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 While one man cranks the spinner, the one holding the "top" walks backwards as the rope is twisted. From Edwin Tunis, *The Young United States, 1783 to 1830* (New York: World Publishing Co., 1969), 82. Used by permission of the estate of Edwin Tunis

Ropewalk

The Newsletter for
Shipwrights of Central Ohio

July 2018

Next Meeting: August 18, 2018

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Special Announcement

Seaways *Ships in Scale* Magazine Has Ceased Publication

The Nautical Research Guild (NRG) is saddened to see *Ships in Scale* Magazine end its long and amazing tenure supporting our hobby of model ship building. The loss of *Ships in Scale* has left a void for the beginning and intermediate ship modelers.

In response to this news, the NRG Board of Directors has decided to make some changes to the *Nautical Research Journal* to offer former *Ships in Scale* subscribers somewhere to continue their journey into model ship building. First, the *Journal* will be expanded to provide more room for ship modeling articles for modelers of all skill levels without diminishing our commitment to nautical research. Secondly, one article started, but not completed, in *Ships in Scale* will be continued in the *Journal* to ensure that this valuable series is completed. Installments of the article already published in *Ships in Scale* will be posted on the NRG website to allow non-SIS subscribers the opportunity to appreciate the entire series.

The Guild has also purchased the intellectual property of Seaways Publishing. This means that CD sets for *Ships in Scale* and *Model Ship Builder* will continue to be available as well as plans published by Seaways Publishing.

The Guild is **not** purchasing Seaways Publishing or *Ships in Scale*. We are simply attempting to fill the void left by their ceasing publication. Any questions regarding *Ships in Scale* subscriptions must be directed to Seaways Publishing, not to the NRG. Refunds for unfilled issues are being issued by Seaways'. More thorough and detailed information will soon be posted on the NRG web site.

The NRG Board of Directors

www.thenrg.org

Editors Note: Joining the Nautical Research Guild provides you the Nautical Research Journal and supports Model Ship World. Membership is \$50 per year. Go to www.thenrg.org and click on "Join the NRG".

July Meeting

We had a good turnout and a guest. We welcome Richard Smith, new to the area and likes sailing. Found our web site and came to check us out. Welcome Richard.



Business

Ohio State Fair

Miniature Art/Miniature Shipbuilding

The third annual Creative Arts/Miniature Art/Miniature Shipbuilding Competition judging took place this past week. There were seven ship models entered and delivered to the Cardinal Hall July 13th & 14th. The competition judges gathered Monday, July 16th to review the entries and select this year's winners.

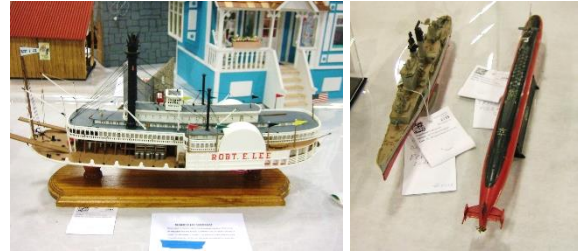


The Miniature Shipbuilding has only one category, so all models, wood, plastic, resin, kit and scratch, are judged against a set of standards. Each entry starts with 100 points and is judged based upon "Effort/Complexity", "Construction", and "Appearance". Points are taken off as errors, building issues, or appearance issues are determined. At least July 22, 2018

three judges, independently review the models and then meet to discuss what they saw and determine the final score.

The six models judged were:

Plastic



Left to right:

- Robt. E. Lee*. sidewheeler
- Destroyer
- Ohio Class Submarine

Wood



Top to Bottom:

- Sternwheeler *Chaperon*
- U.S.S. Niagara*
- Topsail Schooner *Hannah*

All models will be on display in Cardinal Hall at the Ohio State Fair from July 25 through August 5, 2018. Over 50,000 visitors, who tour through Cardinal Hall, will view the entries.

Featured Artist program:

We will be staffing a ship modeling display as part of the Ohio State Fair, Creative Arts Program on both Fridays, July 27 & August 3rd during the 2018 Fair. This has been a great chance to share our passion for ship modeling through a completed model or one the ship modeler is working on.

