Friendships Newsletter of the Friendship Sloop Society

Volume 10

Spring / Summer 1998

Issue 2

Commodore's Message

The one commodity that people frequently lament about is time. "I'm so busy, between work and kids who has time for anything?" are common complaints these days. Well, we are proposing a perfect remedy for those "time challenged people." Make time and create a real memory by marking your calendars today for a summer full of great FSS activities.

Begin the summer down in New London where Jack Vibber and his support crew host a regatta the weekend of July 11 - 12. For our many friends "Downeast", you can buzz over to Southwest Harbor on July 18 when the Lauriats host a great opportunity to race around some of the most scenic coastline in the world. The City of Rockland is ready to host the annual Homecoming on July 21, 22, and 23. This is our major event of the year and we promise great racing and ample opportunity to share each other's company. We are even hoping to have an old fashioned "hoe down under the tent" on Wednesday evening after our dinner where some of the talented members and friends of the FSS can display their musical talent! Dave Graham will once again host a regatta in Marblehead on August 8 - 9. Then there is always the Schooner Days Friendship races on Labor Day weekend in Gloucester the weekend of September 5.

Carrying on the "fine tradition" of some of our recent Commodores, we will not have **Desiree** in the water this season. However, we still plan on having a fun filled summer full of FSS events and we encourage all of you (with or without boats) to mark your calendars for all the upcoming events.

With events running from New London to Southwest Harbor and so many places in between we hope you can find time to join us for at least part of the fun. The summer season passes by all too quickly and next winter when you look back on your summer, let's hope you can fondly recall the good times and wonderful memories that the FSS provided for you.

Hope to see you all in Rockland! Debbie & Larry Plumer

Annual Meeting Date Changed

This year's annual meeting will be held:

October 24th

The New England Center University of New Hampshire

Ready for Rockland?

by R.C. Chairman Bob Rex

The date for the annual trek to Rockland is rapidly approaching. Our paper work is done and your very own trophy has been ordered, so finish painting the old girl and let's go!

The dates for the Rockland Homecoming are Monday, July 20 to Thursday, July 23. Skippers' meeting is at 8:30 with the races scheduled to start 11:30 Tuesday, 12:00 Wednesday, and 11:00 on Thursday.

Friendship Day will be on July 25th. Given the glowing accounts of last year's affair, this is an event not to be missed.

It is with great regret that we acknowledge the retirement from the Race Committee of two originals who have made a very valuable and much appreciated contribution over the past seven years. Thank you Leo Campbell and Gerry Breton. We will miss you aboard **Messing About**.

Two new members to the Race Committee will be welcomed this year. Longtime friend of the Society, Dave Graham of the Corinthian Yacht Club of Marblehead, to whom we owe much, and a new friend Gene Costanza, fellow sailor and racer at Quannapowitt Yacht Club, Wakefield. This club is reported to be the oldest inland yacht club in the country. Contrary to rumor, Gene is not an original member.

Dick Salter contracted for six 12" diameter oak mast hoops and Doyle Sailmakers of Marblehead generously donated enough colored sailcloth for the Race Committee emeritus Leo Campbell to assemble three new starting shapes. Wish that Leo could create new shapes for those of us that need them! This will complete the updating of the necessary Race Committee equipment. Thanks Leo and Dick.

The format and rules for racing will be much the same as past years with one notable exception: at the start a boat over early by less than a boat length may elect to continue on course while accepting a 5 minute time penalty, or sail completely to the pre-start side of the starting line before starting.

Last year's regatta was blessed with beautifully clear weather. This year, with a bit more breeze, it will be perfect.

Many skippers and crews like the racing, but if you would rather not race, please join us at the Rockland Homecoming anyway. There's plenty to do and see in this lovely bit of the Maine coast. Above all there is the camaraderie, good times and friendship to be enjoyed with your fellow sloopnuts.

COME!!

New London Windezvous

The Thames Yacht Club and Jack Vibber will be hosting the 12th annual New London Friendship Sloop Races to kick off the Society's schedule of events for this summer. This year's rendezvous at the club will also coincide with New London's annual Sailfest which is a three day event starting on Friday which features entertainment, vendors, and fireworks.

There will be, as usual, two days of racing on Saturday and Sunday. On Saturday night there will be a beach picnic and gam for skippers, crews and friends at the Thames Yacht Club, which is also a good location to view the gigantic fireworks display. This year's fireworks are sponsored by the Mashantucket Pequots, and is touted as the second largest display in the nation.

On Sunday morning there will be a breakfast at the club, followed by the start of the race. The awards ceremony will be held at the club following the race.

