San Diego Ship Modelers' Guild

Volume 5 Number 5 May 10, 1981

Notes from the April Meeting

The April meeting was one of those nice relaxing bull session type meetings where a great deal of information is exchanged. John Woodard led off the evening with his "Steam Topics". Part of the busines covered was transportation to the La Jolla Social Service League show and the MAC Show which Doug McFarland offered to cover. Also mentioned was the model of the Robert E. Lee aboard the Berkeley which the Guild may undertake to complete (more on this at the May meeting). The remainder of the meeting was devoted to distribution of the Catologe Catolog and Show and Tell. The following Models were present:

Bob Wright	Schooner Irene	Kit Solid
Roy Nilson	"Lake Bondo"	Scratch R/C
Doug McFarland	Patti Ann, Chris-Craft	R/C Kit
Bob Crawford	New Bedford Whaleboat	Kit Solid
Bill Kelly-Flemming	California	Scratch Solid
John McDermott	Sloop "Wasp"	Scratch POF
John McDermott	Gundalow "Loyal Convert"	Scratch POF
John McDermott	Anchor Hoy	Scratch POF

Notes on the May Meeting

John Woodard will lead off the evening at 7:30 with "Steam Topics" aboard the "Star". May means our semi-annual auction evening and from Stan Mellor we have two excellant items, a large photo of the full rigged ship "Sierra Estrella" and 9 rolls each of 1/16" and 3/32" flat brass wire ideal for stropping blocks. If you find anything that you have no futher use for and someone in the guild may like to have set a value that you would like and any money recieved over that value will go to the club kity.

Also scheduled for this meeting is a presentation by Ed White on abrasives and their uses. Don't forget to "Bring A Model".

MAC Show

Something very interesting happened when we took 7 San Diego Ship Modelers Guild models to this years Souther California Model and Crafts Show. The following models were present and recieved these awards:

Val Peterson	"Arapahoe"	Blue Ribbon and Trophy Operational Model
John McDermott	"Franklin"	Blue Ribbon and Trophy Scratch Built Sail
Bob Crawford	"USS Arizona"	Blue Ribbon Steal hull Vessel
Bill Benson	"Carosel I"	Second Place Steal Hull Vessel
Bob Crawford	Fletcher Destroyer	Third Place Steal Hull Vessel
Bob Crawford	Whaleboat	Third Place Scrach

Not a bad showing for so few models. A harty "Brovo Zulu" to Val and John for taking 2 of the 4 trophies.

Other news from the show was that there were more booths devoted to ship models at this years show than any of the previous shows. Seems to be a growing interest and market.

S.D.S.M.G. Annual Regatta

"Sweepers Man Your Broom" and get those R/C Models "Squared Away" for the 4th annual R/C Regatta scheduled for the last weekend of September. The LA group will be comming down with a vengence after the MAC Show and at last years regatta they managed to take most of the trophies so lets get ready early.

Begining in June, the first weekend of each month the Guild will be setting up some aspect of the operations test on which to practice such as straight stearing, manuvering, docking etc. So if you are so inclined, come on out and join us in September and don't forget the first weekend of each month for practice.

Picnic-Regatta

The Ship medelers Association of Fullerton will be holding a Regatta and Picnic in late June or early July which we have been envited to participate. We will be taking our bouys and gates up to help run some competitive events so haw about a few boats going up to show them how its done. More on the exact place, date, and time at the meeting or in the next newsletter.

Catolog Catolog and Articles for the Newsletter

Now that you have had a chance to see the catolog I hope that you will help to make it grow. If you run across a new supplier or one how is not listed please make anote of it with a brief explanation of the services or supplies offered and send it to me for the newsletter.

We still need articals for the newsletter. John has mentioned the possibility of starting a draft for articals. I hope this won't be necessary but I just can't do it all for the letter.

New Members and One I Forgot (sorry John)

Dana McPeek /redacted/

John Dahms /redacted/

George Baggette / redacted/

KNOW YOUR FINISHES - PART II By Steve Ellison, From The Fullerton Newsletter

SHELLAC--This is an organic material made from the secretion of a small red bug, called the lac bug, which inhabits parts of Ceylon and India. It is a fast and beautiful finishing agent. The natural color of shellac is a transparent orange. White shellac is made by adding a bleaching agent which transforms it to a transparent eggshell in color. White shellac should not be used for carvings since it does not last as well and is less moisture resistant.

