gardner or coachman at least for the purpose of local lake racing.

Rudder, as was its want, provided a capsule description of racing on Delavan with 30 to 40 active racers of which half were "modern scows", most built by the Palmer Boat Co. The biggest news, as the year 1903 ended, was White Bear's challenge for the Seawanhaka Cup being accepted by the Royal St. Lawrence Y.C. for the following season.

## 1904

Led by Lucius Ordway and Milt Griggs, invitations were sent to all Inland Clubs to send boats for trials in June to be conducted by a Special Committee. What ensued was the greatest effort by one club to return the Cup to the U.S. Six variations of the scow form were designed and built, five boats were financed by White Bear alone. Some had pointed bows, others had square ones.



ALPHA designed by C.D. Mower, built by Amundsen BETA designed by Crowninshield, built by Johnson DELTA designed by Crowninshield, built by Johnson GAMMA designed by Welch, built by Dingle SIGMA designed by Jimmy Jones, built by Jones & LaBorde WIHUJA designed by (unknown), built by Andrew Petersen



CAREFUL SQUINTING THROUGH A MAGNIFYING GLASS <u>ALMOST</u> ESTABLISHED THE BIG, SINGLE RUDDER, CENTER BOARD SOON AS EITHER "BETA" OR "DELTA" BUILT BY J.O. JOHNSON FOR THE TREMENDOUS EFFORT BY THE WHITE BEAR YACHT CLUB IN 1904 TO RETURN THE CUP TO THE U.S. [photo Johnson Boat Co.]

DELTA and SIGMA (the latter renamed WHITE BEAR) proved superior and were both sent by rail to Montreal, together with two crews in a private car. Lucious Ordway was the helmsman in the actual contest and his crew included Skipper Milt Griggs; so the first team was very much present. Shearwood's product was NOORNA, very much like THORELLA, but with a new wrinkle: curved boards built in two sections. The lower one telescoping out the top one. She also had wire halyards on a reel. Both devices were trouble causing. NOORNA was a scow with pointed bow. WHITE BEAR was nearly square. Both boats had double rudders and, of course, bilgeboards. The series went down to the wire with 2 wins for each. In the fifth and deciding race, WHITE BEAR had a solid lead going into the last beat, thanks to various extraneous factors. She was being overtaken, and probably for this reason, she split tacks. NOORNA won by nearly three minutes. To come so close and yet lose!

Mower had the satisfaction of seeing his ALPHA, left at home by the White Bear effort in Canada, win Class A in the Inlands against six Jones & LaBorde entries. The skipper was young Jack Ordway from White Bear.

For those who patriotic feelings are ill at ease from these descriptions of Canadian ingenuity and winning habits, let the record show that in 1905, MANCHESTER brought the Cup back "home" in three straight and convincing races. Pictures of MANCHESTER complete with three American ensigns show a gorgeous gaff-rigged A boat complete with bilgeboards and double rudders. Ned Boardman was designer and skipper. His success stumped the experts. Perhaps Duggan's departure had left the Canadians without the creative skill to stay ahead of scow developments.

What had been accomplished, of course, was more important than where the Cup rested. The mother of scows, the Inland Lakes, might have produced a different offspring without the parentage of Herrick Duggan and the Seawanhaka Cup as midwife.

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#### Editor's 'note:

To help us "graphically amplify" Sam Merrick's fine research copy about the Seawanhaka Cup era, John Farwell (I-22) came up with "Clinton Crane's Yachting Memoirs" which not only contains pictures of his three U.S. challengers (1896, 1897 and 1899) but also his personal observation concerning that series and his 'one-to-one' involvement with his rival Canadian designer G. Herrick Duggan. At the risk of expanding this issue by another page or two, we feel that Crane's intimate comments concerning what was a near feud in prominent yachting circles should be of interest and convey a bit of the atmosphere current at the time (Clinton Crane's marine design career spanned from 1896 to the 1950's and included J.Boats, 12 meters, cruising boats, steam yachts, Harmsworth Cup speed boat defenders etc.)

In summer 1895 an international race took place at Seawanhaka Corinthian Y.C. between two small center boarders, called "half-raters" in England or "fifteen footers" in the U.S. this was the first for the now well-known Seawanhaka Cup and was won by the U.S.'s Ethelwynn designed by W.P. Stevens. In response to a Canadian Challenge for the cup, Clinton Crane worked evenings and Sundays on a possible challenger during the summer of '96. Despite familiarity only with keel boats he was certain that a light draft, crew-ballasted, center board boat would prove much the faster. His (first) finished design "EL HEIRIE" (named after Arabian racing camels because her deck had a pronounced humped crown.) was a 26 ft. overall, round-bilged, sharp bowed, vertical transom scow with a waterline of 15 ft. (In '95, Larry Huntington had produced a square bilged scow called QUESTION with great reaching speed but only in heavy air.) People watching EL HEIRIE under construction at Lawley's yard claimed she would never go to windward. She beat twenty eight other contenders at the trials which were attended by a multitude of press and spectators since the entries were designed and raced by an all-star cast including Hereshoff, Huntington, Stephens, Hoyt, etc. Crane reflected that having won from the cream of America's designers, his people felt "winning against an unknown Canadian would be easy."

"In preparation for the cup races, we wanted the smoothest possible bottom we could have and it seemed to me nothing was smoother than a grand piano. So I went to Steinway and arranged to have one of their piano finishers come to Oyster Bay and put a piano finish on EL HIERIE. She was built of double-planked mahogany and when the Steinway man was through she certainly shone. Our visiting boat was named GLENCAIRN. She came from Royal St. Lawrence Yacht Club and had been designed and sailed by G. Herrick Duggan, who was not only a great boat sailor but a fine engineer and had proved himself a wonderful designer. He had much more intelligence in sizing up the implications of the scow under the Seawanhaka rule. His boat was much shorter on the waterline and had much more sail than EL HIERIE. Moreover, the hull was lighter and the shape of sail much more modern.

GLENCAIRN won three straight races. The only point of sail where EL HIERIE showed any superiority was on a reach in a strong breeze. Looking back now, I think it was a good thing we did not win. Nothing in life can be more instructive than defeat. After the race, Seawanhaka naturally wished to challenge for the cup another year and I was asked by the club trustees to talk over with Mr. Duggan the sort of boat in which we would race. There was considerable feeling that racing would be better in a 20 footer than in a 15 footer.

I had another experience that was quite surprising. At the dinner which was given to the successful challenger, I was placed on the right side of a very charming lady at least seven years older than I was. In other words, she was 30. She invited me to dinner in her house in Locust Valley and I accepted, expecting a small dinner party. I arrived to find no one else there but my hostess, and the house lighted only with small candles, and not many of them. I do not know what was expected of me, but I am afraid I was a disappointment.

In arranging for the next race, we started on the course of restricted designing, which has by now pretty well extinguished all freedom of design in racing boats. I was invited by the Duggans to visit them at Dorval on Lake St. Louis, the home waters of the Royal St. Lawrence Yacht Club, and spent a very pleasant week going over the place where the races would be sailed and discussing with Duggan the type of restrictions that we should employ if we decided to increase the size of the class to 20 feet. Duggan generously showed me all that he had done in the way of building and designing in the class of 15 footers. GLENCAIRN was one of a half dozen designs which he had made and built. In Montreal at that time there were no good sailmakers; no place where you could buy yacht blocks or yacht fittings. In fact, everything which Duggan put in his boats - the blocks, the sails, the spars, the type of construction - were all his, The only real help he had was the skilled canoe builders whom he put to work on his hulls."

The 20-footers were selected for the '97 racing which made them about 17'6'' on the waterline and about 500 square feet of sail.

Duggan designed four boats and Crane built two for the '97 series. (Crane visited often with W.P. Stephens whose Ethelwynn had won the first challenge in '95. Stephens did not approve of scows, he thought they just ought not to win races and was very annoyed that they did win).

"Duggan was a wonderful engineer and a past master of light construction, which means putting material in the places where it is needed and omitting all material from the places where it is not needed. In naval architecture, particularly, we inherit many habits from the past. My early racing boats, which were built by Lawley, all had keels because the conventional boat needed a keel. But when you look at the form of a scow, you can see that there is no need for a heavy oak member in the middle of the bottom. Duggan appreciated that from the first, and I am sure in our first two years of racing his boats were much lighter than ours."

Crane's two boats were MOMO and EL ANKA and the former finally won the series. In EL ANKA'S last start in Boston, she was three minutes late but caught everyone but a boat called ROOSTER at the end of three miles. Crane observed that people in Boston realized for the first time how fast the scow hull was as EL ANKA planed by Rooster on the reach leg as if she had an engine.

In Canada MOMO won her first race in light air but from then on it was heavy air and the Canadians won three straight races. Crane felt that under the conditions they had a better boat but the Americans had better sails.

For the '98 series Crane designed SEAWANHAKA which he said was influenced by what he had seen the previous year in Canada. Crew regulations were considerably changed. To avoid enlisting heavyweights and multiple wet sweaters a maximum weight of 600 lbs. was agreed upon. The trial series was a duel between Huntington's AKABO and SEAWANHAKA - the former was distinctly faster on reaches but one of her crew carelessly burned up her best main sail with a cigarette and she was a dead duck after that.

The hard sailing in the trial races put Seawausha badly out of shape. Her builders had recommended a strip type of planking, narrow strips with grooved edges nailed together. Unfortunately, modern types of glue were lacking then so she just fell apart. The new boat CHALLENGER was substituted.

"This series of races caused a most disagreeable controversy which highlighted to me one of the great dangers of international racing. Duggan had designed a double hulled boat called DOMINION. With the weather hull lifted out of the water entirely, she proved extremely fast. As catamarans had been barred from our own racing for years, we protested against the use of DOMINION during the trials and when the protest was disallowed by the Canadian Committee the trustees of Seawanhaka felt we should not go on with the race. In fact, Seawanhaka felt so strongly that they sent R.W. Gibson to Montreal with directions to refuse to race, but leaving the final decision to Mr. Gibson and me. I pointed out that the deed of gift, which had been drawn by Seawanhaka, gave the committee of the defending club full authority to decide all questions of dispute, and that it would be most unsportsmanlike, under these circumstances, not to race.

The race proceeded. In the light weather of the first race CHALLENGER won, but afterward, when the usual strong breezes began, DOMINION easily defeated CHALLENGER. That would have been all very well if newspapers and yachtsmen on both sides of the border had been prepared to accept the result without comment. But a most bitter controversy occurred, and unpleasant things were said on both sides. Duggan, who was a real sportsman, offered to



#### **BIBLIOGRAPHY:**

1. Yacht Club histories of the following ILYA member yacht clubs: Lake Geneva, Neenah, Nodaway, White Bear, Oshkosh and Pewaukee.

2. The boxed two volume history of the Seawanhaka - Corinthian Y.C. up to 1940.

3. The bound volumes of Rudder magazine - especially those from 1894 through 1905.

4. Article by Herrick Duggan in Sailing Craft edited by Edwin Schoettle (1929).

5. Various articles and books by Howard I. Chappelle.

6. Clinton Crane's Yachting Memories - Clinton Crane. There is much additional material that would prove of great interest to the scow family in various parts of the country. Field & Stream had a "Yachting department" in the 80's and continued to cover yachting activities comprehensively for many years. Yachting started publication in 1907. These sources were scarcely considered. resail the match with one of his other boats, but the legal-minded people on both sides said that, under the terms of the deed of gift, this was not possible. I have always regretted very much the whole controversy and feel that people at home, when they send a representative abroad, should not meddle but should leave all matters to the man on the spot.

In 1899 I designed another challenger for the Seawanhaka Cup, built for a syndicate headed by Regis Post of Long Island, named CONSTANCE. The crew for these races was the same as in the '98 race except that Joe Thomas took the place of Lewis Stackpole.

As we had been regularly beaten by the Canadians in heavy breezes, we consented to a postponement of a day when the race was set, as a very heavy wind was blowing and the Canadians thought there might be damage. Had we realized that CONSTANCE was a faster heavy weather boat than their GLENCAIRN III, we would not have made this mistake.

CONSTANCE won so easily in the first two races, in heavy winds, that we all expected to ship the boat back to Long Island the following Tuesday, and made the great mistake of having our photographs taken. On Monday morning the wind was still blowing, and CONSTANCE went into the lead which she had usually taken. But before the race was half over the breeze dropped and the Canadian defender proved herself as much faster than CONSTANCE in light airs as CONSTANCE had been comparatively in a breeze. So this match ended in defeat for the American side, as light weather continued for three more days. This was my last crack at Herrick Duggan. I had raced against him four times and had been defeated each time.

> ED. NOTE: MOST OF THE ABOVE MATERIAL WAS PARAPHRASED OR DIRECTLY QUOTED FROM CLINTON CRANE'S BOOK, "YACHTING MEMORIES, "PUBLISHED BY D-VAN NOR-STRAND, INC. IN 1952.