It is not necessary to enter the regatta to attend the Windezvous. The idea of the New London Windezvous is to have as many sloops in the harbor as possible to make a showing. Come with your sloop, anchor, or follow the participants around the course.

If you have any questions, please call:

Jack Vibber at (203) 442-7376.

Sloops To Race at Southwest Harbor

by Miff Lauriat

Friendship sloops will gather again in Southwest Harbor on Saturday, July 18th in the second event of the Society's summer schedule.

Although **Phoenix** returned to dominate last year's Downeast Rumble, 1998 may be more competitive for her: the Stanley shop is working feverishly to complete a new 28' topsail sloop. If their boat is launched in time, she'll be the boat to beat. The other perennial also-rans, **Salatia** et al will be on hand to complete the photo op.

Rumor around the harbor is that **Endeavor**'s chainplates have sprouted a topmast. Look out! So we hope that any of you Westerners out there who happen to be ahead of schedule will slide on Downeast and experience some real racing: where it's always blowing and first to finish WINS!

Give us a call and let us know you're coming; we offer Southern hospitality at a Northern latitude.

Marge Russakoff / Miff Lauriat (207) 244-4313 jvestal@acadia.net

Sloop Society Internet Home Page

The address of the Sloop Society home page is:

HTTP://WWW.FSS.ORG Browse the home page, enter your comments, questions, or ideas, and communicate with others who are interested in our sloops.

Musical Talent Needed

It has been decided to eliminate the band at the Wednesday dinner at the Rockland Homecoming, and instead, have some of our musically talented members provide after dinner entertainment. If you play a musical instrument, and would like to participate, please contact Debbie and Larry Plumer. It should be fun!

Rockland Tides

Based on Eldridge Tide & Pilot Book						
	AM	PM	AM	PM		
	High	High	Low	Low		
Sunday	7:33	7:57	1:21	1:37		
Monday	8:36	8:55	2:32	2:36		
Tuesday	9:35	9:50	3:21	3:32		
Wednesday	10:31	10:53	4:16	4:25		
Thursday	11:22		5:06	5:16		
Friday	12:02	12:10	5:54	6:04		

Massachusetts Bay Regatta

David Graham and the Corinthian Yacht Club of Marblehead will again be hosting the Massachusetts Bay Regatta to be held on August 8th and 9th. The Corinthian is located near the end of Marblehead Neck and enjoys a great view of the entrance to the harbor. The hospitality of the club, coupled with its large porch overlooking the harbor, provides a great setting to meet fellow skippers and crews, as well as a location to race.

Once again, the races will be conducted on the two-division concept that has proven to be a success at Marblehead, with Division I, the smaller sloops, sailing a course inside that of the Division II sloops, so that the winners in both divisions will be finishing at the same location at approximately the same time. All this assumes, of course, that the wind will hold throughout the afternoon and that the race committee will have done a proper job.

As has been the tradition, there will be a dinner Saturday night at the Club, and an after dinner speaker.

David will be sending out the race notice and entry forms shortly. As usual, there will be moorings in the harbor, and laundry and shower facilities will all be available to the participants.

Race Committee Reminders

If you have not filed a measurement rating application, or you have made a change to your sloop that will change its rating, please send an updated / new rating application to Dick Salter our measurer, as soon as possible.

Also, if you received a trophy last year that needs to be returned, please make arrangements to have it available to the Race Committee at Rockland for the awards ceremony on Thursday.

Friendship Sloop Society Scoring System

by G.T. Ross

Introduction

Over the past few years, the race committee has received several requests for explanation of the various displayed results at the Homecoming and Marblehead regattas. At one of our recent race committee meetings we decided it might be a good idea to put together an article that explains the witchcraft. To be sure, all agreed to omit the calculations showing how the state of Dick Salter's liquor locker was factored in. We hope the following provides the needed clarifications.

Handicapping Vs Scoring

As you may be aware, there are two parts to the scoring system, handicapping and regatta scoring. Dick Salter does the handicapping via a carefully constructed program that takes all pertinent boat data into account. The result of this analysis is a seconds per nautical mile (Sec./NMI) rating. Since you all receive a copy of this from Dick, I'm sure you need no further explanation of this part. However, since this rating forms the basis of everything else, it is very important that you have an up to date handicap. One of our annual gripes is running around before a regatta trying to formulate a handicap for someone that has not turned in a form.