Shellac is one of the best sealers when used in thin coats. It leaves a hard, transparent undercoat for the finishes you use over it. Since it has good penetrating powers and dries hard, then by using it first you can then use less of your final finish and get the same effect. It finds wide use as a sealer before the use of stains. When used on end grain it keeps the stain from going too far down the pores. If you are using different stains or colors on different parts of a carving, then you can use shellac to keep one stain from running into another section of the carving. Then when applying the second color you can use acetoneto remove the unwanted shellac. A thin coat of shellac can also be used to keep a carving clean while you handle it during carving. The shellac will prevent oils from your hand from getting into the wood.

Shellac comes in flakes or buttons ready to be dissolved in alcohol. You can also purchase it in solution ready to use. However, you should be aware that there is a limited shelf life of about six months to a year. For this reason, cans of shellac are now dated.

Since shellac dries rapidly it is best to apply it in thin coats for the best results. When applying with a brush, always brush in the direction of the grain and never start a new brushful where the other ended since this will build up the shellac and leave unsightly lap marks. Allow at least three hours between coats. To smooth the final surface use steel wool or pumice stone and oil. Never use water since shellac is not moisture proof and will turn white. A final coating of wax will give a high gloss finish.

When preparing shellac, a mixture of 3-to-1 with alcohol works well. Pound the flakes in a bag to make a powder first before dissolving in alcohol. It is best to use a glass container for mixing and storing since the shellac will react with metal over a period of time. To help prolong the shelf life you should store the mixture in a dark place. The best prodecure, however, is to only mix enough for a one time use.

LACQUER--Lacquer was originally made from shellac. Now they mostly are made of nitro-cellulose dissolved in solvents plus a small amount of plasticizing ingredient that helps prevent brittleness of the film upon drying. Lacquer dries faster than oils or varnish and generally requires more coats to produce the same protective film. Lacquer will give a shiny finish and is easiest applied by using the product in aerosols.

To preserve the natural color of smooth-grained, light-colored wood without darkening, brush on two coats of clear laquer. If the lacquer is sprayed, use three coats instead. Sand lightly between coats and then finish with one or more coats of a white wax.

VARNISH--Today's varnishes are reactive materials composed of synthetic resins and oils. Because of the troubles of applying more than one coat, polyurethane varnishes are not the best choice for a fine finish.

WAXES--Waxes are generally applied last to obtain a higher gloss. It should be applied in light coats; two or three light coats give a better finish than one heavy one. The wax coat may be buffed on a buffing wheel for an even higher gloss. A flannel wheel is better than muslin for use on soft woods.

Some of the types of common waxes used for carvings are listed:

1) Carnauba Wax--This is a product of the Brazilian wax palm tree and is one of the hardest waxes known. It is very durable and will produce a high gloss.

2) Watco Satin Wax--A blend of carnauba waxes in liquid form for easy application.

3) Beeswax--The unbleached variety is yellow to brown in color and is good for use on dark woods. The bleached is best on light woods. It is diluted in turpentine and is very useful for filling cracks and strengthening weak wood when applied in a penetrating solution, since the wax will strengthen the wood when the solvent has evaporated. A very useful produce is "Finish Feeder With Beeswax" and is readily available.

4) Minwax--Comes in light and dark and also mixed with stains. Clear is transparent and doesn't collect in grooves; thus good for carvings.

5) Shoe Wax--The colored varieties are also used for staining purposes.

CARNAUBA WAX & BEESWAX MIX--To make this mixture dissolve four parts of shredded beeswax in an equal quantity of turpentine over heat. Do this over hot water and not over direct flame because of the combustibility of the mixture. Once the beeswax has dissolved, remove from heat and add two parts of powdered carnauba and stir until completely dissolved. Pour the mix into a clean container and allow to set. Always avoid excessive heat since this will destroy the qualities of the carnauba.

(Reprinted from SMA Newsletter, Oct. 1978)

Pearls FROM THE CHEST

Some tips from members of the crew

SOME PLANKING TIPS, by HENRY BRIDENBECKER

1. Determine the size of dowels needed - the smaller the better - at 1/4" scale I use a #69 dowel, and a #68 drill. Make plenty of them!

2. Fastenings - one dowel for planks 8" wide or less. Planks 9" to 11" wide use two at every other rib and one between. Planks 11" or more wide use two at each rib. I use two dowels at each rib for 9" planks for secure fastenings. (Davis says four dowels at each rib, but at 1/4" scale it can become very crowded so make your own choice). The #69 dowel is less than 1/32" which is at 1/4" scale just slightly more than one inch in diameter, and still has strength.

