

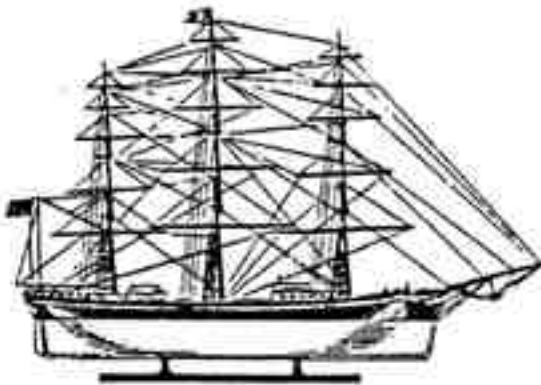


San Diego Ship Modelers Guild

Volume I

NEWSLETTER -- December 1977

Number 8



Clipper Ship -- "Young America"

O to sail in a ship!
To leave this steady unendurable land,
To leave the tiresome sameness of the streets,
the sidewalks and the houses,
To leave you O you solid motionless land,
and entering a ship,
To sail and sail and sail!

...Walt Whitman - from "A Song of Joys"

NOTES From the Last Meeting:

Thirty-eight were present at our last meeting which included the wives of quite a few members. For reasons unknown, only three models were brought down for "show and tell." Since no models will be displayed at our next meeting, perhaps we'll have an exceptional turn-out in January; how 'bout it?? Our thanks to John SANDS for showing the film he shot while Dinah Shore was filming her show at Mission Bay.

MODELS DISPLAYED:

1. Carl R. JOHNSON - "Porta Coeli" - Kit, plank on frame
2. Dick LITTLE - "Sultana" - Kit
3. Dave SELLARS - "Catalina 27" - Lift plug and mold

CHRISTMAS PARTY TIME AGAIN:

Our "annual" Christmas party will be held at 7:30PM, Friday, December 16th. Don't know for certain whether we'll be able to have it aboard the "STAR", so when you come down you'll have to look or ask. We will dispense with "show and tell" which means a free month off with clear consciences for some of us "slackers" who haven't set any late production records. Once again Bill BENSON has generously offered to provide all the champagne. Peg SELLARS volunteered to act as "chairperson" for all the food arrangements. If you have not already contacted Peg for what you'd like to bring, I'm sure she'd appreciate even a last minute phone call. Peg's number is Here's hoping the weather will be as balmy as it was for last years party.



SAN DIEGO SHIP MODELERS GUILD

Elected Officers

CAPTAIN: WILLIAM D. "Bill" BENSON

LOGKEEPER/

EDITOR : FRED FRAAS

PURSER: BOB BECKER

STEERING

COMMITTEE: VIC CROSBY - DOUG MCFARLAND - AL LHEUREUX

MEETINGS: 3rd Friday of each month aboard the BEREKELY

MEMBERSHIP

DUES: \$3.00 per year (Membership in the Maritime Museum of San Diego is very highly encouraged.)

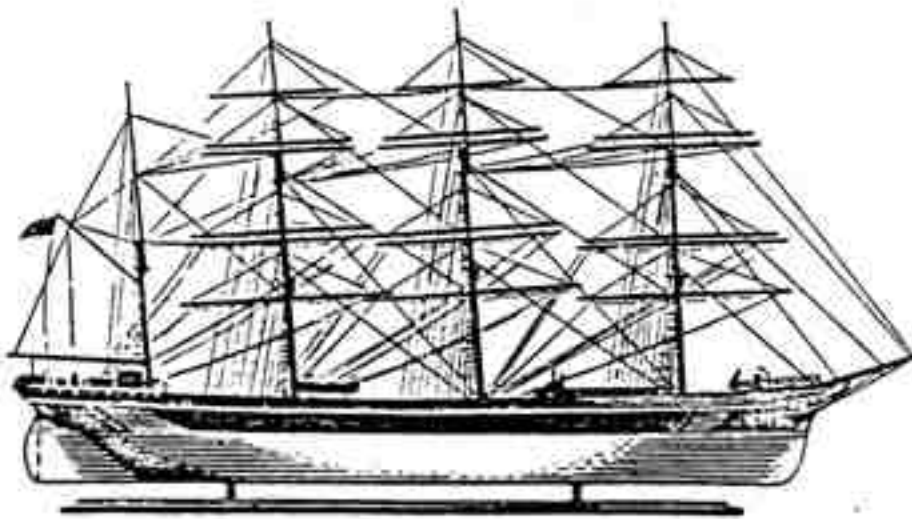
Prospective members are entitled to two visits as a guest of a member. After two visits, dues must be paid for further participation in the activities of the Guild.

FORTHCOMING BUSINESS:

The lack of formality (by design) of our regular meetings is readily apparent. We have many agenda items, however, slated for discussion at our next regular meeting, January 20th. In separate discussions with members of the Steering Committee, agreement has been reached that the following questions must be decided: 1) the election of new officers for 1978, 2) an increase in membership dues, and 3) future limitations (if any) to the number of Members.

