



# THE BROADAXE

NEWSLETTER  
of  
THE SHIP MODEL SOCIETY OF NORTHERN NEW JERSEY  
*Founded in 1981*



Volume 24, Number 2

February, 2006

## FROM THE QUARTERDECK

The Northeast Joint Clubs show in New London, CT is getting closer and in that regard, I ask any members who will be attending to bring a list of their models to the upcoming meetings. This will greatly help us in organizing the event with the overall theme of "Ships Throughout History".

**Jeff Fuglestad**  
President

## MINUTES OF THE REGULAR MEETING January 24, 2005

President **Jeff Fuglestad** called the meeting to order at 7:30 PM. We had 30 members and 3 guests present. New visitors were **Buddy Plechata** from Parsippany, **Allen Hamilton** from Morris Plains and **Griff Jones** from Mountain Lakes.

**Ken Schuetz** gave a report on the Morristown Library Show held during December. The Library indicated that the show was very popular. We had a nice article in a local newspaper as well. Well done Ken!

Another show coming up is the exhibit in February at the Belskie Museum in Closter. **Gary Kingzett** is organizing this event and it looks like we will be well represented.

The Library in South Amboy has also requested we put on a small exhibit during July or August. Both **Al Geigel** and I have visited the library. Enough members indicated a willingness to provide models that we will set something up with the library and report further.

**Walter Pommnitz** and **Bob Karnas**, from the South Orange Seaport Society, came to the meeting to invite us to exhibit at their static show on February 5 at the Baird Center in South Orange. Although this date conflicts with the Belskie Exhibit, our members were invited to put their work on display for the day if they are able. The South Orange Club is also hosting their Annual Regatta at the Meadowland Park Pond in South Orange on May 7, 2006. Any of our members with pond models or R/C models are welcome. Anyone interested can reach Walt Pommnitz at (732) 382-5788.

An issue was raised as to whether we could write to members who are not attending meetings to try to encourage them to come (or try to find out if they have some complaint about meetings). The suggestion was well received but, as usual, the issue of who does the work came up. **Barry Rudd** and **Jim Caulkins** agreed that they would discuss this subject, as an ad hoc Membership Committee, and report further.

**Mason Logie** gave a report on a summer excursion onboard a restored fireboat in New York harbor. There was enough interest shown that Mason will now try to firm up some dates during June.

A friend of **Jim Caulkins**, **Griff Jones**, was at the meeting to solicit our assistance in attempting to identify a ship portrait. Griff collects art and recently acquired two paintings of a ship under sail done by the same artist. Griff would like to identify the vessel and was asking for any input we could provide to help.



### SHOW AND TELL

**Ozzie Thalmann** showed his completed model in 1/96th scale of the Liberty Ship *SS Steven Hopkins*. Ozzie started with a kit from Deans Marine in England but then heavily modified the kit based on his own research. The Hopkins had a short life, being launched in April 1942 and sunk in September 1942 but did sink a German surface raider. Ozzie built this fine model for presentation to the Merchant Marine Academy at King's Point.



**Dan Caramagno** has also completed work on his model of the yacht *America*, built from scratch using one of the Jim Roberts' hulls. Dan built the model based on the yacht's appearance in 1851. Great work Dan.



**Tom Ruggiero** had his work in progress on *HMS Liverpool*, circa 1757. Tom is currently working on the head rails and timbers and is showing us his work on gratings for tonight's tech session



**Bob Fivehouse** had his completed scratch model in 1/1200 scale of the merchant vessel *Californian* owned by the British-Leyland Line. Bob plans to build a base for this waterline model showing the ship underway. The *Californian's* claim to fame is that she was accused of being close to the *Titanic* the night she sank but did not come to the rescue of the stricken liner.



**Mason Logie** showed his completed model of a German torpedo vessel T-23 in 1/400th scale from the Heller kit. Mason built this model because he in fact dived on the wreck of the vessel at Scapa Flow.



## TECH SESSION

**Tom Ruggiero** gave an excellent presentation on his method of making hatch gratings using his Jim Byrnes table saw. The presentation was too detailed to be digested here but Tom made a paper available to the membership.

**(Editor's Note: Tom was kind enough to provide me with his typed tech session which I include for you here)**

Gratings are used extensively on sailing ships. Gratings typically are used as hatch covers that allow air and light to pass through. On model ships, gratings are, to me, one of the first things that can ruin the effect of an otherwise very good model.

A grating, for the most part, is a wooden grill. Key is that a person must be able to walk on the grating; hence, it must be strong enough to be walked on. Also, if the grating is removable by man-handling, it must be light enough (i.e. small enough) for a person to lift. Finally, the space between the planks must be small enough so that a person walking on it doesn't get his heel stuck.