3. Decide on the size and the number of planks needed between the bottom of the wale and the keel rabbet. Measure this distance at midship with a paper strip placed on the surface of the rib. Divide this distance by the number of planks you have decided to use to obtain the actual width of each plank at midship. Try for a maximum width of nine inches. The planks will become a little wider at the stern and slightly smaller at the stem, but the planks should not exceed much over 12" in width. If they should appear to be too wide increase the number of planks and divide again.

4. Lay out the run of the planking. Use 1/16" square battens. Pin the first batten to the midship frame at the turn of the bilge, and let it follow the natural sweep of the hull making contact with each frame; then pin it to every other rib. Now run another batten between the first batten and the keel, and another between the first batten and the under side of the wale. Use at least three battens on a 1/4" scale model. Now see if the battens run fair on the hull. Check from all angles, and rearrange them when necessary. Duplicate the final batten set up on the other side of the hull, and you will be about ready to start planking. Note: Drill holes in the battens for the pins to prevent splitting; one of the pins will serve as a drill bit. I also add a small touch of glue here and there to hold the pinned battens in place. (See Fig. 1)

5. Keep the planks to a maximum length of about 25 feet as in real ship construction. The advantage in doing so is great. The short lengths can be bent by hand to fit the curve of the hull in most places, and since there will be very little sheer curve the rough width of the plank stock will be much less than if the entire length for the hull were to be cut out of one piece.

6. Spacing of butt joints: 3 strakes between joints on the same frame or rib: 5 feet between joints on adjoining strakes; 4 feet between joints with one strake between. Make a simple sketch showing the location of each butt joint. Just draw horizontal lines numbered for each plank, and numbered vertical lines for each rib. This method will make cutting the planks to the proper length a simple job, and will avoid any error. (See Fig. 2)

(continued on page 7)

7. Proportional dividers: Set for the number of planks needed between battens. Example: If six planks are needed set at six. For the second run set at five, etc.. Doing it this way will correct any small error of width automatically. Fit the first plank to the under side of the wale, and cut it to fit the stem rabbet. Mark a vertical line on the plank at the center of each rib. Use the dividers to measure the width of the plank at the center of each rib; holding the dividers with one point pressing slightly into the plank making a small dot. Do this at each rib, and then connect the points or dots with a straight edge using a fine pointed hard pencil. Now sand the edge to the finish line, and glue and dowel the plank into place. The garboard or bottom strake is made in the same manner. I find it helps to place a section of planking against the fitted edge of the strake which provides a firm resting place for the divider point. Work from the wale down, and the garboard strake up, and finish out the planking in the middle. This is the easiest place to fit the last strakes as the planks are nearly all the same width. It will be necessary to bevel the planks slightly at the curved section of the stem and stern to prevent a gap appearing between the strakes. This is easily done with a fine file and sandpaper. (See Fig. 3)

8. I use a piece of damp thick paper pressed over the last space for the final plank which when dry can be used for a template to cut the exact shape insuring a good fit.

9. Use small pins to hold amonia treated curved planks in place till they dry out. Be sure the pin holes correspond to the dowel holes to be drilled later on.

10. Stealers are used if the plank will reduce in width at the stem or increase in width at the stern by more than 1/2 the width of the average plank. Example: A 9 inch plank greater than 12 inches or less than 5 inches. (See Fig. 4)

11. Best tip of all. Get a copy of Underhill's PLANK ON FRAME CONSTRUCTION Vol. 1. It will get you started the right way!