## CREDITS

THE REPORTER IS INDEBTED TO:

- Skip Johnson for the use of Iver Johnson's photo album which dates back to the 1890's and from which many of our pictures were selected. Skip also furnished sail plans of the early E Scow.

- Chris Goes and Goes Lithography for the use of prints previously developed for the Lake Geneva Y.C. 100th Anniversary Book (edited by Hal Hamlin). Chris also coaxed the fine print from a negative furnished by Sam Merrick of the cover shot of "Outlook".

- John V. Farwell IV for loan of "Clinton Crane's Yachting Memories".

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BUSTER, IVER AND JOHN O. JOHNSON

ED. NOTE: A LOT OF SPECULATION WOULD BE RESOLVED IF THIS INTERVIEW COULD HAVE BEEN CONDUCTED WITH THE PRINCI-PALS ABOVE AND THOSE MENTIONED BELOW.

## AN INTERVIEW WITH BUSTER JOHNSON —[SKIP JOHNSON'S UNCLE]

Johnson: My father, John O. Johnson, met Gus Amundsen in Norway and Gus told him he would give him work, so he came in the fall and was just sort of a busboy around the house, cooking a few meals, and I suppose he spent the rest of his time down in Gus' shop, I think he only worked for him about a year. Then there was another fellow between here and Amundsen's place by the name of Peterson. He worked for him. He also married Peterson's daughter — my mother.

**SM:** There was still another builder on White Bear Lake — Ramaley.

Johnson: He never worked for him. He was one of the old timers.

SM: He had a boatworks, too?

Johnson: Yes, he had one here and he had one in Concord. My dad worked for Peterson. I don't know if Peterson built much of anything. Amundsen was the builder and Peterson was renting boats at that time. He talked about putting two rowboats together and making a catamaran out of it. Maybe the first catamaran, who knows? He said it was pretty good, but he couldn't steer it.

**SM:** How did he get started - you say 1896 was when he first started building?

Johnson: He worked for Gus Amundsen for a while and then he worked for Peterson and during that time everything we had at White Bear were keel boats, displacement type boats although they had sails on rowboats and everything else. His theory was at the time, if he could only get a boat to go across the top of the water it would be a lot faster. There was an old fellow around the lake by the name of Milt Griggs who listened to the story a little bit and thought, well, maybe it's not just a bad idea. So he financed him and they built that first boat.

SM: Was that the boat called "Minezitka"?

(Note: this boat was built to sail in the Seawanhaka Cup races of 1900).

Johnson: Yes. He had a few ideas about that boat. He wanted to put double bilge boards in there too, but Griggs wouldn't go for that. He said we're radical as it is. Let's just stick with the center board and the single rudder. And, of course, when they built it, the rest is history. The boat got put to bed before the next boat got around the first mark.

SM: That Minezitka is 1900? Was that the first John

## Johnson boat?

Johnson: I guess the first Johnson boat that showed up in the Inlands was Minezitka.

SM: That was 1901. In that year there were 16 Class A boats in the Inland Lake Regatta held on Green Lake.

Johnson: Was that the first Inland?

SM: No, the first Inland was earlier, but the account of this was in Rudder magazine. Eight pages of description of each race and how each of these boats were built. There was one Johnson boat and there were seven Jones and LaBorde boats. Jimmy Jones — he must have been a genius.

Johnson: Right.

SM: Did you ever know him?

Johnson: Sure. He was pretty old when I was a kid. It would be around 1926 and 1927 that Jones was still around. And actually when the E Class was born, he built one of the very first ones. We built one here, too, with the pointed bows, single center board single rudder. You know the early scantling rules were pretty liberal. All you had was the length, the width and the depth. From there on you could go. You just had a box that was so wide and so deep and you could put any shape you wanted into it.

SM: The first Inland Lake regatta was in 1898. They sailed under the so-called "Seawanhaka Rule" which was the water line plus the square root of the sail area divided by two. It obviously was difficult to catch up to the water line. The measurers would have to lean over the docks and try to figure out where the water line was, especially with any waves, so that's when they ended up with the overall length.

SM: Your father wanted to put the bilge boards in Minezitka.

Johnson: He put them in afterwards. About a year or two later.

SM: The first twin bilge board boat actually was in racing competition in 1902, its name was the Comet, a Jones and LaBorde boat. I suspect that's when your father went back and put them in.

Johnson: I think the very next year he put them in. Everybody came in and laughed. Said it looked like a damn cement box and somebody called it a scow. But there has always been a controversy about who had the first scow. The Duggan supporters claim he had it and my dad claimed he had it and Jones and LaBorde had one about the same time. (Duggan was a Canadian from Montreal who designed The Defenders for the Seawanhaka Cup.) I remember back in about 1930 we sent some boats down to Barnegat Bay for someone who wanted to put anti-fouling paint below the water line. We didn't know where the water line was so we put one in the lake and let it sit to see if we could find where the water line was and paint it on afterwards.

SM: I don't remember seeing one with a water line. I'll take your word for it. There was a fleet of E boats on Lake George in New York State. Does that ring any bells? They had center boards.

**Johnson:** Yes, we built six of them. It was in the '30's and they had a high rig and they had a permanent backstay on the back but with a center board. They wanted some college-type boy to go down and teach these people how to sail the boats, but we couldn't find one. They tipped over half the time and didn't last too long. Some of them were reconverted. But there were six of them -- real tall, narrow rig with a little bronze casting on the back. I think the pattern for the fitting is still around.

SM: You have no idea of when that was?

Johnson: Must have been around '36. A little before WW II.

SM: Nothing like that was ever desired by the Inland, I mean the tall rig.

Johnson: No, it was some group down there that wanted that. The same thing happed on Grand Lake in Colorado, they wanted that tall rig, too. But this time I don't think we put it on.

SM: Small rig and center board. I don't know why they wanted a center board.

Johnson: They didn't want to be bothered with pulling the boards up on every tack. If I remember rightly, I think that's the one that had a little horse across the cockpit so they could tie the mainsheet. We told them you couldn't sail these boats with the mainsheet tied - you had to hold it.

SM: Lake George is up in the mountains - some place for



SM: Tell me about spars -

Johnson: The idea was if he built this curved spar he'd have something to replace the high gaff and bring in the leech -- it wouldn't fall in like the old gaff rig. We really had a field day. We took everybody including Jimmy Jones. Then we went on from there and put a mast on a swivel. It didn't need a handle. We had a series of holes and dropped a pin to determine how far you wanted it to swing. We didn't have to turn it by hand, it would turn by itself. Before we had pear shaped spars, we built them perfectly round ... everybody was concerned about the air blowing through the slot between the sail and the spar. We laid deck material glued on the side of the masts to cover up that hole and then we found on the leeward side you could see where the vacuum was because the flap stuck straight out to leeward behind. That never worked out too well.

And then about that time ... I don't know whether the Canadians had it first, we took these same round spars and glued a piece of cedar on there, made them kind of pear shaped or streamlined on the same straight round spars that we had. That became our first pear shaped one and after that we made them all like that. Hollow spars weren't too difficult. Actually it went pretty fast. You take a big router on half your piece of lumber and dig it out. Then you do the other half and glue them up and square them. You use the skillsaw ... to knock off the four corners until you have eight

sides. At that point you have made it completely round. To get a pear shape you just take a bigger slice off so you have two corners. You work by hand with a hand plane. You couldn't do too much by machine for those big A boat spars. You had a hack them out with a hand axe. You laid them out on the floor with the right curve, then you glue up the pieces and finally they were hollowed out and glued together and you had this great big flat section ... chop, chop, chop, right down ... he didn't make one in a day I'll tell you.

The first curved A boat board was made out of 1/8 inch aluminum. Big sheets. We had this big wooden form where you could push it down for a curve and you laid pieces of wood in there and then a second sheet was put on top. These two 1/8 inch pieces were screwed and riveted all along the bottom and you put regular wood screws right straight through and you round off the other side and peened those over. They were beautiful.

SM: They'd fall apart instantly in salt water.

Johnson: Oh yes, but we had a lot of orders.

SM: You used to curve E boat boards but stopped that some time ago.

Johnson: Well, yes, that's when my hearing went bad hammering those damn boards of boiler plate steel.

SM: That's an interesting idea. Where did you hammer them?

Johnson: Right on that table back out there. You can move up off the leading edge, bang, bang all the way along. If you want a quarter inch curve in there or a half inch, you can get it in there. And after you get it all in there, the damn thing is perfect. Then you have to hammer it more to get the leading edge straight. Finally, we found an up-and-coming machine shop on the other side of the river in St. Paul ... in the bit press he could put in any curve you want.

SM: Did they stop you from putting a curve in?

Johnson: Yes, as the boards get thicker, you know. Originally, we had to have 3/16 boiler plate steel. The curves were hammered in. Then we got into aluminum boards and we were restricted as to how wide the slot should be. There wasn't any high tensile aluminum. We used 3/8 aluminum for a one-half inch slot so you didn't have room for a curve anymore, by shaping the back edge of the boards you get the effect of a curve -- so that's how that started.

SM: When did that happen?

Johnson: Oh. I'm not sure, but around 1939 probably. It might have been a little before that when Jule Hannaford was still sailing. Dick Ordway wasn't doing anything in the races and his father came over and said can't you do something for Dick. So anyway ... (sounds of laughter)

SM: He needs a little crutch.

Johnson: So we made up a set of aluminum boards in Dick's boat. The following week Jule got a set. The same thing happened in the C boats about 1936. The C boats had aluminum boards before E boats because they could have a bigger slot. One year Danny Hornig was a great big kid who wasn't doing well, so my Dad said let's hammer a little curve in that set of boards and see what happens. Danny started to win races. He couldn't keep still about it. We told everybody he had curved boards and they threw him out of all the races he won. He didn't win after all! And then for a while you couldn't put curved boards in E boats. Of couse, now they're supposed to be straight.

SM: Aluminum must have been pretty well developed during WW I for it to become more available.

Johnson: The old A boats had aluminum boards for a long time. It was a while before we got the Eastern boys to go for



1930 "A" BOAT CREWMEN JULES HANNAFORD (L) AND BUSTER JOHNSON. [Photo: Johson BOAT CO.]

aluminum because of the salt water. We painted those doggone boards with everything you could think of. Nothing held up. We could paint aluminum just as well as steel. The first aluminum board went down there on that basis — they'll last as long as the steel if you paint them. And they sure work a lot better than those iron boards. Those steel boards were rough — they rusted and fell apart.

**SM:** In 1923, as I understand it, the Inland people wanted E boats, so a few of them were built in 1924 with a big heavy center steel board and single rudder. But when not very many people bought them they switched to bilge boards and double rudders.

**Johnson:** Yes, at first they had a single center board and they had the pointed bow. One mainsail, jib, one spinnaker, one pole, that was it. The story behind that was we had three classes - A, B, and C - and there wasn't much difference between the A and B. A was 36 feet, 38 feet long and the B was 32. Everything the A boat had in it, the B had. Pricewise there wasn't too much difference so they wanted a boat they could get the price down a little bit. The first one was built for \$750. They were \$850 - \$875 for a long time, with the sails.

LaBorde must have been long gone — Jones must have been running that by himself. I never saw LaBorde, but Jimmy Jones, he was a great favorite around Lake Winnebago. He did alot of work with the Buckstaffs.

SM: They came way out here from the East to get his ideas.

Johnson: Jones was a little fellow. He was always poking around. That last A boat he built for Johnny Buckstaff called Haywire, put together with baling wire, I guess. He built fast boats.

SM: And they were very different each year - terrible hardware on them; stuff that you'd put on porch screens, hinges and hooks and iron cleats. Unbelievable!

Johnson: The hardware was pretty crude in those days. SM: I didn't know E boats came pointed.

Johnson: Yes, we had pointed ones for a long time. My dad liked them for some reason or another. It was quite a while before we ever swung on to round bowed E boats. I think Henry Myer got one of the first round bow ones down at Pewaukee. (1927)

**SM:** How much changing each year took place in the shape of your hull? Got any sense of that?

Johnson: Oh, yes, these first E boats -- there was a lot of fiddling around with them. Of course, everybody was experimenting with them. My dad was always one to have more of a flat bottom boat. Others like Palmer had different ideas.

The first ones were pretty easy bilge boats. As for the pointed bow, the first one came pretty much to a point. There wasn't much difference between the round bow and the pointed one. My dad kind of liked to keep that pointed bow because of the reverse curve. In other words, from the midship section going forward was a concave line ... sometimes a half inch. It looked like it was sagged in at the point, but it wasn't. E boats were too darned short for the reverse curve. So we put in pretty much a straight line ... almost a slight curve the other way, but usually straight.