The staffing of our tables will be:

Friday, July 27:

AM shift: L. Black, A. Phelps

PM shift: D. Markijohn, G. Montag

Bob Mains will provide coverage during shift change and lunch both days.

Friday, Aug 3

AM shift: L. Black, M. Knapp

PM shift: A. Phelps, J. Northup

We will have pictures of our table display and people in the August "Ropewalk".

Library Display

Each year we try to provide a display of ship models at the Westerville Public Library as payment for using their classrooms for our meeting at no charge. This year we will fill their display cases for the month of September.

There are three. The two long cases measure 72" x 12.75" x 12.75" so there is a limit on how tall the model can be. The third case measures 57.5" x 19" x 76.5" and will hold models up to 30" high.

Set up for the display will be Saturday, September 1st at 9 AM with the display being taken down on Friday, September 28 at 9 AM. I will have forms available at the July and August meeting for you to identify what model(s) you plan to display.

Presentation

Electro-Plating

Our presentation this month was on Electro-plating by Alan Phelps. Alan has done

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some experimenting as well as research into electro-plating and the following is my attempt to provide an overview on the subject.

Electroplating is a process that uses an electric current to reduce dissolved metal cations so that they form a thin coherent metal coating on an electrode.

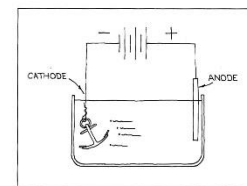
So why do you as a modeler need to understand the plating process? Electro-plating can prevent corrosion and improve appearance such as: the rusting of steel; the tarnishing of brass and copper fittings; change the appearance of brass to look like steel or iron, make pot metal attractive and change plastic parts to look like metal

The plating process consists of a solution that is conductive with metallic ions, DC power to attract the metal ions, the object – negatively charged, an anode positively charged and current, moving metal ions from the anode (pos.), through the solution to the work (neg.).

Outside of using a commercial process (most are not interested in handling small lots; the hobbyist has two choices: Brush or swab (Plug 'n' Plate) from Caswell Power & Wand or



a small tank -a.k.a. Dip Tank.



The advantages of the Dip Tank over Plug 'n' Play are:

1. Uses a larger solution volume which provides more stability.
2. Uses a larger anode to part area ratio: provides a more even deposition; provides a better "throw" into crevices; provides more space between anode

and work which prevents burning and provides some control over current density.

3. Uses the same solution as the brush system.

A successful plating process is dependent upon "Current density" (mA/sq. in.). Current density is controlled by voltage, part area and shape, anode area in the bath, distance between the anode and cathode (work), bath temperature and condition, agitation, and other gremlins (part art, part science). The current density is highest at sharp corners and low radius curves. High current density will build deposits faster, while lower current density will build deposits slower.

The plating process consists of a:

- Workpiece (cathode – neg.)
- Wand or plate (anode – pos.)
- Electrolytic solution for type of metal plated
- Containers or small tank for plating and rinsing
- Power supply
 - 0-4.5 VDC variable, or 3.0 VDC fixed
 - 0-350 mADC output.

Electro-plating solutions are corrosive so it is important to make safety important and a first priority.

- Use rubber gloves
- Use protective eyewear
- Wear old clothes, better yet, use a thick canvas or cloth apron
- Approach plating with respect and caution.

Most important for successful plating is to clean your work. You need to remove all oxides, coatings, oils and finger prints. Wipe the work with alcohol or acetone and then use an acidic pickle to remove rust, activate pot metal and solder.

Alan then took use through the steps of:

- Preparing the object to be plated;
- Preparing the Dip Tank for plating;

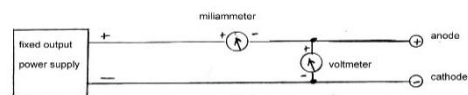
- The plating sequence:
 - Clean part, wipe, rinse
 - Pickle and rinse (optional)
 - Copper plate, rinse;
 - Light buff and rinse (optional)
 - Nickel plate, rinse;
 - Copy Chrome plate, rinse.