Race Data

The scoring system runs on a computer in order to save time and effort, not because the calculations are complex. We like to be able to post the results very quickly after the committee boat docks. The first step is to enter the boats that are participating in the regatta, together with their handicap, in seconds per NMI. The boat entries are separated by division. Division 1 boats are those whose length is less than or equal to 27 feet. If a boat is borderline, and the skipper request division 2, we will generally comply.

Before the start of the race, the date, weather and sea conditions, wind velocity and direction, course marks and distance are entered. When the boat entries are completed, the computer picks out the lowest Sec. Per NMI Value (since I've been doing it, it's always **Tannis**) to be used as a reference for other calculations. Really, any reference could be used, but calculation is easier if the reference is less than any participant's Sec/NMI rating.

Beginning with the 1994 regatta, we started adjusting this reference for the division 1 boats based on wind. A review of the prior years' data indicated that the smaller boats were at a disadvantage in light air. After analysis of the data, the following adjustments, to be subtracted from the Division 1 reference, were adopted.

Wind Knots	Adjustment
1 - 5	200
6 - 10	150
11 - 13	100
14 - 16	50
17 - up	0

These adjustments seem to be working out well. In recent regattas, the two divisions are much closer on adjusted time.

Up to the present, we have not used the above adjustments for handicap alley races (there was only one in 1994). A handicap alley race is one that requires each boat to spend time, proportional to its handicap, in a leg off the main course. If we anticipate a handicap alley course, we calculate the length of each alley course, without the alley distance. We then find the slowest boat and, using its Sec. Per NMI rating as a reference, calculate the time each boat must stay in the alley. The formula is:

Alley Time = (Slowest Sec./NMI - Participant Boat Sec / NMI) X Course Distance

This answer is in seconds and is converted to minutes and seconds. Since the alley time is longer for longer courses, a sheet, for each course length, showing these times is distributed to each skipper before the race.

Time Entry

The next step in the scoring process is to enter the start time for each boat and, later, the finish time. These are entered in hours, minutes and seconds using a 24-hr. clock. Although the start times are usually the same for all boats in one division, the flexibility exists to adjust start times so that most boats finish at about the same time.

Calculations

The Elapsed Time is just a subtraction of the beginning time from the finish time. When done in the computer, everything is first converted to seconds. The corrected time is determined by the following formula:

Corrected Time = Elapsed Time - (Course Length X (Boat Sec./NMI - Reference Sec./NMI))

In the case of an alley race the corrected time is the elapsed time. The above calculation results in a list of boats ordere d by

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Friendship Sloop Society Scoring System (Continued from Page 3)

corrected time. The first boat is assigned ³/₄ point, the second 2 points, the third 3 points, etc. If a boat does not finish, is disqualified, did not start or withdrew, it is assigned 1 point more than the number of competitors in the regatta. In addition, such a boat receives an arbitrary 32,000 seconds for elapsed and corrected time. The points for succeeding races are added to produce a list of boats starting with the lowest number of points up to the highest. The lowest total point score is the winner of that division for the regatta.

The process might be clearer if we use an example. We will assume 2 races, 4 contestants with data as shown below. Also assume a wind of 5 knots for race 1 and 6 knots for race 2.

	Race 1						
Boat No.	Division	Sec/NMI	Ref. Sec/NMI	Length	Elapsed Time	Corrected Time	Points
1	1	655.902	360.485	7.6	8851 sec.	6606 sec.	0.75
2	1	671.302	360.485	7.6	9234 sec.	6872 sec.	2.00
3	2	560.485	560.485	11	10087 sec.	10087 sec.	0.75
4	2	618.450	560.485	11	10957 sec.	10319 sec.	2.00

Race 2

Boat No.	Division	Sec/NMi	Ref.	Length	Elapsed	Corrected	Points	Total Points
			Sec/NMI		Time			
1	1	655.902	410.485	5.2	5550 sec.	4274 sec.	0.75	1.50
2	1	671.302	410.485	5.2	6542 sec.	5186 sec.	2.00	4.00
3	2	560.485	560.485	8.4	7522 sec.	7522 sec.	0.75	1.50
4	2	618.450	560.485	8.4	8234 sec.	7747 sec.	2.00	4.00

In this example, a note that the reference in column 4 for division 1 has changed due to wind velocity. The winner in division 1 is #1 and in division 2 is #3.

Results

Result sheets, showing elapsed and corrected time, position and points are posted after each race for each division. In addition, beginning with the second race, a summary sheet is posted for each division showing position and points for each race and total points. These sheets also show the general race conditions, distances and courses. If the race was an alley race, the distance posted is arbitrary, since the actual distance used in calculations is the course distance plus the alley distance, calculated by dividing the alley time by the boat Sec./NMI handicap for each boat. This makes the distance sailed for each boat slightly different.

