



San Diego Ship Modelers' Guild

1306 N. Harbor Drive

San Diego, CA 92101

SEPTEMBER 2000

NEWSLETTER

Volume 24, No. 9

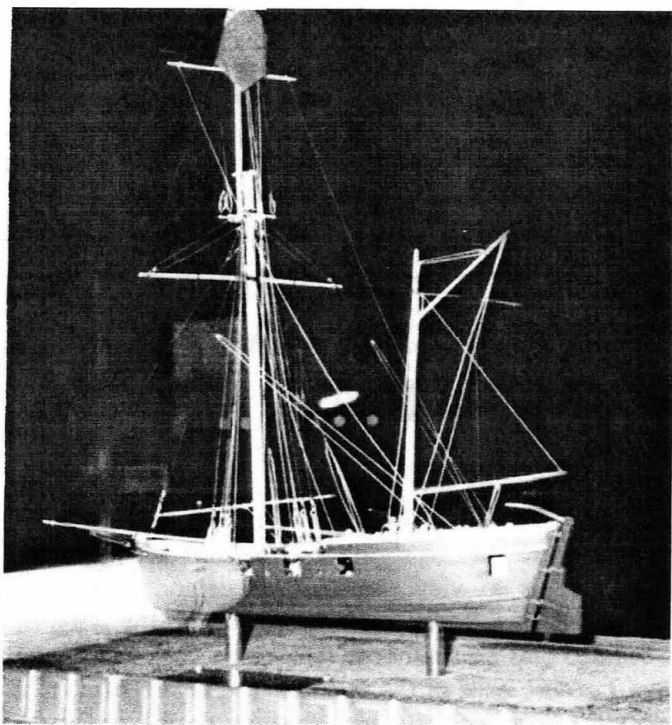
New Members Enlist in Time to Join the Vote on Raising the Membership Fee

It was a pleasure for the San Diego Ship Modeler's Guild to welcome its new members, **Dick Roos, Cheri Wessel, Mike Freeman, Ramsey Arnold, Doug Stratton, Rick Blanchard and Steve Pucillo.** Mark Croug just dropped in for a visit from Virginia. At the August meeting there was no shortage of topics for discussion, including the newcomers' introductions, several interesting models to view, as well as demonstrations of innovative techniques for model ship building. The business focus of the last meeting dealt with the issue of raising the membership fees to \$20.00 per year, and it was decided that we shall vote on the proposal. Therefore, the reader will find that a cut-out ballot can be found on page 7 of this issue of the newsletter. It is suggested that each member either mail in a marked ballot or else show up with the ballot at the next meeting on September 13 which will be held on the *Star of India*. It was brought up that the *Lane Victory* will be visiting from Long Beach on September 16-17. Touring this vessel is a fascinating experience for those who haven't yet had the opportunity to explore the WWII era of ships.