He then took us through the characteristics of the plated metal. In summary: Copper is a universal pre-plate and the only one that plates directly to steel and pot-metal. Copper is required to pre-plate for plastic; Nickel plates directly to copper, brass and bronze and will plate on plastic if the part is first sprayed with conductive paint; Copy Chrome (actually a nickel/cobalt alloy) looks similar to chrome but less blue.

Critical for control is the power supply.

We covered three choices:

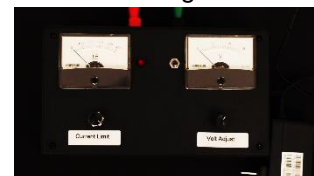
- Switch selectable AC/DC – 3.0, 4, 5, 6, and higher
- Add an ammeter and voltmeter to the supply for feedback on the plating process.
- Use a variable voltage regulator with the ammeter and voltmeter for best control of power.



If only one meter is available, set up as milliammeter.

The advantage of a metered variable power supply is:

- Allows direct control over current density;
- Allows monitoring of bath conductivity
- Eliminates burning
- Shows effect of agitation



True to character, Alan also provided a source if you want to build your own power supply. All computer power supplies have a 3.3 VDC regulated output perfect for plating. Any junk computer will do and the wires conform to standard color code ID.

So how do you hang your parts?

- Only handle cleaned parts with gloves, and/or tweezers.
- Use solid copper hanger wires.
- Use a non-conductive fixturing, plastic is better than wood. Machine to fit and hold part.

Some final tips for best results:

- Pay attention to cleaning.
- Use a mild acid (Pickle #4) before first plate esp. for pot metals, soldered parts.
- Use metallic anode bars – should approx. part area.
- Use some method to control current.
- Look for slight fine bubbles on workpiece.

Steve Wheeler wrote a published a paper on small tank plating using Caswell chemicals and anodes. It was published in the NRJ Vol. 52, No. 3 Fall 2007.

If you are interested in pursuing electroplating, the club has both a copy of Alans PowerPoint presentation and Steve Wheelers article. The club also has the following:

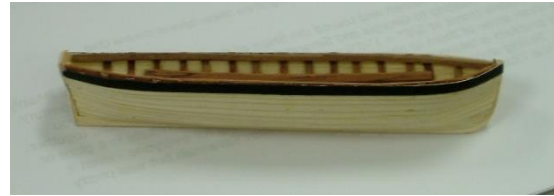
- Fresh nickel and copy chrome solutions
- Useable copper solution
- Metal anodes: copper, nickel, and stainless steel
- A variable power supply to lend
- Pickle #4 available to purchase.

Contact Alan if you are interested.

Ships on Deck:

U.S.S. Niagara

Darrell Markijohn is working on the lifeboats, building them clinker built.



Nice build.

Scottish Maid

Mike Runkle had a model that he picked up and is considering restoring.



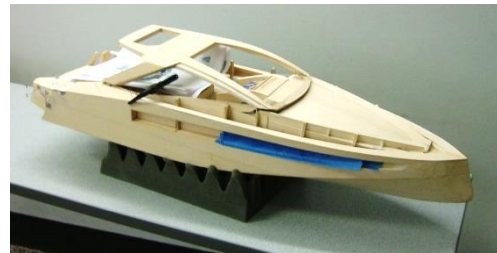
Sovereign of the Seas

Loran Black had a partial completed model of that he purchased from a modeler in Dayton. It is a work in process.



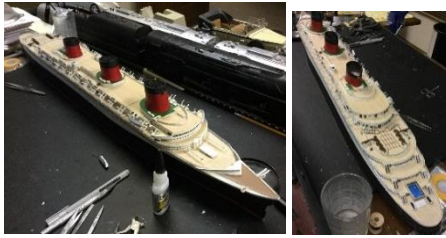
Hedonist

Brian Reynolds had his scratch built, work-in-process to give us an update.



Normandie

Stan Ross provided pictures of his progress building the steamer *Normandie*.



Dapper Tom

I am in the process of adding the standing rigging to my restoration project that had broken or was rotted.



Odds and Ends

Nautical Terms

A-back: A foresail when against the wind, used when tacking to help the vessel turn.

Abaft: Toward the after part, or stern, of the ship. Used relative to some object ("abaft the fore hatch").