Since the Friendship Sloop Society offers a number of prizes that are not division related, we needed a method for awarding these prizes and for breaking ties. To do this, an overall boat performance, stated in Seconds per NMI sailed, is calculated for the sum of the races. The total distance sailed for all races is determined together with the total corrected time it took the boats to sail that distance. The formula is simply:

Total Time / Total Distance Sailed

This allows us to post an overall list of boats starting with the best Sec./NMI performance. For reference, the distance in NMI and total corrected time in seconds are shown. This list is used to determine the top boat regardless of division. It is also used to break ties in points, within a division.

Going back to our example, the table below shows the result in terms of best seconds per nautical mile performance.

Boat No.	Total Time	NMI	Seconds/NMI
1	6606 + 4274 = 10880	12.8	850.00
3	10087 + 7522 = 17609	19.4	907.70
4	10319+7747 = 18066	19.4	931.30
2	6872+5186 = 12058	12.8	942.00

The best performance in terms of Sec./NMI was boat 1 from division 1.

P.S.

Any attempt by any skipper to use the above information against any member of the race committee is cause for immediate disqualification.

Revelation of the Mysteries of Ratings & Handicaps or Basic Principles of Rating & Handicapping Friendship Sloops

by Cy Hamlin & Dick Salter

A sloop's **rating** is a number that reflects the sloop's calculated average speed through the water. This allows contestants to directly compare their ratings to the ratings of other sloops, noting that larger ratings represent sloops having faster speeds. For each rating there is an equivalent speed, expressed as the seconds on average it will theoretically take a sloop of that rating to sail one nautical mile.

The calculations necessary to assign a particular rating to a sailboat can range from fairly simple to very complex. The Friendship Sloop Society rating formulas were designed by naval architect Cyrus Hamlin many years ago. The premise was that due to the basic similarity of the sloops, the information necessary to compute a valid rating could be kept simple enough to allow owners to measure their own sloops.

There are specific characteristics that affect a sloop's speed and which are used to calculate a rating. Speed increasing factors include the hull length and sail area, resulting in higher ratings. Conversely, speed decreasing factors such as fixed propellers, cotton sails and increased comforts below deck produce lower ratings. Because these factors are so vital for accuracy and fairness, it is essential that measurements for the Society's Handicap Rating Application are accomplished with great care and precision.

A sloop's **handicap** is the time it must "give" over the length of the course to other sloops having a lower rating. It is customary for most sailboat races to be handicapped using time as a basis. When this technique is employed, the difference of the actual elapsed course transit times of each participating sloop are compared with the handicaps. For example: If sloop **Tannis** had a handicap of 80 seconds over sloop **Phoenix**, but crossed the finish line only 75 seconds ahead of **Phoenix**, then **Phoenix** would be declared the winner ahead of **Tannis** by a mere 5 seconds even though **Phoenix** finished behind **Tannis**.

Another basis for handicapping is distance sailed rather than time. In the past we have used "handicap alley" to allow the sloop in the fleet having the lowest rating to sail the shortest distance. There are three distinct benefits from distance handicapping. Since the sloops place in the race according to the order in which they cross the finish line, spectators and contestants can easily determine each sloop's performance. Secondly, it gives the lower rated sloops the good feeling of at least once or twice during the race of being ahead of most of the fleet. Finally, because the elapsed time to sail the race course is theoretically the same for all sloops, each is subjected to the same weather, tide and current conditions for the entirety of the race.

With this explanation of ratings and handicaps, all contestants should have a better understanding of what is involved and that assigned ratings actually have no bearing upon the contents of a sloop's liquor locker when the race committee checks any particular sloop!

New Publication

All of the chosen stories have been entered into the computer with lots of help from Tom Berry and the Wojciks. Thank you, thank you! Also thanks go out to all who have sent in pictures. I have received some amazing pictures of Friendships from around the country. The constant influx of sailing pictures this winter has me more than ready to get sailing. Keep them coming! Its not too late... yet.

I am going to start the process of looking for a publisher or an affordable way of printing the book. If anyone in the membership knows a Friendship friendly printer or publisher please contact me.