SM: Most of the Barnegat Bay boats were Jones and LaBorde boats. The first ones we had out there were in 1925; they were all Jones and LaBorde boats except one Johnson boat. Those Jones-LaBorde boats varied each year. The 1926 one was the one I had. With very slack bilges it upset easily but were very easy to plane. The 1927 was an ugly one, it was square. In 1928, it was more like the 1926 one. Then the Johnson boats started arriving in 1929. After that, the boats looked very much the same.

Johnson: By that time we'd pretty much arrived at the approximate shape, made some little changes each year that didn't show much. In 1933, the Barnegat Bay Yachting Association decided that every boat we built had to go back to thee 1933 plan, so we changed the mold back. We did that for a few years. Then we said to heck with them. If you want to take the new model ... outspoken Norwegian says to hell with them. So from about 1936 on, they took whatever we built.

SM: But after 1929, how much fiddling with the hull shape took place.

Johnson: Yes, it seemed like every year no matter what class we built, we shaped it. Very seldom we didn't.

Lots of times you'd be sailing along and the transom seemed to be dragging a little bit, so we narrowed the transom a bit. It doesn't show in the overall picture. Or you'd be going along and she'd heel over too much, so we hardened that bilge a little bit. A couple of years we had the Inlands at Lake Geneva which is a notoriously light air lake, especially in August. The Palmer boats were giving us fits — they were light air boats, real light short water line pot bellied, so we changed our boats mainly to keep up to them in the light air. And, of course, the minute somebody brought a Palmer boat up here, he couldn't get to first base here. We have more wind on the average all summer long than they have there. He was building the boat for a locality and we were building for a locality.

SM: The Palmer boats were always a little more expensive. Their hardware was more refined. They had a beautiful curved cockpit.

Johnson: Round both ends of the cockpit. They went in for lots of things. One year Palmer came out with rod rigging that was pear shaped and, of course, that rattled and shook and got tangled, so he didn't have that too long.

SM: I had rod rigging on my 1939 Johnson.

Johnson: But they were very innovating. He came out one year, too, with airplane fabric on their decks to lighten up his boat. Their boats would give a little so you'd see the canvas wringle up. He had some dope paint that he painted on the deck and then he'd stretch his airplane fabric on it so it wouldn't adhere to the wood deck. By doing that, the boat could work all it wanted underneath that fabric. You could see it under sail, but when she stopped, the deck looked nice and smooth again.

SM: Palmer did not build boats after World War II.

Johnson: Palmer never had any sons to carry on. His daughter and her husband, I think, had a parting of the ways and that was the end of Palmer Boatworks.

SM: Didn't Harry Melges, Sr. start about then?

Johnson: Not then, but two of our fellows went down there to run this Lake Geneva Boatworks. In fact, I was offered the job at the time. My dad didn't think we were old enough to leave the fold so he said you'd better stay up here. So, anyway, Oscar and John went down there to run this boatworks.

## SM: Oscar?

Johnson: Nystrom and John Arnteson. So anyway, they had this Lake Geneva boatworks. They had a lot of storage space and then they built some boats. They built some C boats which were just about identical to ours because they'd made those boats up here. He may have built an E boat, too. But after a few years, they didn't get along too well. Old John came back up here and Oscar didn't want to run it by himself, so he went to work for Harry Melges. They have done a pretty damn good job ever since. **SM:** After WW II did you keep on changing the hull shape?

Johnson: Not such radical changes. One year, it was maybe '47 or '48, we made some changes — that boat was to the point that unless you really knew it, you couldn't sail it. And if you did, it would really go. So then we built this one in 1949. We widened out the bow and we changed everything back in the direction we came from. Made it more stable and easier to sail. Steve won the Inland about then. That was getting into the Nat Robbins era. And then we got fiddling around with Mike Myers. Mike had a bunch of good ideas. Then we went along where we probably shouldn't have. Those years we made some pretty drastic changes. From '49 on we streamlined her a bit, refinements, changed the keel line some.

SM: Did you keep on changing it every year?

**Johnson:** About every two years. Then we finally got where we figured it was a pretty good boat.

SM: Of course, changing a boat now built in fibre glass is something else.

Johnson: Sure is, you have to build yourself another mold.

Fortunately, the way your rules are written now, you have a good boat.



THIS CAPSIZE "SELF-RIGHTING" PROCEEDURE AS PRACTISED ON WHITE BEAR LAKE IN THE '90'S WOULD SURELY PUZZLE TODAY'S WATER SAFETY PATROLS, COAST GUARD, POLICE AND SAILING SCHOOL INSTRUCTORS. E Photo: Johnson Boat Col



Winning four consecutive races, Bill Allen and his crew take the E Blue Chip Regatta held at Pewaukee, Wisconsin. Other victories for Allen during 1982 include: E Nationals. E Invitational, C Regionals, Inland C Championship, and the C Blue Chip.

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jon greeley - design/photography

## 1925



## RULES Inland Lake Yachting Association

## SPECIAL SCANTLING RULES FOR CLASS E.

Add the following Paragraph: Class "E" Yachts shall be constructed in accordance with the following restrictions:

1. Planking of hull shall not be less than ½ in. thick at any point, and shall be of at least as great density as cedar.

2. Frames or ribs shall be of oak, elm or other hard wood and shall be 1 in. by % in. in size, spaced 6 inches center to center.

3. The deck planking shall not be less than % in. thick, with a canvas covering; the planking to have at least as great density as cedar. The deck beam shall be % in. by 1 in., spaced not more than 6 in. center to center.

4. Bracing of hull shall consist of three trusses. There shall be two bilge trusses whose length shall be at least two-thirds of the boat. The third truss shall be an interrupted center truss the forward part extending from the bow of the boat to the centerboard box, and rear section extending from rear end of the cockpit to stern of the boat.

5. All spars shall be round. No Stream lines allowed. The Cast shall be straight, without a curve.

Class "E" Yachts to be not over 28 ft. over-all length and not less than 27 ft. 9 in. over-all length, beam not less than 6 ft. 6 in. nor more than 6 ft. 9 in., greatest moulded depth to be not more than 17 in. nor less than 16 in annichip. Saft area limited to 285 square ft. total. Class E yachts burth ander the Rules and Restrictions adopted in 1923 for the Regatta of 1924 are eligible in Class E races.

Chee P boats shall be built with centerboard or bilge boards constructed of fa-inch boiler plate steel and to be regular stock thickness when finished. These boards shall not extend beyond the bottom of the hull more than four and one-half feet. Rudder or rudders of Class E shall be of boiler plate steel.

.. The total actual weight of the crews including all clothing, personal apparel and belongings worn by them or carried on board during any race shall not exceed 850 pounds for Class A yachts, 650 pounds for Class B yachts, 400 pounds for Class C, 550 pounds for Class E yachts.

The total area of the Mainsail and jib in Class "E" shall not exceed 285 sq. ft. The area of the mainsail alone shall not exceed 235 sq. ft. The luff of the mainsail shall not exceed 28 ft. and shall not be less than 27 ft. The area of the jib alone shall not exceed 50 sq. ft. The mainsail and jib shall be made of sail cloth not lighter than approximately 28½ in, width 5 oz. material. This is a limitation of weight and not on width.

The peak of the mainsail in Class F. shall not be more than 31 ft. 6 in. from the planking of the bottom of the boat immediately adjoining the center keelson or the center backbone of the boat, measured perpendicularly. When measured the mainsail shall be hoisted until flat.

In Class E the area of the spinnaker shall not exceed 112 sq. ft.

Class "E" Yachts shall be restricted to one spinnaker, which shall be used throughout the Regatta. A Yacht shall secure the permission of the judges and measurer hefore using any substitute spinnaker.

. In Classes A, B and E sails set at one time shall be limited to mainsail, one working jib and one spinnaker.

\* By 1939 these figures were 57 for jib and 228 for main Uncertain when the change was made -

## EDITOR'S NOTE:

Regretfully we did not have the complete, tabulated results of last fall's racing at Springfield when we went to press with Vol. 18 No. 2. This caused justified anguish on the part of Sam Merrick who insisted this information must be somewhere in the State of Wisconsin. Undaunted and with great second effort Sam re-assembled the data and forwarded it to us under armed guard. Astonishing to those who are familiar with his unique hand, the results are legible and certainly reflect to the reader the considerable effort required and we wished to share this by using his original manuscript rather than setting it in cold, impersonal type.

		E Seow	Valion	al Cli	and	pro	uile	P			
١	M44	Bill allen	Minne	toulia	17	,2		1	18	2	19
2	MI	GORDY Bauers	,	**	4	1	13	4	1	11	21.7
3	149	Brian Porter	Gene	va	1	10	2	2	16	6 4	36
4	MAQ	Willie De Camp	Barne	rat	3	10	16	5	2	8	48.7
5	LS4	Dave Chapin	Spring	Deld	10	14	6	3	22	1	53.4
6	MAIO	Dick Wight	Barne	gat	9	11	8	20	3	5	61.7
7	1 137	Jel Baper	que	a	2	. 8	15	7	9	29	66
8	MA 31	Doing Love	Barn	egat	11	4	10	6	10	9	66.7
9	1427	HAD Bruck	"	, ,	20	3	36	9	4	20	86.7
10	MI	JAY ECKLUND	Unune	Forter	5	18	4	36	6	22	81.7
11	W3	Bob Nuffert	White	Bear	6	9	18	12	19	7	81.7
12	CH18	ERIC JOHNSON	CHATA	UQUA	23	15	9	10	5	16	84.
13	MA33	TONY HERMANN	Barne	yat	14	24	7	17	11	15	94
14	TIT	CLIFF CAMPBELL	и	0 -	11	7	24	24	12	12	96
15	5 WI	JULE HANNAFORI	o white	Bear	12	26	22	8	31	3	97.7
16	V 444	Buddy ZINN	Rewar	chee	13	13	20	39	7	21	104
17	MA 55	GARDNER Cox	Barne	tot	18	16	17	28	15	10	106
18	BH2	Sam Tuerriek	"	J <u>.</u> .	16	12	29	14	(8	17	107
19	CH 6	Rick Turner	Chata	uqua	15	20	5	27	28	13	109
20	V12	BOB GUIDINGER	Pewa	utee	22	22	14	11	21	34	120
21	H 99	JIM KLAUSER	MEND	OTA	8	27	28	22	34	6	126.7
22	139	GEBRGE KIEFER	GENI	EUA	28	23	13	15	13	ONE	122
23	T8	DAN CRABBE	Barne	pat	24	6	25	18	23	26	125.7

# 1982 NCESA Championship Regatta ~ FINAL RESULTS ~

6

. 4	CRI	MINE HUCK	CRYSTAL	35	29	11	16	20	27	133
25	MAIS	MARK LEWIS	Barnegat	30	17	33	25	14	19	135
26	LE 31	Jack LAMPMAN	Little Egg	21	28	27	19	17	24	138
27	MTT	WOODY JEWETT	minutoul a	29	30	21	31	24	18	152
28	1011	JOM KLABAN	INDIAN	32	21	12	29	37	33	157
29	M 49	Peter JEWE TT	Mine toute	19	31	19	37	32	31	162
30	V 69	Errie Wilson	Pewansee	25	32	26	35	26	28	167
31	To 8	Dennig MALONE	TORCH	26	34	31	32	27	23	169
-		1 4			- 1	- 1	1			
32	T04	JEFF HOCH	TORCH	36	38	23	23	33	25	170
33	54	John Brereton	Carlisle	38	35	40	38	29	14	184
34	SI	Herb Perlmutter	ч	31	33	30	39	30	30	184
35	LET	Walt Smedley	Little Egg	84	37	37	21	31	32	185-
36	510	Roger Carlson	Carlisle	83	25	32	46	35	35	190
37	29	gumber LUBBEN	CLEAR	37	32	35	30	36	37	200
38	SIII	Barry Nelson	Carlisle	27	39	34	34	40	39	203
39	MII	Jim Williams	miami	39	43	39	39	43	36	226
40	132	Jun Sugleton	Island Bay	40	36	41	40	91	40	227
41	IMI	Jun Reilly	V	42	42	38	42	38	41	231
42	1B1	John Robinson	Island Bay	41	40	43	43	42	38	234
43	1B 100	augie WISNDSKY	14 II V	43	41	42	67	39	42	237
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\* 30% penalty position \*\* 60% "

## FIFTY-FIVE YEARS OF "E" SCOW DEVELOPMENT 1923 - 1978 BEING AN HISTORICAL AND MYTHOLOGICAL EXCURSION INTO THE PAST By Maynard W. Meyer



The Inland "A" boat fleet development in the year of the inception of Class "E". Note variety of mainsail configurations.