Abaft the beam: Further aft than the beam: a relative bearing of greater than 90 degrees from the bow: "two points abaft the beam, starboard side". That would describe "an object lying 22.5 degrees toward the rear of the ship, as measured clockwise from a perpendicular line from the right side, center, of the ship, toward the horizon."

Abeam: On the beam, a relative bearing at right angles to the ship's keel.

About: To go about is to change the course of a ship by tacking. Ready about, or about ship, is the order to prepare for tacking.

Above board: On or above the deck, in plain view, not hiding anything. Pirates would hide their crews below decks, thereby creating the false impression that an encounter with another ship was a casual matter of chance.

Absolute bearing: The bearing of an object in relation to north. Either true bearing, using the geographical or true north, or magnetic bearing, using magnetic north.

Accommodation ladder: A portable flight of steps down a ship's side.

Accommodation ship (or accommodation hulk): A ship or hulk used as housing, generally when there is a lack of quarters available ashore. An operational ship can be used, but more commonly a hulk modified for accommodation is used.

Information is from the book "A Sea of Words" A lexicon and Companion for Patrick O'Brian's Seafaring Tales" by Dean King. & Glossary of Nautical Terms Wikipedia;

BlueJacket Ship Crafters

Tip-of-the-Month

Bluejackets "Tip of the Month" continues to be a popular part of their newsletter. They have been asked about an index of the tips. Their response is "It already exists!" Go to their website page (www.bluejacketinc.com) and scroll down to the bottom of the page. Click on the "newsletter archive" and a listing of every tip of the month is there, along with the model of the month from 2013. Click on the name of the month you want.

A Template for Ratline Spacing

One of the really handy things to do when making ratlines (or mounting battens) is to have a template of the spacing required mounted behind the shrouds to guide your knots



A way to make these templates is to use an Excel spreadsheet. Determine what spacing you need. Ratlines and battens are spaced at 18" on real vessels. In scale, this works out for some common sizes:

- use 18/32" (row height = 43.2) for 1:32 (3/8" = 1')
- use 12/32" (row height = 28.8) for 1:48 (1/4" = 1')
- use 9/32" (row height = 21.6) for 1:64 (3/16" = 1')
- use 6/32" (row height = 14.4) for 1:96 (1/8" = 1')
- Reference: 1/32" = 2.4 as a multiple

On Excel, open a new spreadsheet.

1. On the home page, use the border tool found under font section to darken the horizontal and vertical lines on your page.
2. Highlight the number of rows that correspond to the number of ratlines on your shrouds.
3. On the home page, click on format and then row height. Enter the row height equal to 18" in the scale you are building in.
4. Go to "page layout" then "print area" and set the print area for your ratline pattern.
5. Print out your pattern and trim to size.

	Height	Scale
	14.4	1:96
	21.6	1:64
	28.8	1:48
	43.2	1:32

Depending on your version of Excel, there may be differences between the above and how your program operates. Some Excel's let you specify the height in decimal inches, or in font points. Inches is self-explanatory, but font sizes are in 1/100ths of an inch. 6.25 font is 1/16 inch.



The above photo of *Dapper Tom* shows the fore topgallant shrouds with a ratline pattern behind. The model scale is 5/32" = 1'. At 18" between ratlines, the spacing is 15/64" or 18 row heights on my Excel program.

Nautical Research Guild 2018 Conference

The 2018 Nautical Research Guild conference will be held October 25 – 27, 2018 at the Palace Station Hotel and Casino in Las Vegas, NV.

Registration Forms:

<https://www.thenrg.org/nrg-2018-conference.php>

Paint Follow-up

In our May 2018 "Ropewalk" under the heading Bluejacket Ship Crafters we mentioned a new paint company "True North Paint" (www.truenorthpaint.com).

Jeff Northup sent your editor a note that Caldercraft, through "Ages of Sail" (www.agesofsail.com), had created a paint set for their models that were supposed to be authentic. Per Jeff" they would probably be appropriate for any British ship model 1700-1850ish".