Each of you have your own ideas and hopefully, we will be able to hear them at our January meeting. It has been proposed that we have nominations for elected officers in January, followed by voting in February. Absentee ballots could then be inserted in our next newsletter which would be turned in at the beginning of our February meeting, or mailed for those unable to attend. If we have a large turnout in January (quorum??), this may not be necessary or desirable.

An increase in membership dues is mandatory to cover mailing costs of the newsletter. These costs amount to $3\frac{1}{2}\text{¢}$ per page or 21¢ for the 6 page weight limit for a 13¢ stamp. So we're talking up to 34¢ per month per member X 60 or about \$21.00 a month, which is the equivalent of 7 members' dues. Obviously you don't need to be a cost accountant to see our treasury can't support this expenditure for 12 issues if our dues are limited to \$3.00. Alternatives are available such as reducing the number of pages, but the postage remains constant. We could publish every other month, or perhaps find a cut-rate printer who could print both sides of each page for less and improve the quality. (continued)



Four Mast Barque -- "California"



Before we decide to go on any austerity kick, your editor believes you should look at the fine newsletters sent out from Fullerton and also New York City. The Fullerton guys spend about \$50 a month in printing costs alone, so I'm told, and the group in New York have to use 26¢ stamps because of size/weight. There is a wealth of material available which could be reprinted as "helpful hints etc." if you desire or save them for your records. So, all in all it's up to you. Your ideas and suggestions will be appreciated.

With respect to membership size, we have already "outgrew" the master's cabin aboard the "STAR." And we have definite space limitations in our meeting area aboard BERKELEY. A larger membership might eventually force us to move elsewhere which many feel, would result in the loss of charm, inspiration etc. we now enjoy holding our meeting aboard ship. While we might be able to find another place for "free," it wouldn't be afloat.

Which way should we go, when, how and why??? Plan to attend the January meeting and let's set the course for 1978 -- the course that the majority of members want to steer.

WHAT OTHERS ARE DOING:

The November issue of the "BINNACLE" (Log of the Shipcraft Guild-New York City) featured a story of the Maritime Museum of San Diego. This included a full page cover picture of the "STAR" as well as eight subsequent pages of details and history of the "STAR", BERKELEY, and MEDEA. Our special thanks to Mr. Abe Taubman, Editor of the "BINNACLE" for this east coast publicity. We sincerely hope that you and your members will have an opportunity to visit these ships at some future date. We believe they're going to be around a long, long time.



CALIFORNIA WHALE WATCH CRUISE: (submitted by Doug McFarland)

When was the last time you saw a whale up close? No, not Shamu at Sea World but in the wild, swimming free! If it hasn't been very recently then put Saturday, January 14, on your calendar.

The barkentine "California" has been chartered for a four hour whale watch cruise on the above date starting at 1:00PM. If only 45 of you sign on the fare will be \$9.95 per person (the regular fare.) However, if 49 make reservations, the cost will be \$8.95 per person. Spots will be sold on a first come, first served basis. As with the dinner cruises, 20% of the proceeds will be donated to the Maritime Museum Association.

As of this writing there are already over 20 spots sold so make your reservations as soon as possible. Payment will be accepted at the Christmas party.

For further information contact Doug McFarland --

I would also like to extend my special gratitude to those of you who chipped in to help recover the cost of the last dinner cruise. Your generosity is deeply appreciated.

THE GREAT NICAD BATTERY MYSTERY:

The last two pages of this newsletter is being reproduced this month for the benefit of those wondering about the "care and feeding of nicads." This includes your editor. It's been a couple years since Val PETERSON gave me a four page (1970) issue of a catalog put out by ESSE Surplus Co. of Indianapolis, Ind. which showed the later as the last two pages. I've probably asked Val a dozen questions in the interim about nicads, and only the other day did I find this catalog previously lost in my less than meticulous filing system.

When it comes to RC electrics, Val has to be the resident "expert" in San Diego since his halibut trawler and tug both run farther, longer, faster and with less electric load, then any others. So thanks for your kind patience, Val, and just maybe, these last two pages will cut down the number of questions you're asked. (We'll now ask you new questions....)

Incidentally, if you're in the market for nicads, the buy of the decade is on at "I.C. Electronics" (on Convoy) which at 4 for \$3 is a really great bargain....



THE NICKEL CADMIUM BATTERY

(Sintered Plate Type)

CHARACTERISTICS OR ADVANTAGES:

is reliable, smaller, lighter, and virtually indestructible. It is always alive -- may be stored indefinitely in any state -- wet, dry, charged, discharged, open or short circuit, any temperature between -65° and $+165^{\circ}$ F. It is safer -- caustic potash (Potassium-hydroxide) electrolyte less hazardous than acids. It may be used in any position.