Tad Beck Clam Shell Alley Vinalhaven, Maine 04863-0544 or e-mail: TadBe@aol.com

Rockland Schedule of Events Monday Sloops Arrive - Barbecue (bring your own food) under the tent Tuesday Breakfast ashore or on the Monhegan Skippers' Meeting 8:30 11:30 Start of Race 1 4:30 Rowboat Races (Blindfold Race) Everyone is invited 5:00 Barbecue Under the Tent Wednesday Breakfast ashore or on the Monhegan 8:30 Skippers' Meeting 10:00 Parade of Sloops 12:00 Start of Race 2 4:00Public Viewing and Tours of Sloops at Dockside 6:00 Spaghetti Supper and Music by Society Members

Thursday

Breakfast ashore or on the Monhegan

- 8:30 Skippers' Meeting
- 11:00 Start of Race 3
- 4:00 Awards Ceremony
- 5:00 Barbecue under the Tent

Friday

Sloops Depart Rockland for Friendship Days

Host / Hostess Volunteers Needed

Volunteers are needed to be hosts / hostesses for the public showing of the sloops on Wednesday afternoon at the Rockland Homecoming. They would staff a table at the top of the pier where they would answer questions about the sloops and the Society, explain the public viewing, and assist the general public in any other way they can. If you can help for a couple of hours, please contact Debbie or Larry Plumer at (978)-462-9629.

Membership News

Doug Amsbary, Membership Chairman, has been in contact with many of the members of the Society, he has sent in the following report:

Our newest sail number has been assigned (#265) to a 25' Pemaquid design built by Rafael Prohens of Ovalle, Chile. Rafael has also recently joined as a full member.

Member Tom Miller (**Gannet** #97) and Peggy Dotter will be tying the knot soon and will take a leisurely cruise to the Rockland Homecoming as a honeymoon.

Mr. Eugene Costanza has joined us as a new member and hails from Reading, MA. Gene will be a part of Bob Rex's Race Committee at Rockland.

Other new members include Mr. Robert Carmany and Katherine Clark of Woods Hole, MA.

Liberty #157 will be sporting a new topmast rig this summer. With the help of Tom Miller (**Gannet** #97) building the mast itself and other members input, owner Peter Carter put it all together.

Spoke with Bill Zuber (**Gladiator** #71) about the work he has been doing to his sloop. He completely tore out the existing cockpit and enlarged it by 10 inches in length so that it is truly a "family" sized cockpit. He referred to it as a mini **Toddy B** project. You might remember that Dave Westphal, owner of the **Toddy B** #257, did a rather surprising job of both widening and lengthening his original sloop and now races with the bigger sloops at the Regatta. Bill further reports that he will be keeping **Gladiator** in Rockland Harbor this summer as both he and Caroline are working there.

Caught up with Bruce Lanning about the current status of the Captain's gig off the **USS Dwight D. Eisenhower** that he has been modifying into more of a pleasure craft. He has been working on it 7 days a week and says that he has finished up the aft cabin and is now roughing in the dinette and galley area. Hopes are that it may be launched this summer although in a somewhat unfinished condition. If it is in the water by the Rockland Homecoming he will plan on a shakedown cruise to join us at the regatta.

Departure #156 will be back in the water this summer after a year high and dry in its shed in the White Mountains of New Hampshire. The port side of the cockpit has been completely rebuilt with the help of a couple of long days by Bill Cronin. Support legs down to the hull itself have been added to the aft end of the cockpit to help support the cockpit's weight. Other work included sandblasting the entire bottom down to the gel coat and applying 5 coats of epoxy barrier coat and an ablative type bottom paint. It is estimated that in excess of 600 pounds of old bottom paint was removed.

Internet News: New member Bill Mebane, owner of the **Kervin Riggs**, reports that after 3 years work the sloop is back in the water sitting outside his office window at the Woods Hole Marine Biological Laboratory. He hopes to make it to Rockland but a small question mark seems to be the reliability of its Seagull engine to make the trip.



Handicap Reminder

The Society Measurer and Handicapper, Dick Salter, reminds us that if you are planning to race in a Sloop Society sponsored event, you must have a current handicap sheet on file. Please submit your handicap form to Dick as soon as possible so that he can provide a handicap rating to the race committee in advance of the event.

If you have any questions, need a form, or would like a set of instructions on how to measure your sloop, call or write Dick at:

151 Bridge Street Manchester, MA 01944 Tel: (978)-526-1004

Support Our Supporters

Our yearbook is made possible not only through the efforts of our members, but also through the businesses that place ads in our book. When you read the articles in this year's yearbook, take some time to notice the advertising. Then, when you stop in the store or restaurant, make a point of telling the waitress, manager, or anyone that will listen, that you saw their ad in the Friendship Sloop Society publication. Please help us keep the yearbook afloat by supporting our supporters.