Other Notes: (About "Stuff" & Tugs)

"Amy Moran"



Tugboats that pull their tows or handle ships normally do not need high wheelhouses. Tugboats who push large barges require high wheelhouses so that the skipper can have good visibility ahead. The ideal harbor and costal tug that both pushes and pulls, needs a wheelhouse of adaptable height.

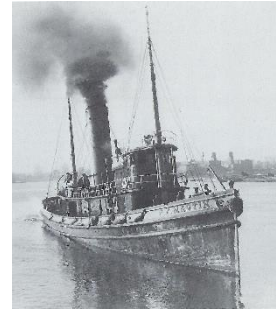
The *Amy Moran*, shown above, is pushing the LNG (liquefied natural gas) barge *Massachusetts*. They are on their regular run, Boston to New York.

The *Amy Moran* has her wheelhouse raised. The hydraulically powered mechanism is similar to those used for car lifts. Controls to the engine and rudder are in the column supporting the wheelhouse, and the ladder from the boat deck folds and unfolds as the house is raised and lowered.

The *Amy Moran* was built by McDermott Shipyard, Morgan City, LA in 1973 for Moran Towing Co. New Canaan, CT. with measures: 107' 2" x 31' x 17' 3", and powered by twin 12-cylinder diesels, 3300 horsepower.

(Original Source: "On the Hawser" by Steven Lang and Peter H. Spectre, 1980)

"P.F. Martin"



The photo above, shows the narrowness of the big coal tugs in relationship to their length. The *P.F. Martin* was built in Philadelphia, PA for Martin Transportation Co. in 1903. She was steam powered with measures 157' x 30' x 16.5'; rated at 1000-horsepower and was in the costal coal transport.

In the early 1900's, a tug with a 1000-horsepower engine was considered to be very powerful. Powerful steam engines had to be big steam engines, which made them difficult to fit and run economically in tugboats. Tugs designed for long costal passages were built narrow and deep to cut down resistance through the water and to keep the propeller in the water. This narrowness made them prone to rolling heavily in heavy seas. Almost all these tugs carried steadying sails.

The *P.F. Martin* looks good in the photo, but she was exceedingly ugly when viewed in profile. She originally had two stacks, but the forward one was removed, presumably when one of her boilers were removed. She sank off Capt Hatteras with all hands in 1942.

(Original Source: "On the Hawser" by Steven Lang and Peter H. Spectre, 1980)

Education

The following appeared in the *Nautical Research Journal*, Summer 2018 Vol.63. No.2. Written by Paul E. Fontenoy, Editor of the NRJ, and included with his permission in its entire. Read it and think about the words and what we can do to advance this avocation, craft, hobby.

"The Nautical Research Guild always has made its mission of educating ship model makers and researchers both in skills and methods a central part of its work. The *Nautical Research Journal* is the most obvious medium it uses to report new research and disseminate both traditional and innovative techniques to its members. The Guild also is publishing a series of detailed guides for modeling different types of wooden vessels (exemplified by the very recent monograph, *A Generic East Coast, Late 19th-Century Oyster Sharpie*) that cover a variety of approaches, methods, and techniques. Each year the Guild holds multi-day conferences filled with presentations, seminars, and round-tables covering new research and demonstrating techniques so that attendees may hone their skills and knowledge bases. In addition, the Guild has a very active online presence through the NRG website, www.thenrg.org, and its forum www.modelshipworld.com.

Effective education requires adaptation in order to continue to reach the widest possible audience with materials that are appealing to people with varying levels skills and interest. The *Nautical Research Journal*, from the very first typewritten mimeographed issues, has never stayed the same but has evolved to meet the needs and desires of the Guild's members. Even within the period of my editorship, there have been two substantial changes: a twenty-five percent increase in the page count and the regular addition of a 16-page section in color. Nevertheless, for the Journal to remain an effective educational platform, Guild members and the Board must seek out different approaches and expand our reach.

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A common concern among existing modelers is that there is a dearth of younger or newer members becoming involved in the hobby. These are among the most important groups we need to attract to ship modeling and strive to encourage and educate through articles, notes; discussion forums, publications, and mentoring opportunities. We have to pay attention to the needs of those who are progressing from the stage of an initial interest in building ship models to that of wanting to learn more about the skills and methods necessary to create better-built and more accurate replicas. This is a critical component of the Guild's educational mission, the novices of today will only become the master builders of the future if current skilled practitioners of the craft share their expertise and provide encouragement and guidance to up-and-coming ship modelers.