There is no known limit of life. Tests of over 5000 chargings and dischargings (equivalent to 25 years use) have shown no decrease in capacity. Cheaper to use as replacement cost is eliminated if properly cared for. The nominal voltage of 1.25 V. per cell (for all nickel cadmium cells regardless of capacity) allows a flexible voltage in battery construction. Low internal resistance produces greater efficiency and more operating power than lead acid cells of three times greater AH rating. Retains 100% power, even in cold weather that reduces lead acid types by 50%.

THEORY OF OPERATION:

No storage cell, regardless of type, actually stores electricity. Instead, the application of electrical energy caused the storage of chemical energy within the plates of the cell. When an electrical load is connected to the cell, the stored energy is converted into a flow of electric current through the load.

(a) During charge -- when charging current is applied, the cadmium-oxide material of the negative plates loses oxygen and becomes metallic cadmium. In turn, the nickel oxide active material of the positive plates is brought to a higher state of oxidation. These changes continue until active materials have been completely converted. Toward the end of the process, the cell gasses as a result of decomposition of water in the electrolyte. The electrolyte solution conducts the current between the plates of opposite polarity but does not take change in chemical composition as in other types of cells. Hence, specific gravity gives no indication of the state of charge.

(b) During discharge -- The process is reversed on connection of an electrical load and the chemical energy is converted to electrical energy. If the load offers very low resistance, the discharge current is limited only by the low internal resistance of the cell and the extreme heat can damage the cell.

CARE:

A 30-percent solution, by weight, of potassium-hydroxide or caustic-potash in distilled water is used as an electrolyte. (This is a strong alkaline solution and may be harmful when in direct contact with skin or clothing.) The specific gravity of electrolyte at room temperature 75° - 85° will remain constant at 1.29. As the cells are shipped in a discharged condition, the electrolyte level will appear lower than normal. Do not add distilled water until after charge. Add water to bring electrolyte approximately 1/4" above plates. Only restore electrolyte solution if loss is due to cracked cell or overfilling. Capacity of a cell is decreased by allowing electrical leakage caused by spilled electrolyte bridging terminals. Keep clean by washing with water.

CHARGING:

Remove any obstructions to vent before connecting charger. Failure to do this can cause gas pressures to build up, breaking the case. The cell should be charged in an upright

12 AMP HRS = 12 AMP FOR 12 HRS
12 AMP HRS = 3 AMP FOR 4

position. Any source of DC charging current may be used. Charging currents may vary according to time desired but, for maximum capacity and minimum maintenance (hi-charging rates causes gassing, making it necessary to restore distilled water to electrolyte more often), charge at rates requiring at least 12 hours. Example: 4 amp. hr. cell may be charged at 1/2 amp. for 12 hours, or 1 amp. for 5 hours. 30 amp. hr. cell may be charged at 3 amps for 12 hours or 8 amps for 5 hours. (Overcharging will not harm cell.)

CAUTION: When gassing, hydrogen released by decomposition of water can explode. Turn charger off when removing connections and keep away from open flame.

1.2
7
1.4

DISCHARGING:

Any current may be drawn on discharge as long as heating of terminals is not experienced. A rule-of-thumb law is 10 times amp. hour capacity maximum.

REPAIR:

It can be concluded, from the foregoing, that the Nickel-Cadmium cell is the nearest approach to a life-time cell, for construction of batteries, ever invented. These conclusions are correct; however, as with anything, cells may be destroyed beyond repair by mishandling. The greatest destroyer of these cells is the adding of acid or the use of hydrometers for adding distilled water that have been used with lead acid cells. ACID WILL NOT MIX AND SHOULD BE KEPT AWAY FROM THE ALKALINE CELL. Cells that have been mishandled by dropping or abuse, causing the plastic case to leak, may be repaired by use of plastic cements such as Testers, Polyethelene coil dope, or model airplane cements. If the cell plastic is broken badly or sections missing, a new case may be formed with fiberglass resin and material. This is an especially good way to repair metal-cased type cells which are leaking as the fiberglass coating also acts as an insulator for separation of the cells. A-v metal-cased Nickel-Cadmium cell must be insulated from other cells in construction of series.

Sometimes cell capacities are reduced by spilling of electrolyte or changing of the solution of electrolyte by addition when not necessary. To restore these cells, it is recommended to wash all solution from the cell by running of tap water over the plates for several hours, allowing to drain thoroughly and then restoring proper solution.

Some types of metal-encased cells, such as our 30AHM, may be refilled with a hypodermic type syringe through the vent noticed in one of the terminal posts by removal of cover. A more desirable method of restoring the electrolyte solution by adding distilled water to the proper level is to drill a small hole (approximately 1/8") and refilling. You may re-solder over the hole or insert plug if cell is to be used in inverted position where spilling is possible.

We have never encountered any cells that were exhausted by natural causes. Only mishandling destroys them.

GUARANTEE:

All new cells are unconditionally guaranteed. Used cells are shipped as received from the Government and, although we guarantee replacement if returned, we cannot further guarantee unless 50¢ additional is added to pay cost of testing. We will refund or replace to your satisfaction less postage charges.

ESSE RADIO COMPANY, 368 S. Meridian Street, Indianapolis, Indiana 46225.