Grating strips are available from several sources. These strips typically look like a dental molding and you assemble them by inserting one into the other, like an egg crate, or by laying each flat and gluing them one to the next. Generally, the space in the grating is the same dimension as the plank. The smallest that I have seen is 1/32". That is okay for 3/16" scale but, is way out of scale for smaller scales. Generally, the space is 2" to 2-1/2" maximum (so 1/32" in 3/16" scale is 2"). I have seen otherwise very good models with gratings that would allow a scale man's leg to go through. Also, it is rare that one grating section would cover the whole hatch. It is a case of it being simply too heavy to lift without a pendant and fall. This is particularly the case with some kit based models. The model is laid out very neatly with all of the hatches covered by gratings. If the gratings aren't able to be lifted without a block and tackle, how does the crew get below deck?

I've used two methods for making my own gratings. I emphasize that neither of these methods are my own invention. They're just what works for me. The one you choose depends on the tools that you have. Both of these methods make use of a modeling table saw. I've used a Jarmac but, Preac or Byrnes saws are much more precise (also more expensive).

The first step for either method is to determine what thickness grating planks need to be and the space for the openings. Also, you want to lay out how many segments of grating that you will need to cover each hatch and if you want the segments to be removable individually. In 1/8" scale, 2" is roughly 18 thousandths; in 1/4" scale 36 thousandths etc. This dimension sets the thickness of the saw blade that you will use. Unless you want to have someone make custom blades, stick with the commercially available slotting blades. For the model that I'm working now, I'll use a blade that is 20 thousandths thick.

You want to use a hard wood with very tight grain. I've used boxwood and parmarfim. The overall size of the grating is, as I mentioned, determined by the weight of the grating and if it is going to be moved by hand or by block and tackle. The athwartship dimension is generally the width of the hatch. This dimension will be the plank that will span the distance from one coaming to the other. The other dimension is determined based on weight and how many segments will be required to close the entire hatch. The main hatch on the model that I'm presently building is roughly 5 1/2' by 4 1/2' and gratings were about 3.5 to 4" thick. Using the density of wood (about 32 lbs/cu. ft for red pine) and some simple math you can determine the weight. The weight of a solid hatch cover is 5.5 x 4.5 x .33 = 7.8 cu ft x 32 lbs/cu ft = 249 lbs. Removing about 40% for the grating openings leaves 150 lbs. The weight would be difficult to handle so, I've taken the modelers license that three smaller grating would have been used.

Now we set up our table saw. Cut a number of strips that are to be the width of each plank. Generally, the finished grating plank will have a square cross section but for ease of handling, the strips are about double the finished size. So, in 1/8" scale, the strips are 20 thousandths thick and roughly 40 thousandths wide.

Now plan your grating. Generally speaking, the bulk of the grating is a 2" wide plank, 2" wide space, 2" wide plank etc. In some cases, the last plank on either side is a little wider (say 4" wide on each side on all four sides). Now we will cut our grating blanks. The grain will follow the plank in the finished product. For now, we will be cutting several slots across the grain. This series of cuts will be in the fore-aft direction on the finished grating.

The difference in the two methods is how we index the rip fence on the table saw. If we use the Preac, we will index the fence with the strips that we cut. In the case of the Byrnes saw, we can also index with the strips or, if you have it, the available micrometer head.

We will make the first cuts in the blanks approximately one third deeper than need to be for the finished grating. So, for a 1/8" scale, set the blade to cut the slots about 30 thousandths deep (you don't need to be too precise with the depth of cut for now). Hold two strips together and place it up against your blade. Run the fence up against the strips. Lock the fence and remove the strips. Make your first cut. Shut off the saw and unlock the fence. Place the blade in the cut that you just made. Put your strips against the blank and run the fence up to the strips. Lock the fence and remove the strips. Lift the blank up, turn on the saw, and make the second slot. Repeat the sequence until you've reached the end of the blank.

If you have the micrometer head for the Byrnes Saw, instead of indexing with the strips, you can index the fence with the micrometer head. To do this, with the saw off, place your blank against the blade. Run the micrometer head to zero and install it against the fence. Remove your blank and slightly move the fence. For the first cut, extend the head 60 thousandths. Run the fence back against the micrometer and lock it. Make your first across the grain cut. Unlock the fence. Run the micrometer out another 40 thousandths (2X a strip width for a strip plus a space). Lock it in and make your next cut. Continue until your going to make your last cut. For this cut, the plank width will include the extra outside frame. So, run your micrometer out 60 thousandths and make your last cut. Note that you may need to move the head if your grating is wider than the travel of the head. To do that, leave the fence locked after the cut. Run the micrometer head back to zero and then move it against the fence. Now continue as you started.

You now have a grating blank with a pattern of slots across the grain. Now, to complete the grating blank you are going to make the athwartship cuts. These cuts are about twice the depth of the first series of cuts and 90 degrees to them. Set the blade to make cuts about 50 to 60 thousandths deep. You be using the same process that we used before except that the cuts will be deeper. Also, this is where, depending on whether you're going to have one finished grating or several butted against each other, the pattern will be slightly different.