Spring Executive Board Meeting Minutes

Submitted by Caroline Cronin, FSS Secretary

The Spring meeting of the Executive Board was held on Saturday, April 25th at the Maine Maritime Museum in Bath. Larry and Debbie Plumer presided over the 11:00 AM meeting. In addition to members of the board, Dan Kanicki and Wayne Greg, representing the Rockland Share the Pride organization, were present to discuss final plans for the Rockland Homecoming. Items discussed regarding Rockland were the following:

Bob Rex stated that he would like the assistance of the Rockland Harbor Yacht Club in setting marks and helping with the races. Bill Zuber suggested that the committee for the Sailing Program in Rockland might be able to get volunteers to set marks.

We need a tent, chairs and tables. Wayne Greg stated that there would be chairs and tables for the Wednesday night dinner and that the tent would be up from Sunday to Friday.

The Society will need a loud speaker for the Wednesday morning Parade of Sloops. We have our own speaker system for the skippers' meeting and awards banquet. Debbie suggested we play some music before the parade so that it will be easier for Betty Roberts and Irene Amsbary to fill the time before the start of the parade. Jack Cronin suggested that the sloops need to spread out during the parade of sail - use their engines if necessary to keep the proper distance. Tad volunteered to write up "Skipper's Orders" for a proper parade of sloops and these orders will be placed in the skipper's packets to be handed out Tuesday morning by Bob Rex.

It was decided to change the Wednesday night chicken barbecue to a pasta dinner. The Share the Pride will contact groups in Rockland to see if anyone is interested in putting on a spaghetti supper as a fund raiser. It will also be a "pay as you go" dinner rather than Caroline collecting the money and Debbie collecting the tickets the night of the dinner. Caroline will have to get an approximate head count from the membership to be given to the Share the Pride. Also, it was decided to ask Society members to bring their own musical instruments and play after dinner rather than hire a band. Caroline will mention this in her mailing to the membership.

Wednesday afternoon will be the public viewing of the sloops. It was suggested that there should be a table at the dock and have someone greet the people and let them know what is going on. Dan Kanicki wants to have public interviews of skippers during the Wednesday public viewing. Wayne Greg would like a video tape advertising the Rockland event to put on the local cable channels.

Tad stated that the posters would be ready by June to be put up by July 4th. The Share the Pride also wanted dates and times for the cable TV and radio stations.

Jack suggested a public announcement of some kind stating that the residents could bring their own food and join the Society at the evening barbecues.

Some questions for the Share the Pride which they need to get answers for:

Will there be a charge for tying to the dock?

Will there be a key available to the showers after they close to the public?

Bob Rex would like to keep trophies in the Chamber of Commerce building again.

Is parking on the grassy area to the side of the parking lot still OK with the city? Do we need to remove cars by Friday?

At this point in the meeting the schedule for the week at Rockland was discussed.

Debbie stated that the usual date for the annual meeting is not available this year at the New England Center. After some discussion the board decided to move the date up to October 24 & 25. Caroline and John would make sure they included this date change in the mailing and the newsletter. John stated that the Fall edition of the newsletter would move up to October 1st. The annual meeting mailing and membership renewal forms would have to be mailed out mid-September.

Debbie also stated that the dinner price would be the same as last year - \$18.00 / person. The New England Center was very apologetic about the date change and the poor food of last year. Debbie said that the New England Center did not like the idea of the "order as you go" menu. The Center did give Debbie a new list of menu options and stated that the potatoes and vegetables would be served family style rather than placed on individual plates. After reviewing the menu options the board decided on the following:

> Southwestern Stuffed Chicken Breast Fresh Fillet of Haddock Vegetarian Pasta

The paid membership for 1998 is as follows:

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Boat Owners:	91
Full Members:	54
Cooperatives:	22
Honorary:	8
Total	178

The following board members reported:

Treasurer's Report: David Bell was not present but provided a financial statement that was distributed to the board.

Pendelton Scholarship Fund: Bill Zuber reported that the scholarship fund is doing well and has \$73,999.77 in the fund.

Yearbook: Roger Duncan reported that Rich Langton has been helping him out with the yearbook - Rich has taken half of the articles and bulletin board to work on. Roger stated that he is looking for a good cover picture for the yearbook.

Newsletter: John Wojcik has set a mailing date of June 21 - 23 for the next edition, with Memorial Day as the deadline for submitting material.

Race Committee: Bob Rex stated that he needs to pay for the insurance: \$321 and U.S. Sailing: \$75. He then discussed a change at the starting line: If a sloop is over the start line early by less than a boat length, then it could just continue to sail

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Tech Tips

by Old Salt

During recent meetings and gatherings we've been asking your opinion on ways to broaden the appeal for this newsletter. Several folks have suggested that articles on various marine systems or boat maintenance may be beneficial. Hopefully, this column will be a forum for sharing the vast range of practical experience accumulated by our membership. It is also intended to be the place where you, the reader, can submit technical questions and either obtain answers or direction to appropriate reference material.

