



# SAIL & SCALE

NEWSLETTER OF THE EDINA MODEL YACHT CLUB

February 1998

Volume 7, Number 2

**Commodore's Corner:** Not much new to report on.

Ice boating has not been occurring this year due to a combination of weather and lack of interest. We had planned to do a demo in late February but with the unusually warm temperatures we may not have any ice left by then. After the discussion last month concerning the possibility of multi-channel radios on surface frequencies disappearing from the market, I decided that I had better get a new one. I ordered a Futaba 4 channel, and got two week delivery and no indication of a lack of supply. The dealer I bought it from had not heard the rumors and his supplier hasn't either.

Although June seems far away, it is time to start planning for the Parade of Boats. The show is scheduled for Sunday, June 14, 1998. We need volunteers to help with the planning and execution of our biggest event of the year. Think about what you would like to volunteer for and speak up at the February meeting. Don't forget to bring your "Show and Tell" items to the meeting! We'd all like to see what you're working on! *George*

**Meetings:** In case you missed it last month, there is a convenient way to access the Centennial Lakes Garage for our Winter gatherings. Use the lower level parking area north of Two Guys from Italy and Austad's Golf shop. In the corner beyond the Audio King shop is a truck loading dock. The door on the dock is unlocked a few minutes prior to the meeting for your convenience.

**What's The Meeting About?:** Soldering! Soft solder, hard solder, silver solder, irons, guns, resistance devices, we'll cover them all. John Bishop and Dave Bros will reveal all that they know! Come on out and see where all the smoke is coming from. Hopefully, there'll only be smoke...no fire!

**Wow!** I have mentioned *Epoxyworks* magazine in the past. The current issue (number 10) is really a winner. Almost the entire issue is devoted to building and finishing a wood strip canoe using West System epoxy. The techniques mentioned are all applicable to model boat building. For your FREE, four issue (2 yr.) subscription write to: Epoxyworks, Gougeon Brothers, Inc. P.O. Box 908, Bay City, MI 48707-0908. Be sure to ask for a copy of issue Number 10.

**Bumper Sticker:** "If you ain't makin' waves, you ain't kickin' hard enough." As a result of the lack of enthusiasm generated by the Question of the Month last year, I think I'll use bumper stickers to fill blank spaces his year. Do you know of any worth publishing?

**Stolen:** From: *Waterlines*, the newsletter of the Seattle Model Yacht Club: Names changed to protect.....

A crusty old EMYC salt has been stranded on a desert island all alone for ten years, just twitching his fingers to no avail. The island's few palm trees are almost gone as a result of his attempts at building model boats...all of which have drifted away.

One day, he sees a speck on the horizon. He thinks to himself, "It's not a ship.".....The speck gets a little closer and he thinks, "It can't be a boat.".....The speck gets even closer and he thinks, "It's not a raft.".....Then, out of the surf comes a gorgeous blond woman...wearing a wet suit and scuba gear.

She approaches the old bird and says, "How long has it been since you've had a cigarette?" "Ten years!", he gasps. She reaches over and unzips a waterproof pocket on her left sleeve and pulls out a pack of fresh cigarettes. He takes one, lights it with a shaky hand, takes a long drag, and says, "Man, oh man! Is that good!" then she asked, "How long has it been since you've had a drink of whiskey?" He almost falls over as he croaks, "Ten years!" she reaches over, unzips the waterproof pocket on her right sleeve, pulls out a flask and gives it to him. He takes a long swig, hacks a horse cough, and screams, "Wow, that was fantastic!"

She then begins to slowly lower the long zipper which runs fully down the front of her wet suit and says to him, "And...how long has it been since you've had some REAL fun?"

And.....the befuddled old coot replies, "My Gawd! I can't believe you're hiding an R/C boat in there!!"

**Radio Note:** Wanna switch crystals to avoid a frequency conflict? Futaba Corporation's official statement regarding their 75mHz radios is, "Never go more than 4 channels up or down from that originally installed during manufacture." JR similarly advises, "no more than 5 channels."

**Radio Blues:** It's true! Futaba is no longer making their four channel 75 mHz Conquest and Attack radios ...because they are not making Conquest and Attack radios of any type. Futaba has changed models once again. The new FM version on 75mHz is called the 4VF "Skysport", and it is currently available at about \$145, complete with 3 servos. Any Conquest or Attack sets that you purchase now are "last year's model!"