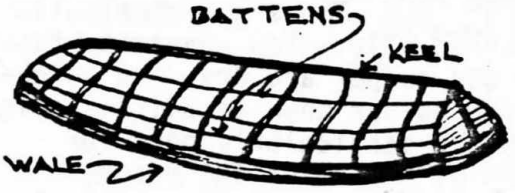


FIG. 1

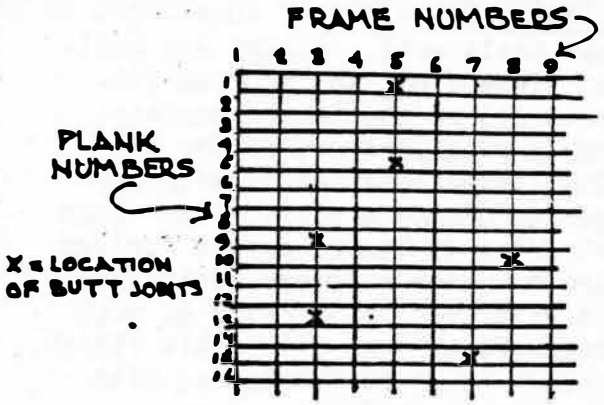


FIG. 2

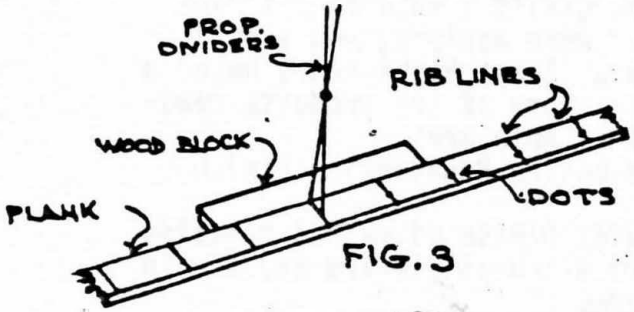


FIG. 3

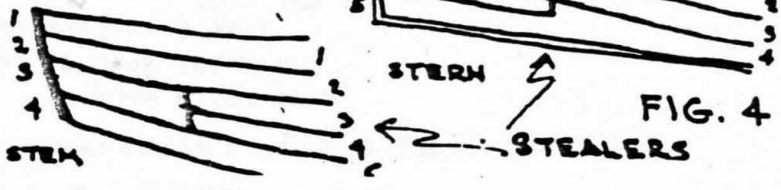


FIG. 4

H.W. BRIDENBECKER
9/78

KNOW YOUR FINISHES--Part I: FINISHING OILS

TUNG OIL--Tung Oil, also known as China wood oil, is one of the oldest and best wood preservatives. It is extracted from the nuts of the tung tree native to the Orient. This tree is currently being commercially cultivated in the Gulf Staes. The name comes from the Chinese word "tung," or stomach, because it has a purgative action when taken internally.

This oil is deeply penetrating and serves to bind the fibers of the wood and thus seal and preserve them. Heat will not draw out tung oil as it will other oils. It is water and solvent resistant.

To apply, rub on with a soft cloth (such as an old T-shirt or a cotton sheet). Rub until all the oil is in the wood and not on the surface. Immediately wipe off all the excess from the surface since a thick coat of surface film will wrinkle on drying. If the oil becomes tacky, wipe it off with a rag moistened in fresh oil. It is also possible to thin the oil with turpentine. The oil should soak into the wood anywhere from 30 seconds to 10 minutes depending on the weather conditions and the properties of the wood. Wait at least 12 hours between coats. It is recommended that three coats be applied with a rubbing with 4/0 steel wool after each coat to assure a smooth surface. Subsequent cleaning and polishing should be done with lemon oil.

If you use a brush to apply the oil, it may be cleaned with mineral spirits or lacquer thinner.

Tung oil tends to dry non-glossy. A varnish made with tung oil has more lustre. The product Tung Seal also contains stains if you want your carving to be stained.

One bad thing about tung oil is that it will solidify or jell when exposed to air. There are two ways to prevent this from happening: (1) use marbles to raise the level in the container and expel the excess air (you must keep the container full at all times), or (2) use a variable volume container (the refillable plastic food tubes made for hikers are very good for this purpose--they work on the same principle as toothpaste tubes).

LEMON OIL--This oil is very good to use as the final oil finish, especially over tung oil. It should not be used over a wax finish. It is recommended that you should use a pure lemon oil and not one that contains linseed oil, beeswax or silicons.

LINSEED OIL--This is an extract of the flax seed. It dries slowly but but seals well. Always use boiled linseed oil and not raw linseed oil as the latter contains non-drying portions of the oil. The linseed oil reacts with oxygen to become a solid film. When it dries it leaves a soft surface and has poor moisture resistance--it will pass about twice as much moisutre as tung oil. This finish should never be overcoated with lacquer or shellace.