PHOTO: MIKE MEYER FILES

#### Part I

When one sees the old photos of the "E" boats back in the late 1920's and compares them with the sleek synthetics of today one's first reaction is that vast changes and great improvements have jumped into our midst. Yet, on reflection, the boat has changed very little over the 55 years of its existence. Of course, another point of view will say that it has changed drastically, going from wooden hulls and wooden spars, steel boards and cotton sails to fibre-glass hulls, aluminum spars and boards and dacron sails. Some will say, that's about a 100% change, isn't it? Despite your viewpoint the boat today still sails very similarly, though a good deal faster, than its earlier counterpart. The "E" has always had a tremendous reaching ability. The "E's" development over the years was one of constant evolution with suggested changes always coming hard. Up until the passing of the scantling controls over to the NCESA from the ILYA, each request for change was always sharply scrutinized, argued and often tested for a season at the insistence of the conservative and thoughtful members of ILYA's Board of Directors. The NCESA now has that charge, and we trust that their decisions as guardians of the class scantlings will continue to be as solidly thought out as did their ILYA predecessors. The boat has always been a

remarkably good boat and a of a size that is potent, yet manageable, and a hell of a lot of fun!

The very birth of the Class "E" Scow came about like this. At the Annual Meeting of the ILYA in Neenah, Wisconsin on August 22nd, 1923, after considerable discussion on the matter, the Milwaukee Attorney J.V. Quarles moved, "That this association recommend to the Board that we include a new type of boat to be called Class "E" into the Association and that a committee of five be appointed by the President to draw up rules and restrictions for same and that the Board act on these Rules and Restrictions on or before November 1st, 1923". The motion carried and the "E" boat was under way! The Committee asked Arnold Meyer of Pewaukee Lake to draw up the boat and recommend its scantlings.

Not quite in accordance with the motion, but on November 24th, 1923 the Board of Directors of ILYA approved the scantlings and added the necessary wording into the ILYA Rule Book which at that time also governed the currently sanctioned Classes of "A", "B" and "C". Briefly, the requirements meant to govern the new Class "E" were as follows:

**Length**] not over 28' overall and not less than 27'9''. **Beam;** not less than 6'-6'' wide nor greater than 6'-9''.



A class "E" being loaded for shipment from Jones & LaBorde Co. 1924.

PHOTO: COURTESY OSHKOSH MUSEUM

Moulded Depth; not greater than 19" nor less than 16". Sail Area; limited to 285 square feet total.

Weight of Crew; not more than 550 pounds.

Flotation; air cans or air compartments of a capacity of 4<sup>1</sup>/<sub>4</sub> cubic feet.

**Center Board;** to be constructed of 5/16'' thick boiler plate steel, and to be of regular stock thickness when finished. Center board not to extend below bottom of hull more than  $4\frac{1}{2}$  feet.

Rudder or Rudders; to be made of boiler plate steel.

Hull Construction; planking not to be less than  $\frac{1}{2}$ " thick at any point, and shall be of at least as great density as cedar. Frames or ribs shall be of oak, elm or other hardwood and shall be 1" x 5/8" in size spaced 6" center to center. Deck planking not to be less than 3/8" thick with canvas covering, the planking to have at least as great density as cedar. Deck beams shall be  $\frac{3}{4}$ " x 1" spaced not more than 6' on center. Bracing of the hull shall consist of 3 trusses. There shall be 2 bilge trusses whose length shall be at least  $\frac{3}{4}$  of the boat. The thirs truss shall be an interruptable center truss, the forward part extending from the bow to the centerboard box, and the rear section extending from the rear end of the cockpit to the stern of the boat.

Spars; all spars shall be round. No stream lines allowed. The mast shall be straight, without a curve.

Sails and Sail Area; the Marconi or jib-headed mainsail is required in Class "E". The total area of mainsail and jib in Class "E" shall not exceed 285 square feet. The luff of the mainsail shall not exceed 28' and shall not be less than 27'. The area of the jib alone shall not exceed 50 square feet. The mainsail and jib shall be of a sailcloth not lighter than approximately 5 ounces of  $28\frac{1}{2}$ " width material. A limit of 112 square feet for the spinnaker triangle and a limit of one spinnaker was included as an amendment. The peak of the mainsail shall be not more than 31'-6" from the planking of the bottom of the boat at the keelson. When measured the mainsail shall be hoisted until flat.

So that was our favorite boat for the first year, 1924.

The 1924 ILYA Championship Regatta was held at Lake Minnetonka.

After considerable discussion, the club delegates from 9 member clubs represented, voted unanimously that the Board of Directors **decide** the following in regard to Class "E".

1. Shall bilge-boards, as well as center-boards be allowed on the new Class "E"?

2. Shall an inter-changeable sail plan be allowed, i.e. either Marconi or Gaff rig-sail area to be the same?

3. Shall a wider beam be allowed? A motion to increase width of beam, without limitation was lost.

A meeting of the Board was held on October 4th, 1924. The Secretary was instructed to write to all clubs asking them, "How many new "E" boats would be built (ordered) if the change to bilge-boards were made"? If enough new boats were promised, the Board would take affirmative action.

On November 26th, 1924 a written ballot was sent out to the member clubs stating that Class "E" boats shall be built with center-boards or bilge boards constructed of 3/16" in boiler plate steel and shall extend beyond the hull no more than  $4\frac{1}{2}$ ". The reply was positive, and Pistakee promised to build 5 new boats and Geneva 3. The bilge-boards were in!

The first ILYA Regatta for Class "E" then occurred at Lake Geneva in August of 1925. This first regatta was won by Albert F. Gallun, Jr. and John Pritzlaff of Pine Lake in their Jones and LaBorde made "Stormalong" which was a 1924 boat converted from center-board to bilge-board.

In 1927, at the ILYA Annual Meeting in Neenah, there was again considerable discussion on the Class "E" fleet, especially in regard to crew weight, spinnakers and the use of aluminum boards. The concensus of that meeting was that no changes be made. However, it was left to the Board of Directors to decide whether or not to allow 2 spinnakers instead of one. The Board took no further action at this time. The "E" Fleet was growing, but still relatively small. At the 1927 Pewaukee Invitational Regatta 15 boats attended, while 21 went to the Championship Regatta.

At the Lake Geneva Regatta in 1928, discussion centered around the use of curved boards, and it was recommended to the Board of Directors that they be disallowed in both Classes "C" and "E". O.P. Curran, of Lake Geneva, an "E" boat skipper, then moved that the "E" be allowed to carry 2 spinnakers. The motion was carried.

In a Special Board Meeting on June 10th, 1929 it was decided to take affirmative action on the bracing questions and re-stated that the bracing shall be of wood. The wood being used for internal bracing by the majority of builders was the light, but strong, spruce.

At this same meeting, James Friend, of Pine Lake spoke at quite some length about the "Swedish Jib" (overlapping, genoa) and while he spoke of its virtues, he recommended that a ruling be made prohibiting the use of the Swedish Jib in Class "E".

On August 22nd, 1929 at the Woodhill Country Club in Wayzata, the matter of the overlapping jib was put to rest.

On August 21st, 1930 at Neenah, James Friend made a report on Class "E" boards which stated that it was impossible to secure steel of greater strength than that being used at the present time. A.F. "Bud" Gartz, Jr. of Lake Geneva moved that a committee be appointed to investigage the advisability of permitting curved boards in Class "E". This same point had come up two years earlier and seemed to be a favorite theme of the Lake Geneva sailors. The motion was carried. Following this, a long discussion ensued on the measuring of sails. Rumor had it that some of the Class "E" sails were as much as 40 square feet over the limit.

At the Annual Meeting in 1931 at Oshkosh, J.V. Quarles moved to have the Class "E" rule changed to allow 300 square feet of sail area instead of the present 285 square feet. This motion carried. Robert Friend urged strongly the enforcement of the rules permitting Class "E" boats to carry on board during a race two spinnakers only, or that the rule be changed. The practice had developed of carrying possibly three or four spinnakers along in the boat, and then, depending on the type of course, would select the two to be used for that race - or, perhaps, sometimed did they use three? This matter of patrolling limitation was left to the sail measurement committee to decide and enforce.

Because of the problems the ILYA had been having on sail measurements, Dr. Otto L. Schmidt of Lake Geneva, the long-time President of ILYA had invited Colin Ratsey out to the Regatta to speak on the matter of controlling measurements. He referred to the NAYRU rules requiring black bands around the mast and boom, beyond which the sail could not be set. In the event of sails of different aspect ratio, a second set of red bands would be used. The system of bands was adopted.

In 1933 at Madison, Arnold Meyer talked on the variations of the fore trianble in the present rules. This was most obvious in the high narrow jibs carried on the Jones and LaBorde boats, the medium high and less norrow ones on the Palmer boats and the low wide jibs of the Johnson rig. The high narrow ones worked well in the lighter air, but none could touch a Johnson when the wind blew.

The following year, in 1934 at Minnetonka, Robert Friend moved that the restrictions on Class "E" spinnakers be removed, and that they be allowed to carry 3 spinnakers on board. A committee was appointed to further study this matter, and at the Fall Meeting the committee's recommendation that 3 spinnakers be allowed, with a high hoist or a low hoist, as may be desired, was adopted.

However, in 1935, at Neenah, the spinnaker problem was again raised and another committee was appointed, "to consider the use of 2 or 3 spinnakers, and only 1 hoist . . .".



Spiffy Jones & La Borde 1926 model - pic taken in about 1933. Note abourd spreaders, mast thru deck - excess spar seneth, Haneil and cansized casily, copper susted to salt,

On October 16th, 1935, the Directors took action that "E" boats have only one spinnaker hoist, but the spinnaker triangle area of 120 square feet remain as heretofore and limit the height of the hoist to 24' (above deckline) maximum. It was decided to poll the clubs and get the club's opinion on the question of 2 versus 3 spinnakers.

The decision was also made to prohibit the use of roller reefing booms or any similar device, for shortening sail on Class "E" boats. Further, a wholly new monster appeared and it was decided to determint if it was advisable to have full length battens (in the mainsail)? Through sail battens in jibs, for heavy weather work, had been used on Johnson boats for several years.

On August 16th, 1936 at Madison, the Directors held a special meeting to clarify the Class "E" spinnaker situation. As the rule read, several hoists could be used, but none over 24' in height. It was decided that for the 1936 Regatta "only one height of hoist would be allowed, and also only one length of pole". This action was immediately posted on the Official Bulletin Board along with another Class "E" notice, "that only 2 mains, 2 jibs and 3 spinnakers would be allowed in the Regatta".

Two days later, at the Annual Meeting, it was recommended that the maximum spinnaker hoist be set at 24', but that additional lower hoist positions would be permissible. It was also recommended that there be only one measurement limitation on the spinnaker pole.

Through the instigation of some unnamed die-hard, the matter of long battens was again brought into discussion and it was decided that all member clubs try out long battens at their home lakes in 1937 and report their conclusions at the next annual meeting.

The measurement committee on the fore triangle, led by Arnold Meyer had reached its conclusions, and on June 17th, 1938, the Directors resolved that the area of the Class "E" jib triangle, using the formula  $IxI \div 2$ , shall not exceed 85.5 square feet, with the actual jib area not exceeding 57 square feet.

In addition to the above, the measurement committee came up with the following determinations all of which were approved. "The moulded depth is defined as the vertical distance at the deepest section taken from the bottom of the planking on the outside of the boat to the top of the deck planking at the gunwale". The Johnson Boat Works had by now developed a mechanical device which set into the end of a flat boom, and to which the clew of the sail was fastened, and by turning a crank the device could ease off or tighten the leach of the sail. On Class "E" this so-called "leach block" had a throw of about 4" and was a worthwhile gadget in heavy weather. For sail measurement purposes it was determined that, "Leach blocks are considered to be a part of the sail". Further, the measurer, "was to permit bilge-boards to extend 3'-9" below the bottom of the boat" and also that, "the minimum molded depth for Class "E" shall be 16 inches". This latter restriction was in response to the variations found in the Palmer "E's".

So that takes us through the first 15 years - from birth through adolesence.

~ and throughout the course of those (now) 25 years there were many committees, many, many meetings, rounds of endless arguements and happy moments of camaraderie as wellas super sailing.









"personally, I'm glad to see an old wood stick get out and go, because they taske much nices than those extrusions ..."



## Part II

It is now 1939 and both the Johnson Boat Works and the Palmer Boat Company have developed two excellent hulls, with the Johnson being the steadier boat and difficult to beat in heavy weather and the Palmer apparently the faster in the lighter going.