As before, there is a frame, of sorts, completely around each grating. When you're making the cut on the next grating of an adjacent group of grating, you need to account for to grating frames being butted against each other. That means that when you cut the last slot for a grating you now must index the fence over to account for the frame of the next grating in the sequence. That means that instead of indexing the fence over 60 thousandths you now index it 80 thousandths (slot width

plus frame width times 2 or 20 thousands plus 30 thousandths plus 30 thousandths equals 80 thousandths). If you're indexing the fence with strips, you need a spacer that adds up to 80 thousandths. Be very careful that you do not wiggle the piece or jam in any sawdust as the little teeth that result from the cuts are fragile and will break meaning you need to start the process all over. This is the reason for a tight wood grain, sharp saw blade and lots of perseverance.

The blank now looks like a waffle iron. Take the strips that you cut back in the beginning and using mid cure cyano insert a strip in each of the shallow slots. Since, they are much wider than the finished product, it should be relatively straightforward. As you go, with a razor blade, slice the strip down until it is almost the correct width. When all of the slots are filled, let the assembly dry thoroughly.

Finally, sand the face of the grating so the strips are flush to our teeth. We are almost there! Turn the grating on its face and slice off the back. Touch it up with some sandpaper. The grating is done.

I've found through experience that fitting the grating into the coaming can be frustrating. While you will be tempted to add extra pieces to fill in gaps on the edges don't do it. On a prototype, the frame is the same width for all the gratings so, if you have different width frames because you had to fill in gaps, it will look terrible. What works best for me is to make the coaming after I've finished the grating.

As I said in the beginning, I didn't invent these methods but, they are the methods that have worked best for me.

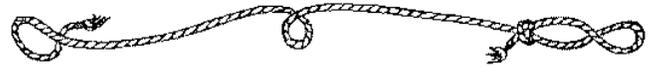
Good Modeling,

Tom Ruggiero, January 2006



### ***"Soundings From D-Deck"***

**Dave Watkins** received an inquiry from Judy Jarvis who is searching for a Makicraft Transformer Dremel drill. Her 90 year old father-in-law's transformer finally gave out and she is hoping someone might have one for sale. If you think you can help her out, please e-mail her at Judy@Jarvis.net



### **UPCOMING TECH SESSIONS**

**February 28, 2006 – Bob Fivehouse** will present a discussion on "Working in Miniatures"

The **'BROADAXE'** is published monthly by The Ship Model Society of Northern New Jersey, a nonprofit organization dedicated to teaching and promoting ship modeling and maritime history. Membership dues are \$20.00 for the first year and \$15.00 per year thereafter.

Visit our Web Site at: <http://www.njshipmodelsociety.org> where a Web version of the **BROADAXE** can be found. The **BROADAXE** is distributed by both US mail and e-mail in PDF format.

Regular meetings are held on the fourth Tuesday of every month at 7:30 P.M. at the Millburn Free Public Library, 200 Glen Avenue, Millburn, New Jersey.

Guests are always welcome.

Contributions to the **BROADAXE** are always welcome, and SMSNNJ members are encouraged to participate. Articles, shop hints and news items may be submitted directly to The Editor as typed manuscript or electronic files, either on discs or by e-mail. Handwritten notes or other materials will be considered depending on the amount of editing and preparation involved.

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**SOME PHOTOS FROM THE MORRIS COUNTY  
LIBRARY EXHIBIT**





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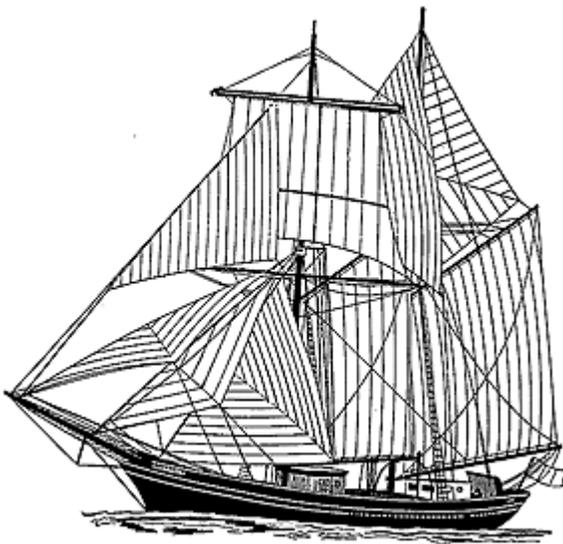
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## **NEXT MEETING:**

**February 28, 2006**

**7:30 PM**

**MILLBURN PUBLIC  
LIBRARY**

**Tech Session**  
**Bob Fivehouse**  
**“Working in  
Miniatures”**