**Bye, Bye, Snow!** The day after the February meeting, Corinne and I are off to Florida and then to an Elderhostel until mid-March. John Bishop has graciously agreed to produce the March newsletter in my absence. Please contact him with any articles or newsworthy items. Contact John Bishop at: 922-1745

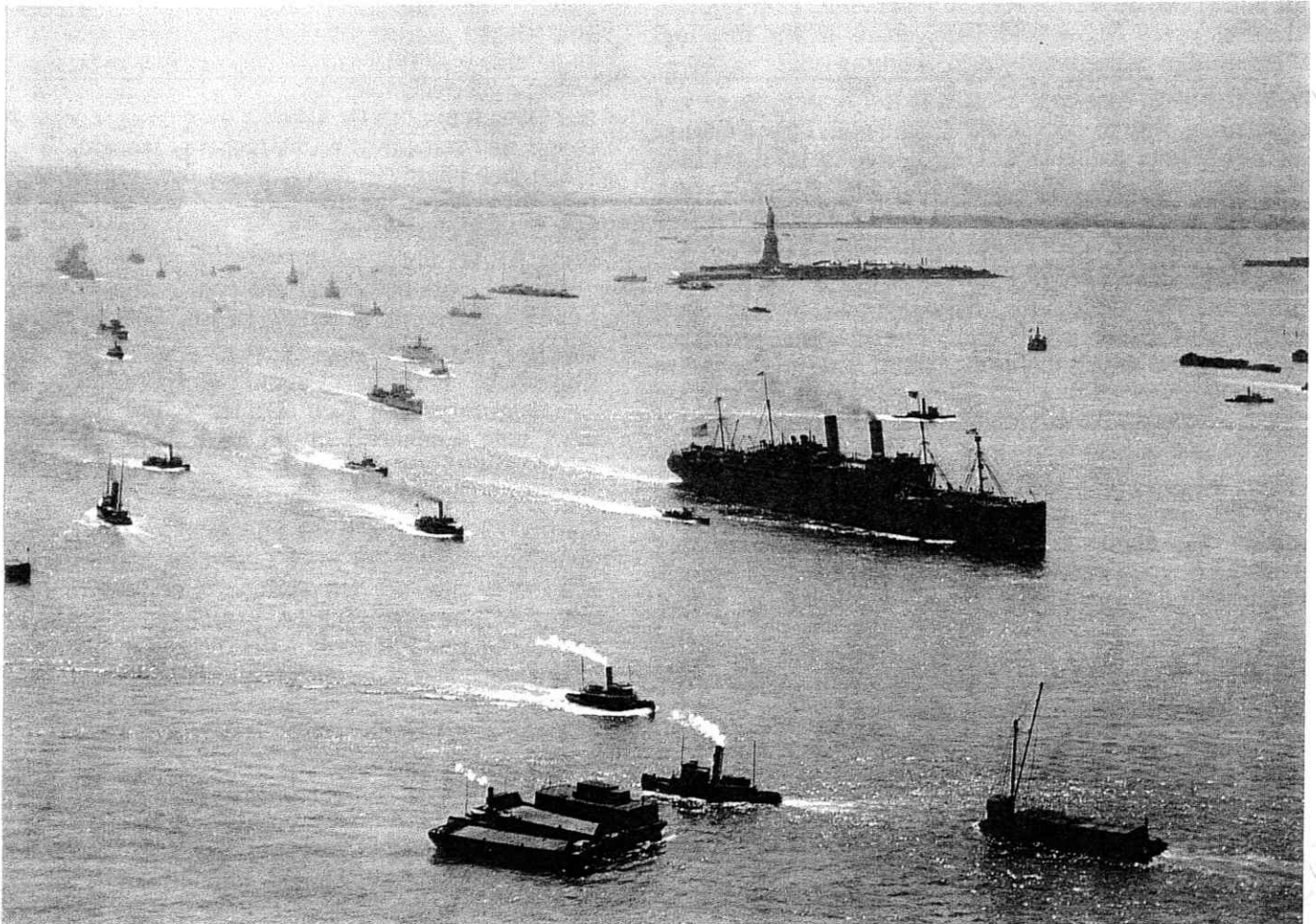
**Membership Meeting, 01/20/98:** 30 members in attendance. Commodore Pfeifer called meeting to order. February meeting date will probably be changed to a Saturday to allow for an ice-boat demonstration. Parade of Model Boats date set: June 14th. Commodore announced the results of his letter to sailboat owners. John Dodson will head up a sailing committee. He will be assisted by Kjellberg, Sigvertsen and Zbikowski. Dodson will also fill the vacancy on the Board of Directors created by the resignation of B.Jones. Commodore announced a "clean-up-day" at Centennial Lakes in late April. Buoys will also be set at that time in north and (new) south ponds. A couple may also be set in the central (old south) pond if desired. He will be checking with park management to see how many buoys are "too many"! George said that the stickers mailed out in the January newsletter to renewed '98 members should be cut out with a razor or new x-acto blade and after application, sprayed with clear Krylon or Dullcoat to kill the gloss. D.Bros showed a wheeled boat launcher which will aid in getting heavy models from the parking lot to the pond and into the water. After testing, the club will see if there's any interest in building additional launchers for members. G.Merrill asked if club members wanted to participate in the Roseville, "Rosefest" again this year. After unanimous "ayes", a July 1st date was set. George will coordinate with Roseville officials. Commodore