While our review in Part I of the official minutes gave us insight into some of the major steps of the development of the boat, remembrance of some of the innovative ideas may be of interest. Prior to 1933 all spars and booms had been built of spruce. Two pieces were used for the full length of the mast. Each piece was hollowed out, then the two glued together, the exterior then shaped and sanded into the round form. The principle reason that a streamlined or teardrop section was not adopted, although known to be aerodynamically better, was the greater difficulty in shaping the mast and thus considerable additional cost. When it came time to change over from the metal track and sail clips to the use of the sail's boltrope in a tunnel, the first solution was the use of an aluminum tube with a slot cut into and screwed to the mast and the second solution was simply to rout out two additional pieces of stock and glue them to the back of the round spar. The booms were built in similar fashion. In 1932 Arnold Meyer devised a new type spar that not only required considerably less labor time, the stock was less expensive, but it was also far superior aerodynamically to the round spar. This box section, built of 5 pieces, incorporated the tunnel into the basic structural design. The mast was so stayed and stepped as to allow it to swivel and thus become a part of the total flow pattern - mast and sail were integral. The first thing that happened, of course, was to put limitations on the amount of corner chamfering and taper on the tunnel portion. Also the depth of these "flat" spars was quickly limited to a fore and aft dimension of 6" overall as they were conceivably adding to the sail area. This type spar was first tested on a Class "C" boat in 1932 but then immediately the next year was used on the Palmer "E" boats. It was not until 1957 that the Johnson Boat Company finally left the round spar and went to the box design. Before going to the box, for a period of 3 or 4 years the Johnsons also experimented with various staying systems to allow the round mast, with protruding tunnel, to swivel. Most of these were very difficult to hold straight and the idea was abandoned. Johnson's standard method of staying their round spar for that period of over 30 years was the use of a full length upper shroud and a lower shroud at approximately the 2/3 point. No spreaders were used, but a forward jackstay with a 12" strut was used to limit the amount of fore and aft bending. While the rules stated that, "a mast could not be built with the intention of bending under the strain of sailing, and no special rigging to accomplish that purpose shall be permitted in any class (except Class "A"), it was, of course, claimed that the jackstay was "preventing" the mast from bending and therefore fully complied with the rule. However, the jackstay was sensibly fitted with a turnbuckle, and as you all know, a turnbuckle's purpose is to tighten or loosen a shroud or stay. On the winning boats the threads were always shiny and adequately oiled. Similarly, on the flat spar the two side jackstays prevented the mast from bending too much, such as breaking, but short of this the tightening or loosening of the jacks controlled the amount of bend to the skipper's desire. The flat spars needed no forward jackstay and had just two shrouds. All of the stays,

forestay, jacks, shrouds and backstays originated at the same point on the flat spar making for a very neat and simple arrangement. Finally, as labor and lumber kept getting more and more expensive, and the aluminum extrusions cheaper, the change from the flat (floating) wood spars to the flexible aluminum spars came in 1969 under the aegis of the NCESA. Regarding the stepping of spars, the early Jones & LaBorde boats had their spars stepped through the deck and resting on bracing above the keelson, similar to both the Class "A" and "C" boats of that time. If not from the very beginning, it was very close to the beginning that Johnson started to step the masts on the deck. All of the builders went to on deck stepped spars and it was all so natural at that time, that no rules were introduced to make it mandatory, it just seemed like the best way to do it. If a stay broke the mast just fell over, or broke, but at least the deck wasn't ripped up. For 30 years all went well until, under the urge of Harry Melges, Henry Harnischfeger of Pine Lake ordered a new boat with a relatively thin, flexible, round spar stepped through the deck with slot for blocking, very similar to a Star Class rig. Bill Perrigo, Sr. quickly followed in his Melges boat and Herman Nunnemacher did the same with a Johnson hull. These rigs proved extremely fast in heavy weather - just couldn't be touched by the flat spars in the real heavy going. A hue and cry went up that greater restrictions were needed! The Rules Committee went to work and ILYA restricted Class "E" to stepping all masts on the deck. Actually, these flexible wooden spars had better control of bending than do today's aluminum spars. When the aluminum (sinking) spars came in, great discussion ensued about again going through the deck, but the compromise was made because hulls would not have to be changed, all one had to do was to make provision for an additional chain plate for the second shroud and the aluminum spar replaced the flat, swiveling spar. The change came remarkably fast and easy. As of today, the only weakness in the aluminum rig is the flotation problem which is a worry to everyone.

Over the years changes in booms closely followed the development in masts. The class went to aluminum booms at the same time it went to aluminum masts. The first Class "E" booms were round, hollow and quite stiff. In the early 1930's when everyone was trying to get more sail area on the boat, Johnson went to a 6" deep, flat boom. This was immediately picked up by the other builders and they figured they were adding approximately 8 square feet of area for the wind to react against. A drawback to the flat boom was the fact that it was extremely rigid in its vertical axis so that sails had to be cut rather flat in the lower third because one couldn't trim anything out of them. In 1953 Mike Meyer went back to a round boom, fairly small in diameter, and solid, but much lighter than the flat booms. It was felt that the extra area to the wind of the flat boom could be more than made up by adding depth to the sail that could then be trimmed out in heavy going. A few of the innovative minded kippers followed this lead, but the builders did not change from the flat booms so it was never a widespread class move back to the round wooden boom, but when aluminum came in everyone went along with the oval extrusion now in use. These act similarly to Mike's flexible round one which he liked very much.

The cost of building the scow type hull with longitudinal trusses, steamed, bent oak ribs every 6'' on center and each cedar plank an individually patterned shape, was constantly rising and becoming more difficult to achieve, and good craftsmen were on the decline. Talk about these problems spurred some action. At the Inland Boat Company in 1939, Arnold Meyer built a plywood Class "C" boat, meeting all of the then current restrictions of the ILYA. The boat had straight, sloping sides with hard chine, a similar straight sloping bow and vertical transom. The deck was also plywood, the whole boat built on spruce frames approximately 30" apart. All other aspects of the "C" were similar to the current boats. The plywood boat sailed well and was extremely fast in light air. It looked like this might be a new direction for scow construction and during the winter of 1939-40 the ILYA set up construction scantlings for boats to be of plywood. Even the use of plywood for bilge-boards was being considered. However, with the clouds of World War II hovering ever closer the sport of sailing was grinding to a standstill and innovative minds turned to forced new directions. The planned all plywood "E" never got built.

At the end of 1945 and into 1946 competitive sailing came back to mind and talk resumed on plywood hulls, but by now the thoughts centered on molded plywood hulls layered up on the frames to form the compound curves. A few "C" and "D" Class boats were built in this fashion by private individuals, but none of the standard scow builders broke away from the rib and planking construction techniques which had served them so well for many years. The dreams of plywood hulls than melted away only to be revived again by Bob Pegel in 1975-76 when "Geugeon" glue was developed. At this time fibre-glass hulls were already in standard production and Bob was given no encouragement to produce a molded plywood Class "E" hull by either the ILYA nor the NCESA. One is simply left to say, "Plywood never made it!"

From the inception of the Class in 1923 until the immediate postwar years of 1946-47 working sails and lightsails were made of but one material - cotton fabric. Obviously there are many grades of cotton and with great variance of stability. Being very subject to changes in humidity in both the sailcloth, the stitching and the manila bolt ropes, the cotton sail was an ever changing mystery. Inasmuch as there was no substitute at that time everyone had the same problems to combat, so all was equal and the most successful sails (as may still be true today) came from the sailmaker who had the best control of his material. Long staple Egyptian cotton could be woven most tightly, was strongest and was least affected by humidity.

Ratsey & Lapthorn at Cowes, England appeared to have a corner on the market. Occasionally, they would let a little of their very best stock slip over to the New York loft, but at that, the very best sails came from Cowes. The Pine Lake "E" boaters usually ordered these. From the late 1920's to the early 1950's Ratsey had the edge, especially for heavy weather sails. To help maintain cloth stability Ratsey would sew three folded seams with strong brown thread into the usual 281/2" width cloth. The sails were quite distinguishable with what appeared to be seams every 7" apart. Other popular sailmakers in the early days from whom Inland sailors bought sails were Wilson & Silsby and Burrows, both East Coast sailmakers. Jimmy Jones of Jones & LaBorde Company favored the Wilson & Silsby sails during the late 1920's. In the Midwest the two most popular sailmakers for Class "E" during the 1930's and 1940's were Murphy & Nye Company of Chicago, owned and run by Harry Nye, Jr. a former champion scow sailor from Lake



Example of a heavy weather Raties said - note the marrow, sewn in panels for less distortion and greater strength. Ilso note relieved leach.

Delavan, Wisconsin. The other was the Joys Brothers Company of Milwaukee where Arnold Meyer and later Mel Jones ran the loft. After the war, Ken Nelson of Chicago who had learned the trade from old man Murphy and had worked at Murphy & Nye, opened his own loft and soon after Bob Pegel joined him. Their sails were to be found on most of the winning boats from the mid 1950's through the 1960's. Meanwhile, Mel Jones left the Joy's Brothers loft and struck out on his own. He too, produced many winning sails for all of the Inland classes. Many of you will remember the super speed that Gordon Lindemann got out of X-9 in winning three NCESA Championships. This was done primarily, if not solely, with Mel Jones' sails. Bill Bentsen and Herman Nunnemacher were also devotees of Mel's and they were also super-fast. Every now and then someone would attempt a breakthrough with a new sailmaker and names like the following would appear at Inland Regattas: Hard Sails, Inc., Watts from the West Coast, Ulmer, Milgrim & Hopkins, the first computerized guys, etc., but these sails either were not sailed by the best sailors or the Companies just weren't as familiar with the idiosyncrasies of the "E" scow, especially one with a flat, swivelling spar, and they never developed a solid coterie of winners. Through the 1950's and 1960's another sailmaker whose early training at Marblehead made him one of the





Perfect shot of the powers of a Roller chute.

Good example of the size and depth of the Torrey, Huntington & Shaw 'Chute at Winnebago in 1967.

very best craftsman in the business was Lincoln Foster. Lincoln set up his own loft in Oshkosh after the war and did a lot of work for Lake Michigan craft as well as for the scows. Lincoln turned out some excellent sails, but his greatest success in numbers found on the scows was his production of "Roller" chutes. The name came from a Mr. Elmer Roller, an engineer at Kimberly Clark Company in Neenah. Roller was sailing a "Y" boat at the time and developed the formula that resulted so successfully in the big, but fairly flat sail that was seen on 99% of the "E's" up until the radical change over came in the 1970's when the downwind iceboating technique proved fastest. Lincoln worked with, altered and improved upon Roller's original formula, and this change made them the really great 'chute they were. Another super powerful 'chute was produced by Torrey, Huntington & Shaw, it was a much different shape and much deeper than a Roller, but it made an "E" scow fly downwind. Hard Sails Inc. also produced a very powerful 'chute with broad, high shoulders that was also a winner. The Torrey 'chute was used mainly by the Easterners while quite a few Hards found their way to the Midwest, but Rollers were the dominant 'chute for about 20 years. Foster also made particularly good heavy weather jibs.

Then, into the picture, and in a big way in the 1960's came the current big three in Class "E" sails, Bowers, Melges and North. Inasmuch as they are now contemporary and most skippers are using one or the other or all three, we will not discuss them herein, but Sam Merrick will cover them in his follow-up article in 1984. However, in this issue, Sam will cover the Easterner's viewpoint of whose sails were best and most used in the early days at Barnegat.

Regarding jibs over the past several decades I'd have to give honors to Mel Jones. He made excellent jibs for light, medium and heavy weather. They were not only powerful but seemed to be so for a reasonably long period of time and after a lot of hard use. During the 1950's and 1960's the author's favorite combination was a Jones jib, a Pegel (Nelson Company) main and a Roller 'chute.

Not much need be said about the old reachers, once you had a good one it would last ten years or better. The real secret was, how to fly it and when and when not to fly it. That was important. As a matter of fact, that was **the** most important thing about the reacher, that all important decision as to when **not** to fly it!

Going back a bit further on reachers, the Class went through an interesting phase early in the game before the length of spinnaker pole was set at 10' and height of hoist at 24'. There were two ways to go, the only limit was a spinnaker triangle of 120 square feet. If one used a 12' pole and a 20' hoist the spinnaker projected an additional 2' but in front of the jib and clearly caught more air, and being lower on the hoist did not tend to tip one over as much. It was clearly an advantage in heavy weather, while the higher hoist and shorter pole was an advantage in light air. Until the 10/24 clamp down came, some of the erstwhile skippers had one long pole and one short pole and 2 hoist positions. As it was impossible to patrol each boat during a race, to know whether he was being honest, and not using both high hoist and long pole, the clamp down came rather quickly, and the 10' pole and 24' hoist became fixed, unalterable restrictions.