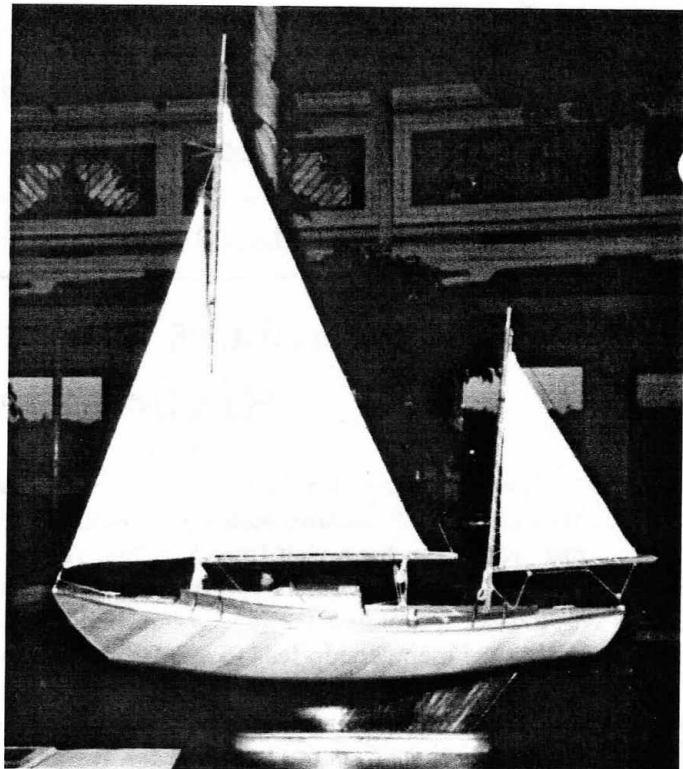
A new member, Cheri Wessel, is working on the *Beagle*, known for the famous voyages of the naturalist and great scientist Charles Darwin (1831-1836). Cheri comes to us seeking help with her Italian Mamoli instructions! It is challenging enough that this 1:64 plank-on-frame kit is her first modeling attempt but the language barrier makes things even more interesting!, Bill Luther is back with us, feeling fit, and he showed photos of two identical brigantines being built in San Pedro. Bob Graham went to the effort of bringing his tool box complete with soldering iron down to the Berkeley where he conducted a hands on demonstration of his precision technique for creating brass pintles and gudgeons by soldering brass strips to tiny brass tubing, immobilized in an ingenious jig milled out of heat resistant corion countertop material.



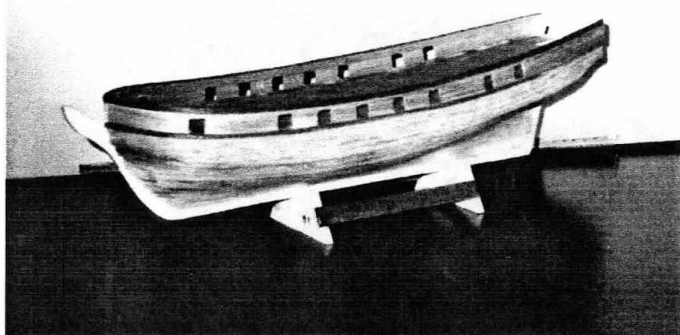
Royce Privett and Bob Crawford examine The N/S *Savannah* (N/S stands for Nuclear Ship) which is being built by **Fred Frass** using a 1/16" Bluejacket kit. The actual vessel, which could carry 60 passengers, was built in the early 60's as an "Atoms for Peace" project in the Eisenhower Administration. The *Savannah* was laid up many years ago because of labor disputes. Fred says this ship was never intended to be profitable and certainly was not.



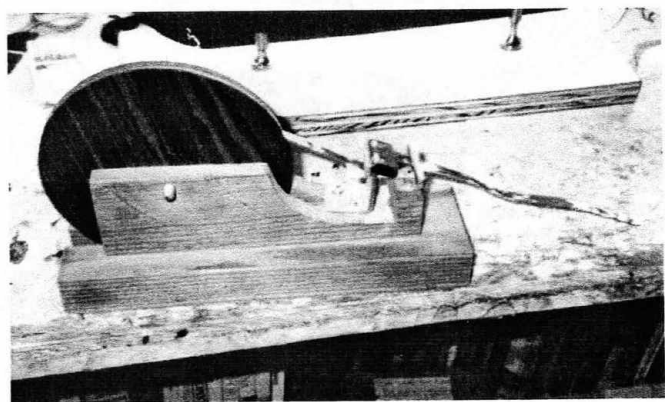
John McDermott's 1776 *Loyal Convert* built 10 years ago looked brand new in its pristine case. John built this 1/8" scale plank-on-frame model from scratch using Drawings from Chappell's "History of American Sailing Navy". Interestingly, this American Ship was captured by the British in the Revolutionary war, dismantled and carried overland to Lake Champlain.