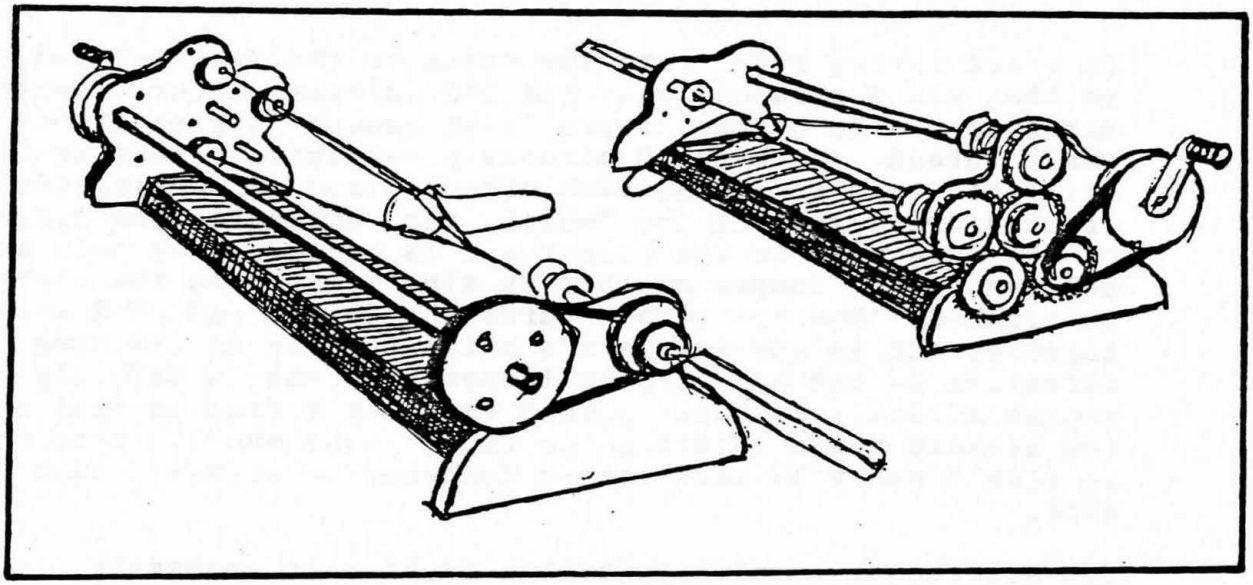
FINISH OILS--These are chemically modified oils which penetrate faster and deeper and dry more quickly and harder than unmodified oils. They are particularly good for woods with a beautiful natural grain. They usually dry without gloss, giving a natural oil finnish. When applying you should allow at least eight hours between coats. Some of the products readily available are:

Leichtung Penetrating Finish Oil

Watco Danish Oil--This contains resins which polymerize and dry in the wood.

Teak Oil--Used on highly resinous woods such as rosewood, teak and zebra wood.

Th-Th-Th-That's all, folks-----



Vern Parrett

MODEL ROPEWALK

Rope making begins by fastening 3 strands together at one end. At the other end of the 3 strands, each is twisted individually in a direction to increase its natural twist. The 3 "hyper-twisted" strands are then twisted together in the opposite direction into rope which has a lay, or twist, opposite to the 3 strands. In other words, left-hand strands twisted individually tighter to the left have a spring-like torsional force which makes 3 of them twisted together to the right hold this right twist without unraveling. In turn, 3 ropes with right twist can be tied together at one end, then all 3 individually tightly further twisted to the right and they will lay into a stable left-hand cable. Each time 3 lines are twisted in one direction, the next larger combination of 3 twists in the opposite direction.

To make model rope from small thread, I made a rope-walk about 20" in length which looks a little like a lathe. The left end has a spindle with a hook that holds the knotted end of the 3 tied-together strands. This hook is called the "looper." The 3 opposite ends of the strands are attached separately in the right-hand end of the rope walk to 3 hooks called "whirls" spaced in a triangle when viewing the rope on end. Each of these "whirls" is geared to a crank handle so that they turn individually but simultaneously in the same direction.

To start making rope, turn the crank on the "whirls" end so that all 3 strands twist tighter in their natural twist direction. The degree of pre-twist needed is greater for small thread. With the 3 strands pre-twisted, (they are still not twisted around each other) a rod connecting the cranked drive gear at the "whirl" end, extending the length of the rope wark to the looper end is connected by belt and pulleys to the looper so that it also turns when the machine is cranked. Now the looper turns the joined end of 3 strands together and as the whirls are still turning in the same direction as the now-turning looper, the whirls add only enough additional twist to keep the looper from untwisting the strands while twisting the rope. Rope made in this way is stable and will show little tendency to untwist, lash or kink.