In 1945, Colin Ratsey came west for the Inland Championships. He spoke about the new synthetic materials coming on the market. He believed that nylon would be better than cotton for spinnakers, but that it would be about 25% more costly. But within two years the sailmakers were trying nylon for working sails. Nylon proved to be too stretchy and was also quickly affected by the sun's ultraviolet rays, yellowed and became very stiff. It was clearly not the answer. Another new material was then on-hand called Orlon. This again was more expensive than nylon but also very superior. It had real lasting quality. And

then in a couple more years along came Dacron, and here we are today more than 20 years later, and Dacron is our material. In the early sixties there was one more sail material that bears mentioning. Gordie Lindemann, always searching for ways to go faster and faster, decided to try an airtight film and made a number of sails out of transparent Mylar. Gordie had jibs, mains and even light-sails of Mylar. Because the film was completely airtight and practically no stretch they were very powerful and Gordie won many races with them. They had a number of interesting characteristics - one could trim the sail in to a certain definite point, to the cut of the sail, and then it would just stop, because the material had no stretch. No sewing was necessary, the seams were all taped. One needed no windows, the whole sail was a window. There were also several drawbacks. The material was quickly affected by ultraviolet rays and became hard like the early Nylon did. It rattled like hell during a comeabout. It was very difficult to put on and take off the spars, and the chute was so airtight one couldn't pack it into the cockpit, much less into a bag, box or side pocket - you punched it here and it came out there! But it was an interesting experiment. Several others also tried the Mylar -Mike Meyer had a suit for his "E", as did Roy Mordaunt of White Bear, while Herman Nunnemacher, Arnold Meyer, Jr. and Art Stamm of Stamm Boat Works at Nagawicka had Mylars on their Class "A" Scows. Oh yes, the biggest weakness was when a tear would start, unlike woven cloth, the film would rip from leach to luff in one very speedy zapp, and you were all through racing.



Jordon Lindemann measuring sail depth and contour



One of gordie Lindemann's mylar chutes.

The all - window myler sails at Neench in 1455. Note standard method of conging spinnake pole on deck.

Throughout the years everyone, but everyone, was always trying to get more sail area on the boat within, and sometimes without, the restrictions. The long battens referred to above were introduced solely with the idea of being able to carry a larger and larger roach. Prior to 1957 there were no limitations on the depth of the sail, but that year the girth measurement restriction was put into effect and it did a remarkably good job in stabilizing the size of the sails and put an end to a lot of wild experiments.

Also in that year the rise of roller reefing booms was prohibited, but to the author's knowledge none had ever been tried. In the next year, 1958, the use of any device for shortening sail or other reefing gear was prohibited. It meant that no matter how hard the wind was blowing, one would be out there with a full 228 square feet of working sail aft the mast. As one was limited to the use of two mainsails only, in any regatta, one couldn't afford to have a sail that was unduly short on hoist or foot. To be competitive one had to have two full size mains and simply learn to control the boat with full sail area at work. The most successful use of a shortened sail was exhibited in 1939 at the ILYA Regatta at Minnetonka. In two very heavy weather races, the kind where the wind whistles through the rigging, Ralph Wyer of Minnetonka used a flat "C" boat mainsail on his "E" and this shortened sail, plus his very excellent helmsmanship, gave him the Regatta Championhsip. I do not believe, however, that that could happen today the way the boats are set up.

In 55 years of development it's pretty hard to write meaningfully about changes in boat hardware. One just knows that tremendous strides have been made. Each year some new piece of hardware arrives on the scene improvements here and improvements there are constantly changing. To the author's knowledge perhaps the most ludicrous piece of marine (?) hardware appeared on the 1927 Jones & LaBorde boats. It was toward the end of Jimmy Jones' career and possibly his funds as well. In those days we did not use an adjustable downhaul (gizmo, twang, barber hauler) on the afterguy as is done today. That is a fairly recent (1950's) development. In its stead one had a hook riveted to the forward shroud chainplate. In the case of Johnson Boat Works this was a very well shaped, strong cast bronze hook under which one placed the afterguy (outhaul) to keep the pole from going skyward when it was well forward on a reach. Well, in place of a real article such as the Johnson's cast from their own hand made pattern, Jimmy Jones had the temerity of going down to the local hardware (household) store and picking up a few window screen fasteners! These consisted of a thin, stamped galvanized iron affair with a central hole for screwing into the wooden screen frame. And this was then just riveted to the chainplate. Well, they lasted until the first good wind and then on the first reach with reacher set - zapp - twang and pieces of metal flew high above the spar into the briny. What a solution! Other than this weird decision, most of the hardware on the "E's" has always been quite consistently good. Johnson's hardware in the past, mostly made by them in cast bronze and cast aluminum always worked well, was adequately strong, if not over-designed, and was pleasurable to handle. Jones & LaBorde hardware, by contrast, was poorly designed, difficult to use and insecure. Palmer and then later, the Melges hardware was always lighter, less husky and always finished to greater aesthetic perfection than was Johnson's. However, trying always to stay lighter, the Palmer/Melges hardware was subject to more failures

more easily than Johnson's - and, as somebody's law says, it always broke at the most critical time. Now, in the most recent years, both major builders are mainly using hardware designed and produced by marine hardware specialists, one of the greatest of which, is right here in Scow Country's midst, the Haarken Boys' Shop.

And that reminds me of "blocks". The early boats had main sheet sheaves of 11/2" diameter of bronze or aluminum, with a hole and rivet through the cheeks, period. Not only this, but there were but two travelers on the aft deck each with single block spaced about 24" apart. The sheet was tied to end of the boom, then down at 45 degrees to the aft traveler block, up again at 45 degrees to a boom block, down at 45 degrees to the forward traveler block, back up to the boom at 45 degrees again to another boom block about over the skippers head, then forward another 3' and down to a snatch block or winch in the bottom of the cockpit. (See Ted Brennan's sketch of the mighty winch). The main trouble with this rig was the inefficiency of the block and traveler placement, yet both builders continued this design for many years. The first change from this standard came in 1952 when the author knew he was not going to have a separate mainsheet man, and knowing he was going to hold it himself, he installed 3" diameter iceboat sheaves, changed the traveler and block locations to obtain about an 80 degree efficiency. Now, of course, many skippers have gone to multi-sheave blocks, with ball or roller bearings which really give the efficiency needed for the skipper's trimming of today's powerful rig.





Sam Merrick's 1939 Johnson. Note club jib, track on mast and booms, reef points, spinnaker on deck ready for downwind start. Also note beefy mainsheet man and inefficient block and traveller arrangement.

Jib trimming in the past was also a rather primitive concept of mechanical advantage. During the entire period of club footed jibs, from 1923 to about 1953, or for 30 years, there was always the jib traveler set about 18" ahead of the spar. Originally the jib sheet was tied to the aft end of the jib boom(club) then down to a block on the traveler, again at about 45 degrees, back up through a boom block, forward along the boom to a block at the jib tack attachment at the deck and then back through a deadeye in the deck opposite the spar and about a foot athwardships. That's all folks! But then, the jibs were smaller. In the 1940's this was improved upon by 50% by having a becketed block on the traveler, then going up vertically to a boom block, down again to the traveler block, then back up to the boom and forward, etc. It wasn't until about 1947-48 that the first small (11/2") diameter) winches came in to replace the old lignum vitae deadeyes. When loose footed jibs were developed the double lead came in, one to port and one to starboard, and the leads ceased going forward and then back again. When old Stingray first changed over from club to loose foot, the powerful Orlon jib was trimmed with a single direct lead from the clew of the jib down to a deck block and across the cockpit to a small centrally located winch just behind the mast. This was very simple and quick trimming, but one has to pay for such efficiencies. Jib man Norton Biersach's arms were 3" longer at the end of the season!

Speaking of the comforts the jib man enjoys in his advantageous forward position, after all he does have compensations, he is in the best position to watch the race (and too often does) and he always beats the skipper across the finish line doesn't he? The one thing that really got him, especially if he was a nootch too slow, was the ever present bilge-board and its further upward protruding horn. It took quite a goodly number of years to ease the jib man's



problem. Most credit for this certainly has to go to Harry Melges and Buddy, who consistently tried to lower the board flush with the deck, cut down on the length of the horn, etc. The board, when fully raised, use to project about 4" - 5" above the deck. This great knife was certainly an unwelcome edge to cut into the back of one's legs. As this situation improved from year to year the Johnsons came up with their version and finally had the board fully enclosed beneath the deck. The main problem with this solution was the fact that if the board got stuck there was no way to manually move it from topside. Also one never knew if the board was down to the exact setting you wanted. Both companies have now resolved this problem and all forward crew members live a happier life with much smoother calves, shanks and shins.



A 1927 Palmer at Neenah. Note weedless rudders, extent of raised bilgeboard projecting above deck, deep belly and soft filgesno lipting bridles in those days but plenty of white duck pants.

Handrails have had a varying career. A Johnson boat was always recognizable by the handsome all-mahogany handrails extending from bow to stern - actually from tillers to forestay. Carrying them forward was a practical necessity because spinnakers were always set from the bow. The spinnaker man with arms around the sail would run forward to the bow, guided by the handrails.

The clew was attached (usually!) to the sail and packed on top, he threw the clew over the lee side for No. 2 man to grab out of the water. He then snapped the head onto the halyard which was kept forward attached to the forestay and would shout, "hoist". He then picked up the forward end of the spinnaker pole from its station on deck, (one on port and one on starboard) snap the tack of the sail onto the pole, turn aft and picking up the pole, set the hook into the eye on the mast. Yes, it worked, but not nearly as well as our system of today. And when a big sea was rolling that spinnaker man was sometimes up to his waist in solid water - especially on Winnebago. There are many funny incidents in connection with this operation. There are guys who have been known to run right off the bow of the boat, they forgot to stop at the forestay! Then there's the guy who runs up, tosses the clew overboard and the boat sails blithely by it for he has forgotten to attach it to the sail! And then there's the guy who has gotten the clew overboard ok, has snapped the halyard on smartly and shouts, "hoist", and while it is going up finds that his foot is inextricably wound up in the sail itself, and while his leg is going up in the air, he falls down, knocking the loose pole overboard. The skipper's station is excellent for viewing these acrobatics and he, of course, remains collectedly calm, except, of course, when he had to lean out frantically to grab the pole from the water. From those beautiful long wooden rails we have now progressed to no rails at all, save a couple of depressed deck hand grips.





You may wonder just how many boat builders have tried their h: nd at building a Class "E" Scow? I shall try to list them, but please don't hold me to all-inclusive accuracy.

### 1923-29

Amundsen Boat Company White Bear Lake, MN	?
Johnson Boat Works White Bear Lake, MN	John O. Johnson
Jones & LaBorde Company Oshkosh,WI	James Jones
Palmer Boat Company Fontana, WI	Charles Palmer

## 1930-39

Inland Boat Company	Charles Edward
Oconomowoc, WI	Arnold Meyer
Jewell Boat Company Williams Bay, WI	Walter Beauvais
Johnson Boat Works White Bear Lake, MN	Johnson Family
Lake Geneva Boat Company	Ernst Schmidt
Lake Geneva, WI	Oscar Nystrom
Palmer Boat Company	Walter Beauvais
Fontana, WI	Harry Melges

Charles Edwards

Arnold Meyer

Johnson Family

Harry Melges, Sr.

**Robert Schieble** 

Don Harring

**Dick Swanson** 

Arthur Stamm

Harry & Buddy Melges

## 1940-49

Oconomowoc, WI
Johnson Boat Works White Bear Lake, MN
Melges Boat Company Zenda, WI
Palmer Boat Company Fontana, WI

## 1950-59

Bay Boat Company Sharon, WI Melges Boat Works Zenda, WI Stamm Boat Company Delafield, WI (Fibre-Glass)

(Wood & Fibre-Glass)

### 1960-69

Johnson Boat Works White Bear Lake, MN	Johnson Family
MacNeil Boat Company Green Lake, WI (Fibre-Glass)	Charles W. MacNeil
Melges Boat Works Zenda, WI	Harry & Buddy Melges
1970-78	
Johnson Boat Works White Bear Lake, MN (Wood & Fibre-Glass)	Johnson Family
Melges Boat Works Zenda, WI	Harry & Buddy Melges

In the above listing I may be wrong about the Amundson Boat Company. If they built any at all it would have been just in the first two or three years. I seem to recall that Johnny Johnson said Amundson tried a few and perhaps they just stayed on White Bear as none were ever seen at a Regatta.

A most important person in the building of "E" Scows that certainly bears mentioning herein is the person, Oscar Nystrom. Oscar Nystrom was trained at White Bear Lake, having worked for both Johnson and Amundsen. He was a master craftsman in the highest sense and had a very superior eve for forming a boat in the very right way. He really knew instinctively how to proportion wood - from keelson, to trusses, to board boxes, and to the fairing of all the curves. On top of his great skill as a craftsman he was also a very superior person, and he is perhaps the only one who worked for all the major scow builders. Oscar Nystrom was in demand. When Ernst Schmidt founded the Lake Geneva Boat Company, the first thing he did was to hire Nystrom away from White Bear. Oscar came down and laid out an "E" boat from the ground up - and I would say all by eye. It turned out to be a beautiful and a very fast hull, and obviously, the craftsmanship was exquisite.

For reasons financial the boat company wasn't able to continue in the scow building business for more than a few years and Oscar was swooped up by the Palmer Boat Company where he stayed until Harry Melges broke away from Palmer to start his own boat works at Zenda. Under Harry's smooth persuasion Oscar happily went along and became the superintendent at the new boat works. Many of you think the "Wizard of Zenda" is Buddy, but he'll be the first to admit that while Oscar was active in the shop, he was the Wizard of Zenda, just as he had been the Wizard of Fontana and the Wizard of White Bear. His was an invaluable contribution to the development of the successful Class "E" Scow. It is probably a good thing that Oscar passed away when he did for he would have hated fibre-glass boats. He was too great a craftsman to mess around with glass cloth and goop!