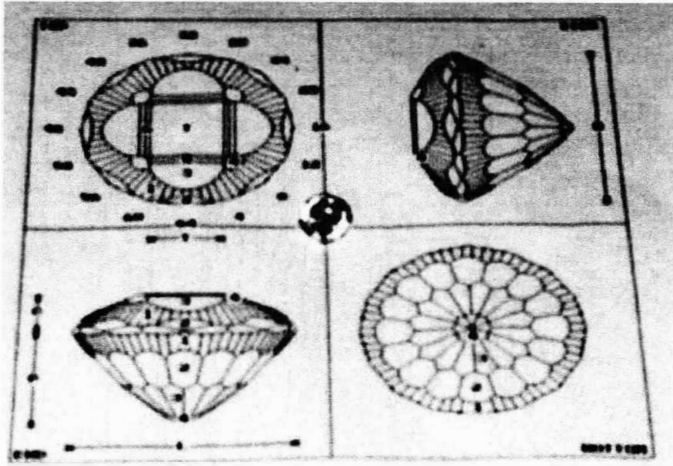
L. Francis Herreshoff designed the graceful *Rosanenti*, which was built by Jerry Deschene from scratch. The scale is 1" to the foot and was constructed using Basswood, Plywood, Mahogany and Cedar.



The 18th century American ship *Lexington* under construction by newcomer Michael Freeman. Mike is using a plank-on-frame Mamoli kit at a 1:100 scale for his first effort and has been applying himself to learn planking.



Jack Klein demonstrated the method he employed to rapidly copper the *Challenger* using a shop-made copper tape dispenser (for the sticky copper tape used in stained glass window making). The dispenser automatically creates an indented pattern as the tape is pulled through. Jack claims that this little invention saved him hours of work and he has offered to allow Guild members to use it for their next coppering project.



Ernie Andrew's *Purple Phantom* is a beautiful lavender-pink colored gemstone which took first place at the Del Mar Fair in the synthetic stone class. The material is cubic zirconium which Ernie faceted to his own design (shown in the figure). This gem has 114 facets and weighs 20.65 carats. Ernie notes that this model will not be floated!

Steering Committee Meeting

All Guild Officers are requested to attend the Steering Committee meeting which will be held aboard the *Berkeley*, below in the galley. Any interested members are invited to join the meeting for a brain-storming session. Please join us at 6:30-7pm, immediately before the next meeting on Wednesday evening, September 13th. The regular meeting itself will be held on the *Star of India*.

**Cast your Ballot at the
Next Meeting
September 13th
on the *Star of India***



Del Mar Fair Volunteers Enjoy Splendid Cruise on the *Medea*

How fitting that the graceful vessel featured in our Guild logo, the 1904 steam yacht *MEDEA*, should take the Guild members for our annual luncheon cruise. Friday August 25th was a perfect day for the event. As always, this experience is a great incentive to continue the Ship Modeler's Guild tradition of manning our educational booth during the festive Del Mar Fair held annually in June and July. We were joined by members of the San Diego Fine Woodworkers Association who also worked at the Fair. Special thanks to **Jack Klein** for organizing the event, to the San Diego Maritime Museum for making the cruise possible and to **Bob Crawford**, the Chief Engineer of the *Medea*, for his efforts in the steamy engine room while the rest of us enjoyed the balmy breeze on the deck.

| September | | | | | | |
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

OK, Let's Put This Problem in Scale

The drawing at the right first appeared in *Broadside!*, the newsletter of the U.S.S. Constitution Model Shipwright Guild, and has been reprinted in many other newsletters. The reason for such widespread interest is clear: it addresses questions of terminology in model-ship sizing and suggests some answers. Many modelers from coast to coast must have benefited from this "Imaginizer," which was dreamed up by USSCMG member Mat Leupold and executed by that Guild's Newsletter Editor Irwin N. Schuster.

The concept led me to find an article called "Scale Consideration For Ship Models," which appeared in *Ships in Scale* for July/August 1993. It defined and discussed the two major scales used in model ship construction.

One kind, called the engineer scale, is the mathematical ratio— a/b —such as those shown under each figure in the drawing. It means that 1 unit of measure on the model is equal to some larger number on the real ship; often it is written as $a:b$. Using this scale, you can find the real-life dimension of anything on the model by multiplying it by the denominator. Thus a two-foot model on the 1/20 scale represents a 40-foot ship.