mentioned a few small ponds adjacent to local office buildings which lack boating activity. He will check around to see if owners would allow us to show our "stuff". Polo tug and water skier plans were distributed to any and all interested. Radios were shown. These varied from a Babcock unit on 27MHz from the 60s, through modern two and four channel units, Ace Nautical Commander and Robbe Navy, to a six channel aircraft unit with mixing, exponential and all the bells and whistles. Kyle Blaha showed his Futaba four channel which has a "doctored" left gimbal, allowing for two forward-aft sticks, i.e. two throttles on the left side of the transmitter. He also replaced the neck strap eye on the face of the transmitter with a bright LED which illuminates when the transmitter is "on". Kyle agreed to write a how-to article for a future newsletter. Show-n-tell: G.Pfeifer showed a Freedom Song tug and his Creole Queen. E.Stevenson brought his Happy Hunter tug (which is for sale) along with photos of his recent trip to Europe (Germany, this time). J.Bishop showed several scratch built brass items that he is working on for his tug (or were they for his railroad?). D.Patterson had a plastic boat model built by the late George Johnson. Several of George's models are available to go "to a good home". Give Don Patterson a call. D.Proulx showed his RC-10 car underbody which is under modification to become a jet (electric ducted fan) powered ice-boat. Whew!  
*JimSmith*

### Schedule Of Upcoming Events

	Every Sunday	Open Boating (60 Days, and Counting)	4:30PM - 9:00PM
	Every Tuesday	Open Boating (60 Days, and Counting)	5:30PM - 9:00PM
	Every Thursday	Open Boating (60 Days, and Counting)	5:30PM - 9:00PM
<b>Feb.</b>	17th.(Tue.)	Membership Meeting (Soldering)	Cent. Lakes Garage 7:00PM - 9:00PM
<b>Mar.</b>	17th.(Tue.)	Membership Meeting (Eric Peterson and the "Minnehaha")	Cent. Lakes Garage 7:00PM - 9:00PM
<b>Apr.</b>	21st.(Tue)	Membership Meeting (Batteries, Care and Feeding)	Cent. Lakes Garage 7:00PM - 9:00PM

When Tugboats Were King! New York Harbor 1919



**Peanut Butter and Jelly:** Bread and Butter! Whatever seems right! If you are utterly bewildered by those ship hull drawings with the multiple curved lines going in all directions, you are not alone. They are confusing at first, but lend themselves readily to the layered method of hull construction.

The accompanying drawing is a simple example. Any boat hull can be drawn in this manner although the finished model may not show all of these lines.

The drawing of the side view of the hull is known as the Sheer Plan or Hull Profile view. The straight, vertical lines are the stations at which the body sections are derived. These lines, shown as curved lines on the end or body view, are used to create frames for plank-on-frame models, and to make templates for checking cross sections on a laminated or solid hull.

Also shown on the profile drawing are horizontal, straight lines and a series of curved lines. The horizontal lines indicate horizontal slices, or waterlines. These waterlines are also shown on the lower drawing, the Waterline Plan or Deck Plan. Note that the straight, vertical lines, indicating cross section stations also re-appear on the lower drawing.

The straight horizontal and parallel lines on the lower drawing indicate vertical slices on the hull which produce the buttock lines, the series of curved lines shown in the profile view.....So, the straight lines in one view appear as curved lines in the other.

How are these lines used to build a hull? Since a solid hull is not feasible in an operating model, we will ignore that option. We can laminate a hull using the "bread and butter" method or a framework can be built which can be planked to produce the desired shape. Wood is the "bread" and glue is the "butter."

The bread and butter method can be built on either the waterlines or the buttock lines. The former method uses horizontal laminations while the later uses vertical. The building procedure is similar in either approach. Horizontal laminations are the usual, so we'll go with that method.

The critical part of the process is dictated by the spacing between the waterlines. New waterlines can be drawn, but it is not a simple task. For a first attempt, enlarge or reduce your plan so that the waterline slices are the exact thickness of the available wood stock. Planing the wood (basswood is a good choice) to the thickness indicated on the drawing is an option, but can be quite wasteful (i.e. costly).

Let's assume that the waterline spacing and wood thickness are equal. Take the plan to a copy shop and make several copies of the waterline (deck) plan. You'll need as many copies as there are slices shown on the profile plan. It is not necessary to pay the high price for full sized, one piece copies. 11" x 17" copies, cut and carefully pasted up to full size will work fine. Just make sure that you don't add distortion as you paste or tape them together. A sufficient number of copies of the end or body view will also be necessary to make templates for each of

the sections depicted. You will need both male and female or inside and outside templates. Note that one side of the end view shows the hull cross sections for the forward half of the hull while the other side of that drawing depicts the aft end. Make one full hull (double sided) template for each station.