In closing this overly long mythology (Sam asked for it!) I've got to relate to you some of the innovations that occurred along this 55 year path. These won't be in chronological order necessarily because sometimes things recurred after a several or ten year lapse. The reasonably loose rules, allowing for some development, meant a lot of design fun for the innovative mind. Geographic-wise there was less innovation on the Minnesota lakes than on the Wisconsin lakes, and similarly, from what I can gather, 1200 miles, there was less innovation in the east than in the midwest. At Little Egg Harbor, in the 1960's, Charles Dore, an attorney with an engineering bent came up with all sorts of ideas to skirt and sometimes exceed the intent of the rules. He took maximum advantage of deck crown to get the peak as high as possible. His greatest success was the use of a very thin, whippy spar that even required a preventer stay being snapped onto it when the spinnaker pole was set. It could not take the aft pressure load without the preventer. This was a fast rig and a real departure for the easterners. In one of the NCESA regattas at Lake Geneva both Cliff Campbell and Ed O'Malley show up with similar rigs. In heavy weather they literally blew by the fleet they were so fast. Other than this, and I don't mean to be slighting anyone, the easterners sailed their boats pretty much as they had been delivered (and I hope this statement will cause all sorts of reaction to bring to light additional things not too well known). In the north country the situation was

rather similar. Not much was done to the boats by the skippers, except to sail them well, and by that I mean damned well! Other than the long batten experimentation in trying to hold out maximum unmeasured girth, little innovation came about (except at Johnson Boat Works) until the era of the Minnetonka group consisting of Stuart Wells, Brad Robinson, Chuck Gorgen, et al., when they decided to make a better, faster boat out of the Class "D" cross-breed. Their enthusiasm and experience here carried over into their "E's". Brad Robinson's single rudder experiment was worth the trip, but it couldn't out-perform the empirically successful double rudders. Brad's excursion into thinking through improved hardware and then producing this beautiful metalwork certainly had a great affect on getting the commercial builders to think more carefully about what they were putting on their standard boats. Brad's work was very influential in bettering the sailing qualities of our boats. Stu Wells' innovations seemed to center primarily around cockpit and deck improvement, how to accomplish tasks most efficiently - meaning hardware placement, deck contouring, etc. And was it Stuart who used a fish pole parallel to the boom and then sweeping upward from the clew in a great loop to act as a spring for holding out the leach? Or was that before his time? The Johnsons of course, had many innovations, such as the adjustable clew board to loosen leach with a crank mechanism, roller bearings on swiveling spar steps, the pointed bow boats, the very square bowed boats with almost straight waterline and upturned corners at the bow (DeCoster Bros.), etc. and the Melges's contributions including Buddy's cross-breeding the best of the Olympic class trimming and hardwaring systems with the E are legion.



Ster Wells functional array with depressed jit trim tracks circa 1968.



Bill Bentsen's 1964 "Santana" with cloth-lined wells for chute and reacher, small cams for holding sheet and halyard, flush mounted compass and two jit winches.



Bob Pegels jit wine

The Pegels' 1965 "Frozen Asset" sporting mid ship "horse" two spinnaker winches, two splash brands and four horseshies on tille bre.



Innovator Brad Robinson showing the REPORTER how he complicated jit leads and stuck most other systems below deck in 1965.



But here in this article we are trying to point out the Corinthian innovators who altered the purchased product. Pine Lake and Pewaukee produced a fair share of weirdos. Bill Kyle perhaps topped all others in the boat he put together just after the war. The beautiful machined hardware custom produced to Bills' designs was absolutely magnificent. Board boxes were tapered to compensate for leeway, and with the flick of a finger the transom mounted rudders could be raised or lowered for minimum drag. These were fun to see popping into the water, then as the tack got underway the weather rudder would suddenly pop up. Engineering-wise they worked like a charm but sometimes human error came into play. For instance, as one came into the leeward mark and a jibe was called for - it was awfully important to remember to flick the windward rudder down before the jibe or else ..., and you know how much else is occurring simultaneously under these circumstances. Then there was Herman Nunnemacher who arrived at an ILYA Championship with a permanent backstay and boomkin. Well, they threw him out because the hull (boomkin attached to transom) was over the legal length. And then Herman was disgualified another time when all of a sudden his wife is riding well out in a trapeze. You just couldn't keep Herman down - at one point he had the life jackets filled with lead pellets! One loses good crew members that way. And later on Pine Lake, Tom Norris cut a crude hole in his front deck for lightsail stowage and jib man cockpit. Then Gordie Lindemann came along with his famous bottom washer. Gordie rigged up small tubes across the bow through the planking just below the rub rail. These tubes were connected to a reservoir back near the cockpit with a pump connected to it. At opportune moments he would pump out detergent to help slip the boat through the water just that much faster. His boat always stayed nice and clean and you could track him by the foaming bubbles. Gordie was one of the leaders, if not the leader in keeping the boat light. He would take off every little piece of metal or whatever, unless it was absolutely mandatory to sailing the boat. He was probably the first to take off the rub rail,

to take the canvas off the deck and to take out the floor boards. He was a fanatic at boat-weight consciousness, and this finally led to the need for establishing a minimum boat weight in the rules. At first just hulls were weighed in with an 825 lb. minimum. It was soon seen that mast, boom and standing rigging also had to be included and along came the present 965 lb. minimum figure. Gordie had many, many more successful innovations - far too many for me to remember all.

A few miles to the south at Lake Nagawicka, Art Stamm, the boat builder, was working almost exclusively in fibre-glass in the 1950's. Art decided to build some "E's". He remodeled a "C" boat mold and added on another 8' and decided to revert to a pointed bow. The boat showed speed under some circumstances, went through Winnebago waves with ease and steadiness, but Art never got enough of them out on the market to obtain a supply of good skippers at their helms.

Meanwhile, over at Pewaukee, Mike Meyer kept fooling around with a number of items. Mike picked up Tom Norris' front cockpit idea and developed a real working station out of it which many of you have seen in operation. Gordie Lindemann had been sailing his jib man ahead of the spar giving the boat a slight nose-down attitude. The difficulty of the jib man to move around the spar, back into the cockpit and out again, etc. was not efficient. Mike believed that with the front cockpit the jib man would be far more efficient, weight in the same place, and the front of the main cockpit would be less congested area in which the 2nd and 3rd crewpersons could operate. It was a correct assumption and that boat with the front cockpit could outtack any competitor. A real blooper came just prior to the adoption of girth measurements. Again, to get that extra square footage up into the mainsail, Mike tried a "scalloped" roach. The intermediate battens held out their own little additional roach between the main battens

'nuff said, see photo. After the spinnaker poles came off the foredeck Mike developed a pole sock extending back from the front cockpit into the bilge along the main cockpit.



Mike Meyer's thin round wooden boom. Note continuous handrails, temporary splashboards, spinnaker pole sockets, amount of board projection above deck - and skipper bailing!

This meant that the spinnaker pole was never cluttering things up in the main cockpit. When he left the front cockpit design the pole sock idea was retained and simply moved into the sides of the main cockpit as is current practice today.

In putting this legend together I have missed many things that happened along the route the "E" Scow took in its development to date. Also, I have missed people who were important in making changes. I hope you all forgive me for these omissions.

I hope there will be reactions to this story and that you will write in to the Reporter and relate incidents, innovations, and make corrections. Please do respond, and what you say will be published and will all add to a better history.

MAYNARD MEYER



The two current builders of Class E Scows.



The Author and Editer and their better halves.



curly Perrigo probably thinking of A boats



John Hunt (L) and Maudie Brennan commiserating with Dick Casper as he recalls some of his harrowing WWII Navy duty at the Hotel Del Coronado.



Johnny Sangmeister bilge board wizard







Runnie Calie (whispering?)

Nat Robbins Hartley Comfort - Walter Smedley Past commodores 40



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Reminiscing with Harry Melges, Sr.

Harry Melges, Sr.: I started sailing on Delavan Lake. My grandfather was alway good enough to buy a used boat somewhere like 18 foot C boats. We used to revamp them and rent them to people at the hotel. I sailed A boats on Lake Delavan when I was a kid.

SM: You sailed A boats before WWI?

**Melges:** Oh yes - alot. I was 17 years old when the U.S. entered. Actually the first regatta I went to was on Oconomowoc Lake with Elmer Stevens when I was eleven years old - I was a sponge boy. That A boat was brought over on half a load of hay. And when we got there, they drove the horses into the water - that's the way they unloaded the boat. That was customary at the time.

SM: Who built the boats then?

**Melges:** Stevens' boat, the West Wind, was built by Ramaley of White Bear - Ramaley built one of the first E boats later. Jones and LaBorde (who built the first E boat with double rudders) - built A boats too - narrow boats with long water lines. Amundsen and Johnson also built A boats at that time. Palmer Boat Co. also built A boats. Charley Palmer built a boat for my father - a 24 foot boat with a centerboard - it was called an X boat then - we used it to carry passengers to and from the hotel.Charley Palmer came to Fontana (on Lake Geneva) around 1910. He built the 18 foot Norwest Association D boat. I had one of the first Marconi rigs on that boat - a cat rigged boat, no jib. Bill Napper also built A boats. Walter Jewel at Williams Bay also - he built sand baggers in the very early days before 1900.

SM: How about Jimmy Jones? He must have been extraordinary fellow. Did you know him?

Melges: Yes I did. He was a real enthusiast. He was a real guy who made you think you wanted to have one of his boats. He had a partner by the name of LaBorde. I had an A boat once that LaBorde built. LaBorde split off from Jones and LaBorde even though Jimmy Jones kept the name. LaBorde got himself a shed somewhere and built a few boats. I know of one boat he built - more like the modern type of boat we have today - named the Commodore. He built it for a fellow named Athern - the Athern Hotel in Oshkosh.

Jimmy Jones was a helluva good sailor and always was crewing for someone - he never became prominent as a sailor because of the rule against so called professionals. Jimmy Jones was backed by the Kimberleys, a fellow called Will Davis and his son Steve - all around Oshkosh and Winnebago - all of them instrumental in keeping Jimmy Jones alive so to speak. He started Johnny Buckstaff sailing. He would loan the whole jig he used to build boats on to Buckstaff to build a boat with. Buckstaff built furniture. SM: Was Jimmy Jones a naval architect?

**Melges:** No. The whole business in designing scows was one guy making boats a little better than the next. Nobody went hog wild usually. Boats were better because of who sailed them. But improvements were made over the years.

I was more or less affiliated with the Palmer Boat Co. for many years. Charley Palmer had a high squeaky voice - a nasal tenor. He used to say "Harry, you'll never learn how to run a screw driver" - one of those old push button screw drivers - I used to work for him as a kid. Charley was tops with C boats for light weather. The first E boat they built was just a C boat lengthened out. It was bought by the Meyers boys - Arnold Meyer, Henry Meyer and Chris Meyer - Arnold was Mike's father. They had A boats before that - they were Palmer Boat Company minded. Then over in Pine Lake where the friends, the Galluns and Pritzlafs were all for Johnson. And Johnson boats were there. The first Johnson E boats I remember had pointed bows, centerboards and single rudders. The Palmer boats had square bows - good in light weather, but not much in heavy air. Jones and LaBorde, Johnson Palmer and Amundsen were the early builders. Oscar Nystrom, who worked for me 15 or 20 years, always thought a lot of Amundsen.

SM: How long did Johnson build E boats with pointed bows?

**Melges:** I would say 4 or 5 years. Then he built a boat with a shovel bow - the boat came up and the deck went down. I suppose you got a round or pointed bow whatever you wanted. Jimmy Jones' boats were not put together very well - that's why you fellows in the East stopped buying them.

SM: Barnegat had a fleet of 10 E boats in 1925 - one Johnson and nine Jones and LaBorde. Each year until 1929 new Jones and LaBorde boats were delivered. But starting in 1929, nothing but Johnson boats came East until after World War II.

**Melges:** Johnson built a fine cedar boat - they were tight and that's why you bought them.

I went with Palmer in 1939 and designed an E boat pretty much what we sell now. Jimmy Jones built many boats with hard chines - they bent the ribs so hard they would crack. When I took over Palmer, the bilge curve I put in for all the boats was about the same as now. When Oscar Nystrom came down from Johnson to work for the Lake Geneva Boat Works he built a couple of E boats - one that was sailed by Brit Chance on Lake Geneva. He beat the pants off everyone, but they ruled him out.