The other, called the architect scale, gives you the fraction on an inch that represents one foot on the actual ship, such as those shown (with their engineer equivalents) in the table that accompanies the drawing.

Why do architects, and most modelers, stick to inches-and-feet? Says Ben Lankford, writer of the *Ships in Scale* article, "I guess it is just tradition that wooden ship models are built to architect scales, or perhaps we have been trained to think in 1/8" and 1/4" increments. Isn't that why we resist the metric system?"

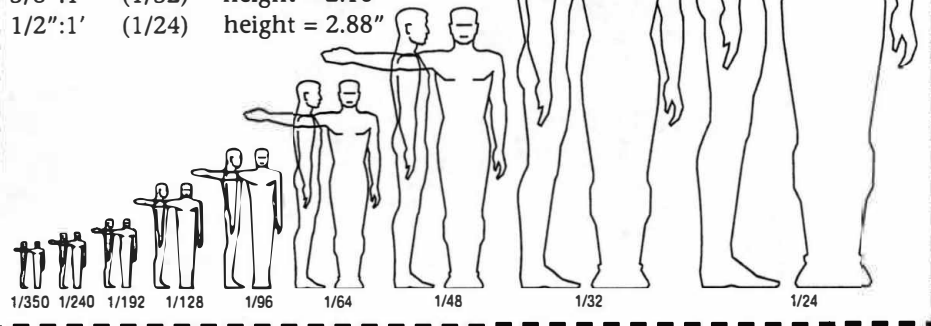
That's certainly part of the reason. Using the architect scale, we can look at a two-inch hatch on a ship built to the 1/4":1' (or 1/4"=1') scale and quickly visualize a real-life hatch eight feet long. But if we know from the 1/48 engineer scale that the hatch is 48 times larger, we can't clearly visualize how long that might be. We have to pause and think.

Gotta go metric on this. Get out the metric ruler and a calculator. The hatch is five centimeters long. Times 48 is 240. Dividing by 100 (that's where the metric system is so handy) gives us two meters 40 centimeters. That's about—u-m-m—eight feet!

This all seems to get back to some old arguments about the merits of the English system of measure vs. the metric. The inch supposedly comes from the size of man's thumb, and the foot, 12 times longer, from his foot. Both terms are easily visualized—they are what Lankford calls "known-size objects." But the meter is defined as a ten-

Official USSCMG Scale Imaginizer

| | | |
|-----------|---------|----------------|
| 0.034":1' | (1/350) | height = 0.2" |
| 0.05":1' | (1/240) | height = 0.29" |
| 1/16":1' | (1/192) | height = 0.36" |
| 3/32":1' | (1/128) | height = 0.54" |
| 1/8":1' | (1/96) | height = 0.72" |
| 3/16":1' | (1/64) | height = 1.08" |
| 1/4":1' | (1/48) | height = 1.44" |
| 3/8":1' | (1/32) | height = 2.16" |
| 1/2":1' | (1/24) | height = 2.88" |



millionth of the distance along a meridian from the equator to a pole—a concept which boggles the mind, even though it appealed to the rational thinking of the metric system's French inventors.

Still, for modelers the English system is useful only down to 1/16":1', as the table in the drawing shows. Builders of tiny models, like Robert Hewitt, are forced to go to the engineer scale—typically, in his case, 1/350.

And the fact that the English system is non-decimal (one foot is equal to 12 inches), complicates all calculations. Suppose the question is: how thick is a deck plank on a 3/8"=1' model if it is two inches thick on the real ship? Answer: 3/8"=1'=12", so 1/8"=12" divided by three, or 4". Thus it turns out that a 1/16" plank on the model will exactly represent two inches on the ship.