As I mentioned in the first "Tech Tips" article, I hope to present six topics related to marine electrical systems. These are: electrical wiring, alternators and regulators, batteries, grounding and bonding, radios and antennas, and instrumentation (depth, speed, GPS, LORAN, etc.). In the last article we talked a lot about marine electrical wiring, but because I got a little long winded, we never covered the various methods for connecting the wires to anything. So in this "about a page" long article we'll look at the connectors, terminals and battery clamps that let the electricity get where we want it to go.

There are all sorts of ways to connect wires together or to electrical devices. Most of us have seen really great examples of the wrong way to make these connections. Funny thing is that you always find them on other peoples boats. They range from the wires that are jammed between the battery post and battery clamps, to the mega-bundle of wire that's twisted together and held by single (and usually loose) wire nut. Admittedly, this is an extreme example, but hopefully you get the point. Doing things the wrong way sets you up for a "Murphy's Law" calamity.

The last article pointed out the right way to lay out a wiring system and chose the correct size circuit breakers, fuses and wire. This time we'll look at the right way to fasten things together. If we have everything sized correctly, we can deliver the electrical current from the source to the load devices with very little voltage drop. However, we can only do this if we have everything connected with the appropriate size and type of wire terminals and connectors.

Usually the largest wire "terminals" used on a boat are the clamps at the ends of the starting battery cables. We don't give them a whole lot of thought until something doesn't work. That's usually the starter motor. And according to Murphy, it usually happens just when you need it most. The clamps must be capable of conducting high current to the starter with a minimum of voltage loss. The amount of contact area between the surface of the clamp and surface of the battery post is critical to the voltage drop (loss) across the connection under high current conditions. If the surfaces are dirty or the clamp is loose, the contact area between the clamp and post is reduced. The lack of surface area causes a resistance to the flow of current. As the starter current increases, more and more voltage is dropped across the bad connection. This represents a power loss since power is equal to current times voltage (P=IE). Under high current conditions the power available at the starter won't be great enough to crank the engine fast enough to start it.

The best way to keep this "Murphy's Law" scenario from happening is to keep the battery connections clean, tight, and protected from corrosion and dirt. After tightening the clamp coat it with some of the products designed for protecting battery connections. You can find them in any chandlery or auto parts store. Do not use greases or light oil-based corrosion preventive compounds. These products can penetrate the area between the clamp and battery post, and decrease the contact area. They can even cause a cascade effect, potentially leading to a fire or explosion. I witnessed a fire on a boat that was caused by ignition of the grease used to "protect" the battery terminals. Continuous cranking of a stubborn diesel caused a poorly connected clamp to overheat enough to melt the grease. The grease burst into flame and ignited the hydrogen gas being produced by the battery. It was not a pretty sight.

On a far smaller scale, the type of terminals and connectors that you use on other wires on the boat and the method you use to install them can be the difference between a great system and one that causes you continual grief. In an ideal world, all wires run directly from the electrical source to the load device with no connections except for the necessary circuit breakers and fuses. Ok, but how do you attach them! Personally, I like to use ring terminal lugs in combination with terminal strips where appropriate.

Ring lugs have the advantage of not falling off the screw they are attached to if it loosens up for any reason. If the device or terminal strip you are attaching them to is in an awkward position they can be hard to attach, but the safety factor of not having electrically hot wires hanging loose greatly offsets this inconvenience.

All sorts of ring terminals, or lugs, are available. I like to use the type that crimp onto the wire with a crimping tool and have an insulating vinyl sleeve over the barrel that the wire slips into. On the better made lugs the insulation is tapered on the inside so that the multi-strand wire slips right into the hole. These provide a good mechanical and electrical connection between the wire and the lug if you choose the right size. No matter what type connector you use make sure that you get the size that matches the wire's size. If you don't, the crimping tool will distort the barrel end of the connector. Although you may have succeeded in getting the lug mechanically fastened to the wire, you more than likely don't have the correct electrical contact area between the lug and wire. Using the wrong size crimping tool or a pair of pliers to crimp the lug will create the same effect. Combine this poor connection with a little dirt and salt corrosion and you have a good source for future problems.