One additional complexity of the machine is necessary because strands twisted into rope shorten, so that the rope is shorter in length than the strands were, and the looper must be free to travel (under light spring restraint) toward the whirls as the rope is made. I solved this by mounting the looper hook on the end of a split dowel (quill) which passes through a hollow shaft of metal tubing which has a longitudinal vane or blade soldered lengthwise along its bore inside. The split in the dowel straddles this vane so that the dowel with its looper hook "inboard" must turn with the belt driven shaft but is free to move toward the "whirl" end (longitudinal to the rope) with only a light tensioned spring or rubber band holding it outboard.

Other features include a take-up spool to hold the rope just made which slips over the looper spindle so that it turns with the spindle and on it is wound each one foot length of new rope. Similar spools (3) slide over the whirl spindles to hold strands in reserve for the next length of rope to be made.

As rope is twisted, the three strands are guided by a "top," a disc on the end of a dowel (handle) held in the hand and guided in front of the newly twisting rope. Each strand runs through a notic in the periphery of the disc.

MAY MODELER OF THE MONTH

ROYCE PRIVETT

Back in 1976, members of the Guild first saw the start of a model of the CONSTITUTION. From the earliest stages we were impressed with the quality of the work on the model. Once the model entered the rigging stage, we had to anxiously wait for its completion before seeing it again. With the recent static show, she made her maiden voyage and there were no disappointments. Even the judges were impressed, giving her a first in sail, and a close second overall. Royce Privett's model of the CONSTITUTION is perhaps one of the best ever made, and to honor its completion we salute Royce as our Modeler of the Month.

CONSTITUTION is Royce's first full fledged ship model! As a boy growing up in Mississippi he built a few model airplanes out of scrap wood, and in the late 40's he built a 10-12" balsa model of the MISSOURI. He has also worked on plastic models of CONSTITUTION and CUTTY SARK. Royce has always been building something with his hands, especially most of his furniture. Currently a computer specialist, this 23 year Navy veteran would much rather spend his time building something out of wood. Among his furnishings he has lamps made out of 12" rigging blocks and a teak wood deck coffee table.

CONSTITUTION started as a Bluejacket kit obtained for Christmas 1975. A rather poor kit (the actual description would violate postal regulations!), Royce got the Model Shipways plans and also used the Revell plastic kit for parts patterns. A perfectionist, Royce's "6 month project" soon incorporated much research and great attention to detail. I can remember a discussion about how her anchors were actually rigged. The model has a poplar hull, painted parts out of basswood, and trim from substituted walnut. An example of the detail is in the hull. Instead of painting the hull copper, Royce found some 1/4" copper foil adhesive tape, out of which he cut 3000 plates, and then plated the hull like the original, overlapping plates from keel up and stern forward. His bow trim is made out of solid pieces of walnut thanks to a piece of walnut with a large knothole giving just the right curve to carve with.

When CONSTITUTION was in a show a few years ago as a partially finished model, Royce started a VICTORY section, which is also an excellent model. But with an empty waiting case, Royce was moved to complete CONSITITUTION. Now done and safely encased in his dining room, Royce asks, "Where do I go from here?" Rumor has it he still has a SMUGGLER in a box, just begging to become a completed ship.

Royce's interest in woodworking and shipbuilding comes out of a deep interest in history. "If I were to be a teacher I'd teach history. It was always my best subject." He feels a committment to preserve history for future generations. Part of building CONSTITUTION was to preserve part of history of how our country came into being.

Well Royce, you have given us an excellent representative of our history, and you have every right to be extremely proud and pleased with your work.

San Diego Ship Modelers Guild
Bob Crawford - Logkeeper
/redacted/

TO:

John L. Harmeling
/redacted/

San Diego Ship Modelers Guild
Officers for 1981

Master:	John Woodard	Point Loma	/redacted/
Mate:	Doug McFarland	Mira Mesa	/redacted/
Logkeeper:	Bob Crawford	State College	
Stearing Committee:	Bill Kelly-Flemming	Hill Crest	
	Al L'heureux	Poway	
	George Oliver	Santee	
	Bob Ross	Chula Vista	

Meetings: 3rd Friday of each month, 8:00 pm aboard the Bark Star of India, on the Orlop Deck.

Membership: Dues for Members of the San Diego Maritime Museum and anyone living outside San Diego County -$7.50 Non-Museum Members - $15.00. After July 31, 1981 dues are ½ for the remainder of the year.