In his article, Ben Lankford offered an interesting example of thinking that led him to use the engineer scale. After strongly recommending the purchase of a graduated engineer's scale, he writes:

"I recently built a model of a modern sailboat for a customer. He first wanted it to be 1/2" to the foot. I tried to talk him up to the 3/4" scale, because of the difficulty I would have making the fittings at the smaller scale. We compromised on a length that would require a scale of 5/8" to the foot. The final decision was an engineer's scale of 1/20, which is very close to 5/8" to the foot. Why did I do that? The answer is simple. I could not find an architect, engineer, or hobby ruler scale with the 5/8" to the foot scale on it.

"Also, for the rigging diameters, the engineer scale is easy to calculate. In full size, 1"=20", so 1/20=0.050. Notice how easily the number calculates. If I used 5/8" to the foot, 1" on the model would equal 0.05208333333."

There is much more to be said on the subject of scale. I hope this essay will inspire San Diego readers to respond with stories of their own experiences in choosing and using scales, and the arguments pro and con for the architect and engineer solutions. How about it, Bob, Jack, Robert, Ernie, Gordon, Fred, Dick, Phil, Ed, Jerry and everybody else?
—Bill Forbis

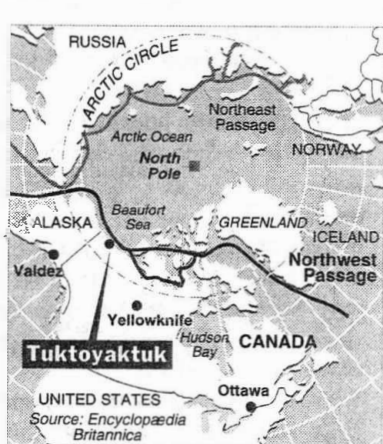
Northwest Passage: A Reality at Last

Last month the ice on the ocean at the North Pole melted and left a patch of open sea for the first time in 55 million years. Aboard a Russian icebreaker, Dr. Malcolm C. McKenna of the American Museum of Natural History consulted his Global Position System navigation device and found that it read precisely 90 degrees North.

The larger significance of this event is probably that it confirms that global warming is for real. For those interested in ships and shipping, it also means that the Northwest Passage to Asia, the dream of European explorers in all the centuries since the discovery of America, is increasingly becoming practical—the Panama Canal of the North.

And for the same reason, another dream of explorers like Henry Hudson, a *Northeast* Passage across the top of Russia, is also coming true.

James Brooks of *The New York Times* recently visited the village of Tuktoyaktuk on the northern coast of Canada. He reported that the villagers have in this season spotted a Chinese research ship and a Russian tug towing a huge floating dry dock. Moreover, a number of American cruise ships have



The New York Times

begun to traverse the Northwest Passage. It's also true that in previous seasons, several Canadian naval vessels have been able to pick their way through floating ice and voyage from the Atlantic to the Pacific.

Now the possibility looms that big commercial vessels will sail in the summer from, say, Rotterdam to Yokohama and back. Even more likely, they will make the same voyage north of Russia, which has fewer icebergs and islands.

In either case, such ships would save 5,000 miles of steaming compared to going through the Panama Canal.

There is, however, a big downside to the whole idea. The ice-free season will be short, and only expensive icebreakers could extend it.

Canada will insist that only ships with double hulls can use the passage, often following icebreakers. The authorities fear that some *Exxon Valdez* type of oil spill could wreck the fragile environment of the twisting island channels. One official speculates on the perils of "a cruise ship going down with 400 to 500 people."

In 50 years, however, these dangers may diminish.

The National Aeronautics and Space Administration says that the polar icecap will warm enough to vanish in the summer. Already, according to *Science* magazine, the ice sheet covering Greenland is melting 1.25 trillion gallons of fresh water every year, enough to supply every U.S. household for five months.