Cut a half-hull template from your copies of the deck view for each of the curved waterlines. These templates can be used directly, however it is wiser to glue the templates to something stiff such as poster board or plastic. It will be necessary to use this template twice, once for each side of the hull, so it is desirable for it to be as stiff as possible.

Place the templates on the wood laminations and trace out the various waterlines. Cut out two of each (a left and a right half) with a band or scroll saw, stack 'em up...and you've got a hull. A solid hull! For the desired, hollow hull, part of each plank must be cut away prior to glueing.

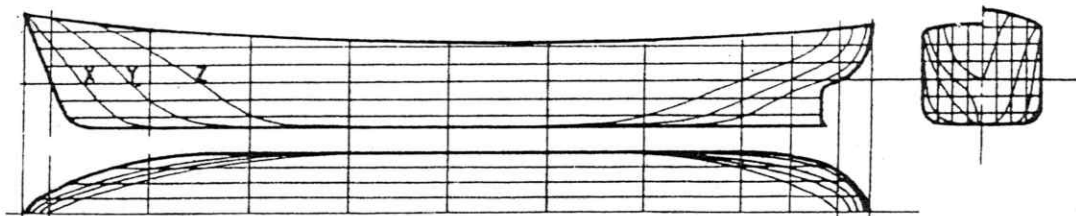
It becomes obvious that all but the bottom plank can have much of the center removed. In fact, if done properly, the removed center of larger lifts can be used as material to make some of the smaller lifts, or put aside for use on a later, smaller hull. The closer that you cut to the desired inside shape, the less material that must be carved or sanded away from the inside of the hull after the lifts are glued-up.

Mark the cross section locations on each lift. Using a contrasting color, draw in the desired hull thickness (e.g. 3/8") on each section (inside) template. Measure from the hull centerline to the point on this curve that is closest to that centerline. Mark this distance on the corresponding lift. When a mark has been made on each lift at all of the cross section stations, join these points with a smooth, curved line. Cut the inside of each lift to this line. The plotting of these inside curves is the most tedious part of the whole process. If it is done carefully however, it results in a relatively thin hull requiring little interior work after glueing. The resulting steps on the interior can be left as they are or shaved off for additional weight reduction. Since this building method results in two half-hulls prior to final assembly, it is much easier to do any smoothing of the inside prior to glueing the two halves together...rather than after assembly.

Color added to the glue during laminating will allow the glue lines to show, making final contouring of the hull simpler. Dyes are available for epoxy, while India ink works well in white or yellow wood glues. (newer yellow glues such as Titebond II are much more water resistant than white glue)

Final shaping is accomplished using knives, chisels, rasps, and sandpaper. Just make sure that you observe the glue lines and don't cut into them. The full width (outside) section templates made earlier will assist in the final shaping. Mark the locations of each vertical hull section at the top of the hull and near the keel for reference as you carve. Check frequently with the templates to avoid removing too much material. Good luck!

*Jim Smith*



# February Meeting Notice:

(Third Tuesday of the Month)  
**Tuesday, February 17<sup>th</sup>**  
**7:00 P.M.**

Centennial Lakes  
**Garage - Band Room**  
300 feet north of the Centrum Building

Commodore:	George Pfeifer	[REDACTED]
Vice Commodore	John Dodson	[REDACTED]
Vice Commodore	Kim Hershey	[REDACTED]
Vice Commodore	Bob Larson	[REDACTED]
Vice Commodore	Erwin Stevenson	[REDACTED]
Treasurer	Gary Phillips	[REDACTED]

Newsletter Editor Jim Smith [REDACTED]

[REDACTED]

## For Sale:

Our club members must be building every kit that they own because nothing is being offered here.....but the St.Louis Admirals' newsletter lists the following items:

Smit Roderdam tug, with fittings, \$200	Don Taschner	[REDACTED]	
Fiberglass, 74" Cruiser hull, with plans, \$100	John Midkiff	[REDACTED]	
Smit Nederland, 34" with fittings, \$175	Deans Marine, 52" Liberty ship, \$300	Norm Kalaskie	[REDACTED]
Delta 12" Wood Lathe with tools, \$1500	Robert Black	[REDACTED]	
Fairwind II, regatta winner, custom paint, radio, lights, hidden switches, etc. No price??	Jim Bostrom	[REDACTED]	
18" x 56" x 5" metal test tank. No price??	Bob Chapman	[REDACTED]	

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EDINA MODEL YACHT CLUB  
CENTENNIAL LAKES CENTRUM  
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EDINA, MN 55435

**First Class**