Accomplishing this task will require us to explore different approaches to using the space available in the Journal and the types of material it includes, while also ensuring that it continues to meet the high expectation of the Guild members. We will have to exploit the possibilities of all the various media and work to integrate them more effectively and (hopefully) more seamlessly. The goal is to allow the Guild to serve both relative newcomers and experienced modelers and provide multiple platforms to support all builders in raising their own standards of excellence."

"Ropewalk" Editors Note: Think about how we can encourage people to try ship modeling and how we mentor and encourage new ship modelers through our programs, activities and presentations. Is it a mentoring program, a group build or a basic ship modeling class?

This year, so far, we have had six guests attend our meetings of which one has joined the club. What are we doing wrong?

A Ship Modeling Club is a modelers most valuable tool

Presentation Selection:

2018

- 01/20 - Sail Making
- 02/17 - Flags
- 03/17 - Scratch building w/plans
- 04/24 - Lofting
- 05/19 - CAD - Computer Assisted drafting
- 06/16 - 3D Printing
- 07/21 - Electro Plating
- 08/18 - Transporting Models
- 09/15 -
- 10/20 - Planking a deck
- 11/17 - Wood Finishing
- 12/15 - Submarines

Events & Dates to Note:

2018

Ohio State Fair

"Featured Artist in Resident"
Shipwrights of Central Ohio
State Fair Grounds, Cardinal Hall
July 27 & August 3, 2018

Toledo Antique & Classic Boat Show
Promenade Dock, Maumee River, Toledo, OH
Aug 25, 2018

Ohio River Sternwheel festival
Marietta, Ohio
September 8 & 9, 2018

"Artistry in Wood"
Dayton Carvers Guild Woodcarving Show,
Roberts Centre, Wilmington, OH
www.daytoncarvers.com
Oct. 13-14, 2018

NRG Conference
Las Vegas, NV
Oct. 25 - 27, 2018

2019

Columbus Woodworking Show
Ohio Expo Center
Voinovich Livestock & Trade Center,
717 East 17th Avenue, Columbus, OH 43211
January 18 - 20, 2019

IPMS Columbus

46th Anniversary BLIZZCON
Arts Impact Middle School
680 Jack Gibbs Blvd. Columbus 43215
Saturday, February 16, 2019

Miami Valley Woodcarving Show

Christ United Methodist Church
700 Marshall Rd., Middletown, Ohio 45044
March 2 & 3, 2019

64th "Weak Signals" R/C Model Show

Seagate Convention Ctr.
401 Jefferson Ave. Toledo, OH
April 05 - 07, 2019

North American Model Engineering Expo.

Yack Arena
Wyandotte, MI
April 20 - 21, 2019

43rd Midwestern Model & Boat Show,

Wisconsin Maritime Museum
Manitowoc, WI
May 17 - 19, 2019

Constant Scale R/C Run - Carmel, Ind.

Indianapolis Admirals reflecting pond
Carmel, IN
May 18 & 19, 2019

Lakeside Antique & Classic Wooden Boat

Lakeside Hotel, Lakeside, OH
July 20-21, 2019

Ohio State Fair

Miniature Ship Building Competition
July 12 - 15, 2019

Editor: Bill Nyberg
President and editor for the Shipwrights of
Central Ohio
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THE NAUTICAL RESEARCH GUILD
"ADVANCING SHIP MODELING THROUGH RESEARCH"

Annual membership includes our world-renowned quarterly magazine, Nautical Research Journal, which features photographs and articles on ship model building, naval architecture, merchant and naval ship construction, maritime trade, nautical and maritime history, nautical archaeology and maritime art.

Other benefits include discounts on annual conferences, ship modeling seminars, NRG products and juried model competitions which are offered exclusively to Guild members. We hope you will consider joining our ongoing celebration of model ships and maritime history.



For more information contact us at: www.thenrg.org or call 585 968 8111