For Treasure-Ship Hunters, No More Finders Keepers

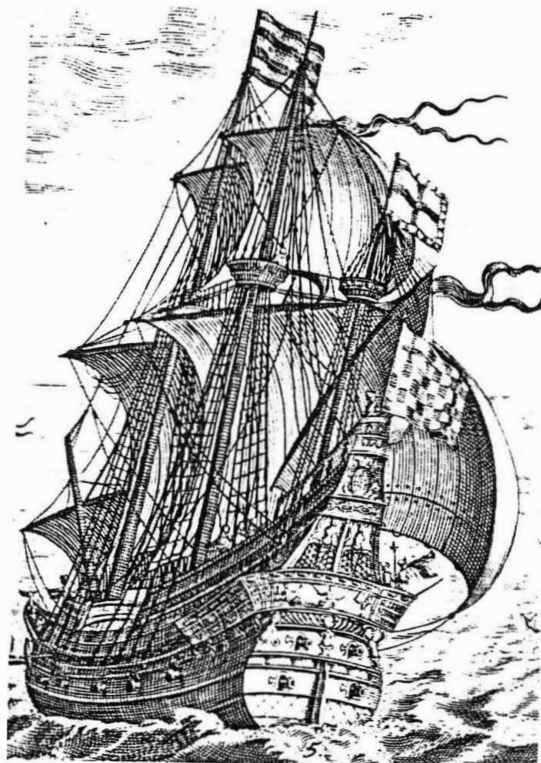
In Spain's long centuries of exploiting the Americas, she lost thousands of ships to storms, accidents and pirates. Scores of their wrecks still lie on the bottom off the coasts of Texas, Florida, Cuba, the Carolinas and Virginia. They are prize targets for treasure hunters. When they went down, they took with them billions in gold, silver, diamonds and emeralds.

In July, a federal court in Virginia ruled that the wealth belongs to Spain, not to the treasure hunters who have raised a few of the galleons. Spain had not been too concerned until a few years ago, when a treasure hunter brought up *Nuestra Señora de Atocha* with \$400 million in wealth.

When in 1998 another salvor, Ben Benson, poured \$2 million into a project for raising two Spanish ships, Spain went to court, backed by the U.S. and Britain (which have a stake in sunken ships of their own flags).

The Court of Appeals for the Fourth Circuit ruled that the "title to the shipwreck remains with the original owner." Spain wants more than doubloons; it thinks of the ships as cultural riches, with anchors, cannons, historical artifacts and military grave sites.

A Massachusetts treasure hunter who helped Benson to find the ships took issue with the court decision favoring Spain. His argument: the Spanish got the treasure by stealing it from the Incas and Aztecs in the New World nations that they conquered. Or that they forced the natives into slavery to mine the gold and silver.





A galley using greek fire from a blow-tube; detail from a Byzantine MS

Sea Talk

Gleaned from *The Oxford Companion to Ships and the Sea*

GREEK FIRE, a liquid charge made largely from naphtha and thrown from mortars as an offensive weapon against ships, acting as a flaming torch against masts and sails. It was developed in the Byzantine Empire during the 7th century. A.D., and came into general use after it was employed with conspicuous success against the Arab fleet which attacked Constantinople in 678, launched from the walls and towers of the city defenses. It was then widely adopted as a naval weapon by most of the maritime countries of the Mediterranean, but fell into disuse after the introduction of guns as naval weapons, the consequent increases in range at which battles at sea were fought making it useless, since the charge always burned out before it was able to reach its target.

POWDER MONKEY, a ship's boy in a warship whose duty when the crew was piped to quarters for battle was to carry powder from the magazine to the gundecks during the days of sailing navies. They were assisted in this task by any women who might be on board; many of the larger ships carried three or four wives of trustworthy petty officers or seamen when at sea, particularly for their value in nursing the wounded after battle. The powder that they and the powder monkeys carried to the gundecks was weighed out into silk bags in the form of cartridges for the guns.