I sailed on Barnegat Bay with Bud Gartz. He wanted me to tend the main sheet. Gartz was used to sailing an A boat on its ear - you couldn't sail an E boat that way. He finally got me to sail it. You fellows from the East did pretty well. The year I went out, we had Ralph Wyer, Tom Ervine as the other skippers. Mike Meyer sailed with Wyer. Hib Winkler was the third crew.

SM: You were with the Palmer Boat Co. all that time?

Melges: Well off and on. During the summers off and on. But I was with them in 1939 for 2 years until the war broke out when we completely redesigned the E boat. With the war I got into the chicken business with Grunow.

I remember the Kimberleys bought some of the last of Jimmy Jones' boats named Faith (an A boat), Hope (a 1927 E boat owned by Ed Loehr), and Charity (built in 1926 for the Buckstaff's with a pointed bow). Jim and Jack each had one - they all sunk, they were badly built - he pot nailed them; you drove in a nail and then bent it over - no screws. SM: How did Palmer build them?

Melges: Screws - iron screws, some brass later and then aluminum.

SM: I had a Jones and LaBorde fastened with copper rivets - that boat lasted.

Well they must have done that a good deal. I remember an A boat called the Ilene built for Davis. It came down to Lake Geneva to the YMCA camp where they sailed it for years. I went over once to look it over and it was copper rivetted.

SM: You really started Melges Boat Works after World War II?

**Melges:** It was 1945 when the first boats were built. It was one of our first E boats that Bill Perrigo sailed in 1946 and won the Inland Regatta.

**SM:** Let's talk about Palmer a bit. They put in a lot of fancy hardware and varnished bright work.

Melges: That's what sold the boats. They were good on the small lakes - they couldn't go in heavy wind and sea that's where the Johnson boats always did well. He went in for double planking. Dorothy Palmer was the daughter of Charley Palmer and was married to a fellow who didn't know much about boats. I wanted to carry on. I almost got a war contract to build bridge barges and to build spars. She wouldn't go for it and that was the end of the Palmer Boat Co. After the war Bob Schieble bought it up. He went for a year or two - he was good competition because he had the forms from Palmer. When Oscar came with me, we started out with Oscar's forms. We widened his boat out a bit - it was a nice boat for ghosting conditions, but it was too tender. I needed a good boat builder, and Oscar was a great mechanic. You could tell Oscar "I want this bilge line to come in like that" - and use your hand to describe it. Oscar would know just how to do it. I didn't expect to be in the shop, but would work in selling, so Oscar was just what we needed.

When we decided on the M16, we had all this lumber around, too small for an A boat or E boat, so we decided to build the M16 - we laid it out on the floor - very much like the E boat, but cut down and with the same bilge curve.

I don't know just why, but Dr. Otto Schmidt got Oscar to come down from White Bear with the Lake Geneva Boat Co. They never got into much boat building.

You know how your national E got started? Right down here in Florida with Bus Maag was an E boat sailor - he was down here with a boat company. Ernie Schmidt was having some trouble with the Inlands. He called us up and asked whether we ever thought about doing any sailing outside of the Inlands. I said we ought to have a national organization - get scows in from all over the country.

Between Bus Maag and me, we had the first regatta under the International Scow Association - about 30 boats came. Dick Bertram sailed and Buddy (Melges) crewed for him along with Billy Grunow. Billy Grunow was the same age as Buddy - they sailed together.

**SM:** You're telling me there was something like a national E regatta several times before 1959?

Melges: Yes, the first one was at Geneva in '53 or '54, next Spring Lake, Michigan, then Pewaukee sometime. I have membership card showing 'International Scow Yachting Association, Williams Bay, Wisconsin, June 1, 1954'' signed by Marylyn Melges, Buddy's sister - my secretary. It was just for E boats. It was before people really started to travel. All of a sudden in 1959 the whole thing blossomed. Klem Harvey and Mike Myer did a lot of work getting it together along with Dick Turner from Lake Chataqua.



## ANOTHER APPROACH OR "If you're going in the creek, be sure and wear your waders"

Ever since the introduction of aluminum masts, one problem has plagued the E scow class. The nearly immediate turtle after a capsize is probably the major factor inhibiting the growth of the class. It does not take much imagination on the part of a prospective owner to visualize himself in the predicament in which all of us find ourselves at one time, or another. Inevitably, the question arises, "How do you right one of those things?" Unfortunately, no description of the process provides a satisfactory answer, and the prospective boat owner declines to enter the exciting world of E scow sailing.

This problem causes the rest of us difficulties as well. Not only do we miss the benefits of an expanded market for resale purposes, and the added benfit of new blood in class, but if you can ask someone about Columbia '82, or Springfield '83, you'll find that we frequently miss cocktails for the same reasons.

Over the winter, one of the newest E fleets, Lake Conroe in the Houston area, asked us to try and remedy the situation. They, like many sailors in the sourth, sail on a man-made lake. Consequently, they deal in water depths constantly less than mast height. The chances of having an extremely revolting development are much greater when there is not enough water to roll pole down. If someone loses a mast in Oklahoma, they face a major expense in time as well as money.



Having participated in many attempts to prevent the turtle, we realized that we needed to come up with something that was (1) effective, (don't laugh, just remember the attempts to seal the spar), (2) not ungainly enough to adversely affect the performance of the boat, and (3) kindly to the eye so that it might be used without damage to the crew's morale. Obviously, nothing heretofore tried has filled the bill. And, regardless of what I've heard, I've never seen anyone win the race to the mast end.





We now have another device to offer as a solution. We had encountered some of the light foam and glass used by aircraft enthusiasts to build their experimental designs. Using this epoxy resin and light glass, we built an extended headboard which delivers a great deal of flotation, has an efficient shape, and is quite light. The low density foam is cut into an airfoil shape by using a hot wire to cut it according to a pattern. The entire unit weighs just 4.5 lbs., which is not an unreasonable amount of weight, even at the mast head. The board is in two pieces, and is attached by bolting the halves together through hole in the existing headboard and a grommet placed in the middle of the first panel. One of the attractive features of this system is that it can be used with existing sails, and taken on or off in less time than it takes to change a jib. The holes are already in the headboard, and merely require that the sailcloth is drilled through, and the addition of a grommet is no big deal.

The pictures of the unit show that it is not ungainly, and it is certainly more appealing than the thought of spending two hours trying to right a turtled boat. Its shape is also kindly to the airflow, so it will not contribute much in additional drag. Our friends in Houston, Don Whaley, and Dick Peterson et. al., gave the prototype a thorough test. As you can see, the boat remains stable on its side for quite some time; long enough for the thru-decks to fill the cockpit to the rail, about 15 mins. Hopefully this kind of time will ease the minds of those almost prepared to make the jump into the E. The cost of this installation is going to be about \$50 making it a wise addition for everybody who might be involved in early spring or late fall pleasure sailing.

This may not appeal to the hardcore racer, but the fact of its availability might be enough to move the reluctant sailor into the more challenging and rewarding E. This will in turn strengthen the class by infusing new blood, broadening the geographical base, and starting a pattern of growth which will build upon itself. Those of us who are actively promoting the class certainly look forward to this pattern of growth emerging, and welcome any comments, either on this particular subject, or related ones.

by Mike Huck & Buddy Melges



## EARLY DAYS IN NCESA or them was the days!

## by Walter Smedley

It was a long time ago. We sat down together after the race that afternoon under the flag pole of the White Lake Yacht Club and appointed an "Interim committee" to pursue the continuance of our " E Scow National Championship" and to establish a broad organization to support this boat which we all loved so much. Of that original group, we've lost track of Klemm Harvey and Craig Welch; Gordy Lindemann popped up at our '81 Muskegon Regatta, with another boat full of ideas; Mike Meyer and Nat Robbins have transferred thier expertise from the race course to the race committee; and Dick Turner and your scribe are still enjoying the thrill of an uncontrolled spinnaker ride down the back of a 30 knot gasser, or enduring the tedium of a three hour time limit without cold beer.

Can you visualize a "Cigar box" hull rule, essentially no mast or rigging rules, two incompatible crew rules, and a blank tablet for Class Organization? That's what Mike Meyer and his Interim committee tackled over a period of several years, aided by the inspiration and amenities of the New York Yacht Club in January and the comradery and hospitality of the likes of Little Egg Harbor, Lake Geneva, Chautauqua and Muskegon Yacht Clubs at Regatta time. It wasn't so difficult to control the hull, as only one builder other than Johnson/Melges ever asked to be approved. He was building in Ontario what he called a Sabre Scow of approximately the same size as our "E", but with enough major differences for us to dismiss it from consideration out of hand. Incidentally. this was the boat, as I remember, in which our own Cliff Campbell won the Mallory Cup at Lake St. Louis in 1967.

But some of us with keen imagination, a thirst for competitive advantage and a spare dollar or two did try. The inimitable John Sangmeister was convinced that the E could move fast enough to take advantage of hydraulic lift from bilge boards which had a proper angle of attack. Not having at hand the most effective angle, he equipped his scow with board boxes some 5-6" wide and controls for adjustment. There are still some of these experimental board boxes strewn around Fred Wiedke's place on Toms River.

And then there was the "Star Mast" idea supported by several Easterners, and perhaps best remembered in Charlie Dore's extreme design. As with a Star mast, its side stays had no aft purchase, so the back stay was vital , and the tiny mast cross section was supported with stays, jumpers and spreaders untold, uncoated, and almost unseen! But the most curious feature of all was a short forestay to support the mast at the spinnaker pole eye. It of course had to be reset on each tack to allow the jib to come through, a manoeuvre which, when we finally identified it, allowed us to take unfair advantage of Charlie in the Season Championship by engaging him in



tacking duels whenever possible. Lest the effectiveness of this design be underestimated, let it be remembered that Charlie placed third in the 1965 Nationals, behind Bud Melges and Nat Robbins and ahead of Cliff Campbell, in the only Championship he ever entered.



These and numerous other revolutionary and evolutionary products of exciting competition were identified, codefied and harnessed to the advantage of all by the early directors and their conscientious committees. The procedure they developed for this purpose was unusual, if not unique - a formal experimental clause which permitted variations from the established rules, both scantling and regatta, for evaluation of the idea in local racing and in the National Championship. The design of our present aluminum mast was developed in this way in the extensive "Phantom Project" sponsored by Hartley Comfort and Bud Melges.

Rules are ineffective without enforcement in the field. The 1965 Regatta at LEHYC was the anvil, and Bud Melges was the blacksmith. Our club measurer, Mike Fehr, took special pains that year to measure each boat carefully for conformance to the published scantling rules then in effect. Each boat was measured on its trailer as it arrived as a matter of routine. The distance between bands on the spars was especially east to identify, and when I-1, Teal, was found to be a half-inch or so too long, there was a STIR! But Buddy, with no fuss or comment. got out his paint pot and made th correction, and instantly the air was cleared and other necessary changes were made without further ado, from cutting off spinnaker poles to adjusting halyard tangs. Mike Fehr's thoroughness and Bud Melges' reaction were giant steps toward the general conformation of our boats to the rules and the relative ease with which we "measure in" at a National Championship.

As we set up our NCESA organization, we considered how other one-design groups were run, especially the ILYA. Some matters were decided by discussion alone: we are one of the few groups whose basis unit is the individual member rather than a fleet or a yacht club; and in other things we experimented.

The crew was a particularly touchy issue, as the Eastern contingent was used to the fixed crew idea and the ILYA used the maximum weight concept. When Gordy Lindemann, under the "fixed crew" rule, won three of our first five Championships with a light three man crew, there was audible grumbling. His success, the less venturesome alleged, was due more to "weather roulette" than skill. In response, the Directors approved a three year trial of the ILYA 650 lb. rule. Commodore

Meyer set the tone: You can weigh yourself wearing as little clothing as you wish, but the weighing must be in full view of interested parties! I remember a good bit of jogging on the beach in sou'westers that year at LEHYC, and that was well before Jack Kennedy made jogging so popular. In the end, as we all know, things all fell into place, and we settled on the principal of maintaining the same crew throughout the regatta with no other restrictions.

As we contemplate our Twenty-Fifth National Championship at Lake Mendota this September, we can attribute our longevity and the fun we have had along the way together to an idea whose time had come. But our good fortune is due no less to the communication between the various groups and individuals. We corresponded, we phoned, and we visited together, both with our boats at Easter and at the Nationals, and in the off-season in New York and, later, Chicago. And all this to-ing and fro-ing was documented, enhanced, and disseminated by Ted Brennan and his Reporter. The success we enjoyed with our various trials and our Experimental Clause was entirely dependent on the discussion in the Reporter, supplemented by Ted's unique humor and sensitivity, especially in his cartoons and picture captions.

Many other vignettes come to mind - Sam Merrick challenging the vote at Chautauque while the band played on - the Easter regattas in Fort Meyers and Jacksonville - Ed Malone learning about thermals at "Little Egg Harbor Lake" - many memories to share with many people. Thank you, you inspiring E-scow and those early ones who got us started. Here's to many more of the same!





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