The insulating vinyl sleeves on the lugs are usually color coded to match the colored dots on the crimping tools and the size of the wire for which they are designed. Red colored lugs are made to go on 22 -18 gauge (AWG) wire. Blue coded lugs

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are for 16 - 14 gauge wire. Yellow coded lugs are designed for 12-10 gauge wire. Better quality crimping tools have the terminal size labeled right next to the machined crimp face. In many cases, they also have a colored dot corresponding to the color code for the lug. These color codes also apply to the in-line splice connectors and other types of terminals. You don't have to be a rocket scientist to do the job correctly.

In general, avoid using spade lugs or bullet terminals if you can. I avoid them because they can be pulled apart too easily. Of course, in some applications that's what you want, but inspect them routinely if you have to use them. This type of connector uses the spring tension of the outer shell to hold the inner part in place. In a marine environment, they seem to be more prone to corrosion and rapid deterioration. A ring terminator screwed to a terminal strip provides a better electrical and mechanical connection that is relatively easy to clean.

To establish a good electrical connection I always use tinned copper lugs and solder the wire to the lug after it's been crimped. This may seem like overkill (and in anything other than a marine environment it would be) but after several years, corrosion between the wire and lug can become a problem. Careful soldering not only prevents this from happening but also establishes a superb electrical connection between the lug and wire. If you are careful, quick, and have the right heating element on the soldering iron, you can melt the solder to the wire and lug without melting the vinyl insulation. If you haven't had a good conversation with your soldering iron lately, forget you read this paragraph and go buy a good crimping tool! Properly crimped and insulated lugs will last a long time.

Speaking of insulation, you can get lugs and line splices that come with heat shrinkable insulating sleeves. They form a good moisture seal between the insulating sleeve and wire insulation when heated with a heat gun or hair dryer. The seal will keep the salt corrosion at bay as long as it is not disturbed. You can also use products like "Liquid Lectra Tape" or other brush-able insulating material to seal up the insulation. Again, you don't have to go to this extreme, but may want to consider it if the terminals could be exposed to salt spray.

Another good idea, that should be part of your annual maintenance, is to spray all of the electrical terminals, except the batteries, with an anti-corrosive spray that is designed for electrical connections. There are many, many products to choose from. "Practical Sailor" ran an article not too long ago on the subject of corrosion preventive products. I like to use CRC and Boshield, both of which fared well in the "Practical Sailor" comparison tests. As I pointed out earlier there are many excellent references on the subject of marine electrical systems. "The 12 Volt Bible", "Boatowners Illustrated Handbook of Wiring", and other books are available from most good chandlers and catalogs. Gordon West's articles in "Sail Magazine" are excellent references, and well worth reading. "Practical Sailor" has a good article on electrical wire crimpers on page 24 of the June '98 issue. Hopefully this "about a page" long article has stirred up some questions. Certainly your electrical system should not be viewed as a "monster". With a little knowledge and occasional tender loving care you can easily tame it and save yourself some money in repair bills.

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and will be penalized 5 minutes. Jack Cronin suggested leaving it to the discretion of the skipper whether he wants to take the 5 minute penalty or turn around and restart. Bob also stated that if any boat is over the start line by more than a boat length, it will be the race committee's call.

Bob then asked (for David Cashman) if the Society would be willing to donate money to Old Ironsides for new sails. It was decided by the board that the Society does not have the responsibility or right to make such a donation. John Wojcik suggested that possibly the Mass Bay Group make a donation in the Fall when they meet again since that group has held meetings onboard the ship. He also suggested that this donation be brought up at the Annual Meeting. Jack Cronin suggested that John put a piece in the newsletter asking the membership to donate if they wish.

Publicity Report: Bob Monk reported that he has made his annual mailing of approximately 25 letters to various publications. He is hoping the information will get published. Bob stated that he would write the information needed by the Rockland Share the Pride for their publicity needs.

The meeting was adjourned at 1:30.

"Old Ironsides" Pennies Campaign

Last year marked the 200th birthday of "Old Ironsides", still on active duty to remind all Americans of our nation's glorious early history.

In celebration, the **USS Constitution**, now fully restored, sailed under her own power for the first time since 1881 in July of last year. The new set of sails was paid for by public donations of pennies (and dollars) to the "Old Ironsides" Pennies Campaign. Donations are still needed to complete the set of sails. Donations can be sent to:

Charlestown Cooperative Bank 201 Main Street, Charlestown, MA 02129 For details, call, write or fax: Cdr. Robert L. Gillen (Ret.), National Chairman, Building 125, Navy Yard Charlestown, MA 02129. Tel (17.241, 2005, Ferry (17.241, 2008)

Tel.: 617-241-2995, Fax: 617-241-2998.