PQ 17, the code letters and numbers of a convoy carrying supplies to North Russia during the Second World War. It sailed from Iceland on 27 June 1942 with a close escort of six destroyers, four corvettes, and two anti-aircraft ships, a close support force of four cruisers and three destroyers, and distant cover by the British Home Fleet. The convoy consisted of thirty-five merchant ships and made good

progress for the first seven days, passing North of Bear Island, between Spitsbergen and the North Cape of Norway on 3 July. On this date the British Admiralty received intelligence that two German pocket battleships, the *Scheer* and *Lutzow*, had sailed from Narvik bound for Altenfiord, a temporary base in the far north of Norway. Further intelligence came in the same day that the battleship *Tirpitz* and the heavy cruiser *Hipper* had sailed from Trondheim, bound for the northward. It appeared to the British Admiralty that these heavy ships could only be gathering in the far north for an attack on Convoy PQ 17, and a quick calculation indicated that they could reach the convoy during the night of 4 July.

U-boat and air attacks on the convoy began on 4 July, but were beaten off with the loss of three merchant ships. It was appreciated in the Admiralty that the distant cover of the Home Fleet was much too far to the westward to be able to intervene if the German surface ships attacked, and also that the close support ships and the close escort, four cruisers and nine destroyers, were no match for the guns of the *Tirpitz* and the pocket battleships. On the assumption that these ships had already sailed, the Admiralty ordered the convoy to scatter and the close support force to withdraw to the westward as ordered. Unfortunately, the six destroyers of the escort force, believing from the Admiralty signal that an action with the German ships was imminent, accompanied the support force and also withdrew westward in the expectation of providing much needed support to the cruisers in the coming battle. Although no enemy appeared, they remained with the support force throughout the night.

In fact the *Tirpitz*, *Scheer*, and *Hipper* (the *Lutzow* ran aground when leaving Narvik and was damaged) did not leave Altenfiord until shortly before noon on 5 July, but by then there was no task for them. The merchant ships, no longer a convoy for they had obeyed the order to scatter, were falling victim one by one to the torpedoes of U-boats and aircraft. Of the thirty-five that had sailed from Iceland, only eleven reached their destination in North Russia.

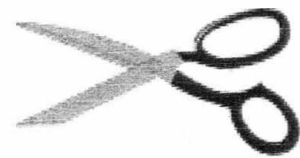
Let Your Voice Be Heard...Vote!!!

It was unanimously passed that the guild members should vote to decide the issue of increasing the annual membership fee. This will require that we alter the bylaws. Article II part C of the current bylaws states:

C. DUES - Annual dues are \$15.00 per year or \$7.50 for a person joining after July 1.

It is proposed that the above passage be altered to read:

C. DUES - Annual dues are \$20.00 per year or \$10.00 for a person joining after July 1.



Please cut out along dotted lines!

BALLOT

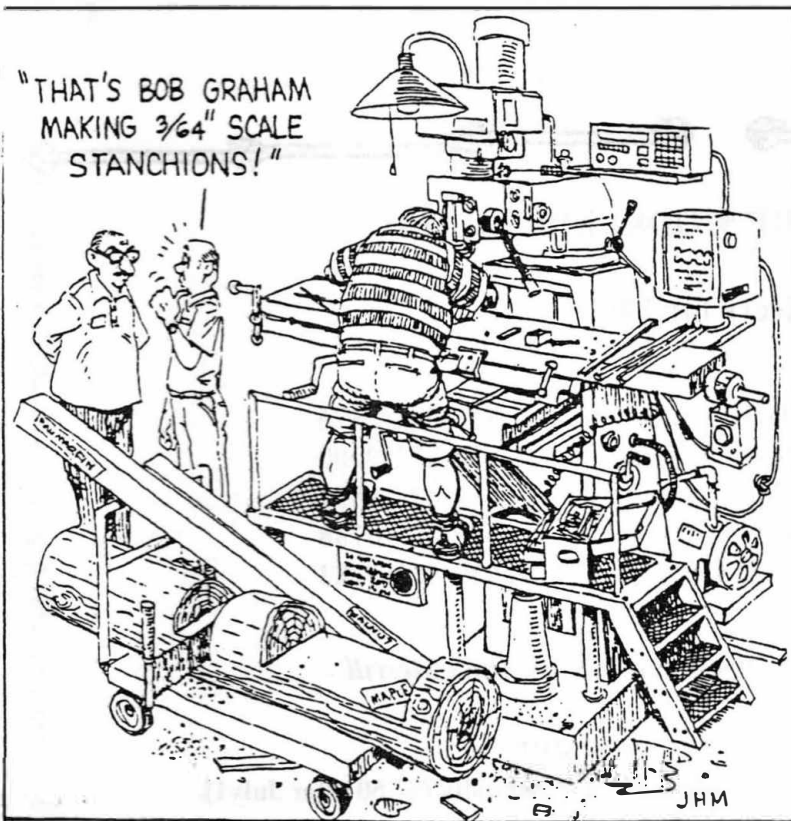
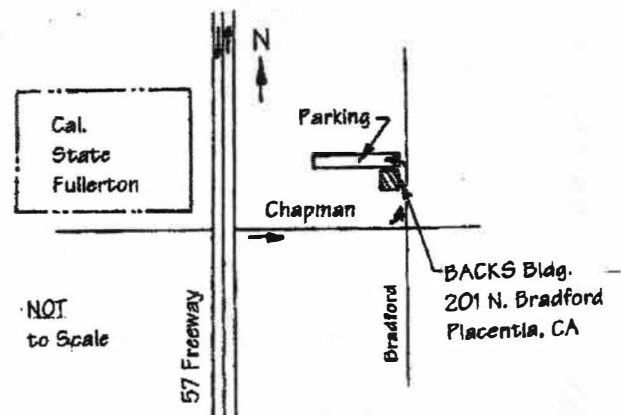
- Yes, raise the annual fee
- No, do not raise the fee

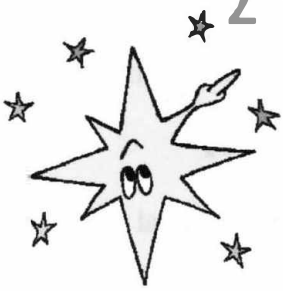
Please mark your ballot and either bring it in person to the next meeting or mail to:

Bob McPhail
 c/o San Diego Ship Modeler's Guild
 San Diego Maritime Museum
 1306 N. Harbor Drive
 San Diego, CA 92101

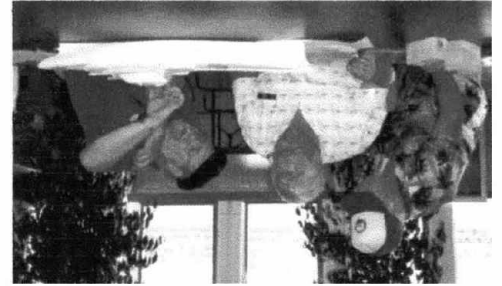
Learn All About Planking from the Experts!

Guild member **Bob Graham** and Don Dressel of the Los Angeles organization SMA (Ship Modelers Association) will present a planking seminar on Sunday, September 17th at 1 pm and we are invited to attend! Please call Bob for more information at /redacted/. The map below shows the location of the seminar in Placentia.





VOTE ON RAISING MEMBERSHIP FEE!
BALLOT INCLUDED IN THIS ISSUE... P. 7



/redacted/
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Welcome
New Members

San Diego Ship Modelers' Guild
1306 N. Harbor Drive
San Diego CA 92101



SAN DIEGO SHIP MODELERS' GUILD

Officers for 2000

| | | |
|--------------------|--------------|------------|
| Guild Master | Jacki Jones | /redacted/ |
| First Mate | K.C. Edwards | /redacted/ |
| Purser | Bob McPhail | /redacted/ |
| Newsletter Editors | Bill Forbis | /redacted/ |
| | Fred Frass | /redacted/ |

Founded in 1971 by Bob Wright and the late Russ Merrill

SCHEDULE OF ACTIVITIES

Meetings
Second Wednesday of every month.
7 p.m. social, 7:30 p.m. meeting
held on board the ferryboat
BERKELEY.

MEMBERSHIP

Dues are \$15 annually (\$7.50 after July 1).

We strongly encourage all to join the San Diego
Maritime Museum as an expression of appreciation
for the facilities provided for our benefit.