

# Friendships

Newsletter of the Friendship Sloop Society

Volume 13

Summer 2001

Issue 2

## Commodore's Message

In the last message I was looking out at 12" of snow. Now I look out at a garden full of flowers where that snow was. Though I had my doubts spring actually came. The rain of spring gave us a couple of days so we could get Tern painted and now she sits at the mooring rigged and we have had the first sail of the season.

The summer ahead has several events with stops in Southwest Harbor, New London, Rockland, Marblehead and Gloucester. These are times for us to get together and Gam, trade stories and sail. It is always fun to see all the kids. The next generation of sailors and in today's sloop owners we find the kids of years before. I think it is in the genes.

The main event of this year is Rockland. We hope that many of you can get there and join in the fun. This is not about racing, but fellowship. We don't want people to feel that they have to race. Ruy Gutierrez is putting together a program for those that do not race and if you are interested you can contact him at 207-782-8199.

The town of Rockland opens its doors to us and the sloops always look so good tied to the dock. This has given a lot of recognition to the Society because of the exposure. I run into people all the time that say they have just come down to see the sloops. The local Chamber and the media give us a good plug.

Those who have not had a chance to be in Rockland this winter are going to find a major change. That big field next to the town landing where the Plow Company was now has new buildings and there is a new stone pier off the town docks. By the time we get there MBNA should have moved in. They have done a nice job and have a board walk along the shore that will be open to the public.

So get those sail ties off, hoist the main, staysail and jib, throw off the mooring and make way for Rockland.

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## Share the Pride

We arrive in Rockland and find the tables and chairs being set up, the tent erected and the grills in place. Ever wonder how all that comes together? For all this we owe a great thanks to Don Kanicki and the group SHARE THE PRIDE. They put it all together. During the winter Don has been making arrangements for our arrival. He also finds the charitable organization to put on the Wednesday night supper. This year The Pride's job was

## Rockland Homecoming Regatta

*By Dave Graham, FSS Race Committee Chairman*

Save the dates - - - July 24 through 26, 2001. These mark the days of our 41st annual homecoming regatta. Rockland will again be our homeport for the three days of racing and we sincerely hope that you will plan on joining us there. Your Race Committee has had several off-season meetings to gear-up for the race program and you probably have heard that we have acquired a new committee boat, thanks to the effort of Don Ellis of Southwest Harbor. We are also extremely fortunate in that Ralph Stanley will be providing us with his boat for the mark-setting tasks.

While the new 2001-2004 USSA rules are in effect, you will notice little difference in how we will be conducting this year's races, from those of the recent past. However, we may add one slight (but highly important) change in that you will likely see a 2½ foot yellow tetrahedron trailing several feet off the transom of our race committee boat at the starting line. If used, it will serve as a "Barging Buoy"; in other words, a sloop cannot proceed between the buoy and the committee boat. This is a method often used elsewhere to protect the committee boat from collisions by starting boats. Don't worry about it, for we will cover this minor change in greater detail during the skippers' meetings, scheduled for 9:00 AM under the tent each race day.

A lot of work has gone into the planning of the 41st homecoming regatta, much as it has every year since "Day One". We hope that you will take advantage of all the effort by registering in a timely manner and joining us for another pleasurable gathering of sloops, to participate in the good times, to renew old friendships and establish new ones.

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complicated further as we lost our donor for the tent. SHARE THE PRIDE split the cost of the \$1,000.00 rental fee for the tent with us so it is only costing us \$500.00. After we leave they collect the tables and chairs along with the grills and put them away until next year when they do it all over again. If it were not for SHARE THE PRIDE we would have to have a Rockland committee to plan all this and arrange it and than set it up. So if you seen Don or any of his people let them know that we appreciate what they have done.

## Membership News

*Doug Amsbary, Membership Chairman, has sent the following:*

Les Taylor has recently purchased #185 **Ocean Roar** (ex **Sine Die**). Les hails from Warren, ME. Les has joined the Society and we look forward to seeing him out on the water.

**Morning Star** has been sold to Paul Milani of Ashfield, MA. **Morning Star's** hull has been painted white so she may not be as recognizable as her past distinctively blue hull. She is currently sitting on a mooring in Sandy Point, ME on the Penobscot River.

#222 **Lady Jeanne's** ownership has been transferred to Raymond Dupere's son, Joe. Raymond renewed the membership for Joe and friend Kyles McMaskill.

In the July issue of "Downeast" a picture of #19 **Blackjack** was seen undergoing plank replacement, refastening of the planking and other extensive repairs. Owners Bill and Alison Fletcher hired "Chummy" Rich of Bass Harbor Boat to perform the repairs. **Blackjack** is 100 years old this Summer. They will continue to take paying passengers out of Northeast Harbor, ME. (See the note from Alison & Bill that follows).

We have issued our newest sail number 271 to **Jasmine**. The sloop is 18' 6" LOA with a beam of 6' 4". The new owner is Patrick S. McMahon of Airdrie, Alberta Canada. The sloop will be homeported on Sylvan Lake in Alberta. Its former name was **Hummingbird** and was originally launched in 1985 and built by Pete Donahoe on Gabriola Island, British Columbia. **Jasmine** is presently set up with a single jib but Patrick plans on adding a staysail and a jackyard topsail sometime in the future. A warm welcome has been extended to our newest member.

## Blackjack

*The following note was sent by Alison & Bill Fletcher*

Dear Friendship Sloop Society,

We thought your members might be interested to know that our dear old girl **Blackjack** is undergoing a major restoration at the hands of Robert Rich at the Bass Harbor Boat, Inc. Robert, known to locals as "Chummy", is a skilled and expedient builder, and because of these qualities **Blackjack** will be sailing once more next month.

**Blackjack**, you might remember is 101 years old, built by Wilbur Morse. She is #19. We bought her from Bill Pendleton from Searsport in 1975 for the purpose of sailing trips for tourists. We quickly fell in love with her, as did our 8 children who grew up aboard her summers.

We can't take part in the big yearly race now at Rockland, but do try to participate in the smaller race here at M.D.I. off Greenings Island. In these races the fiberglass Friendships prevail in lighter winds, as one is apt to have in July. Many of them with topsails. But one race I remember vividly. It was an original Friendship kind of day. Winds 25-30 knots, gusty and kicking up seas. We left those fiberglass Friendships like a streak. The only boat ahead of us was **Hieronymus** built in wood by Ralph Stanley in 1962, and she was carrying topsails. She won by 30 seconds according to our race committee. I thought it was less, but no matter.

Now **Blackjack** carries her original timbers and many of her original frames. We have to say "Yea Wilbur Morse and others like you!" You built wooden boats for a specific purpose, and they should always be a part of Maine's Maritime History

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## 8th Annual Southwest Harbor Race

*Submitted by Marge Russakoff*

This is the eighth annual Southwest Harbor Race! Believed to be the second biggest event on the Society's racing calendar. Let's make it even bigger this year, with the convenient weekend before Rockland schedule.

We are hoping that we will hear from people before they arrive. Usually I end up calling all the likely local boats and remind/plead with them to join in the fun. After the race all are welcome over at 47 East Ridge Road to swap lies with Miff and to receive sustenance from Marge. As usual, the forecast is for sunny skies and plenty of wind. The race starts off the northern end of Greening's Island at about 1300 hours. If you aren't there for the skipper's meeting, just follow Phoenix...

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## Dues Reminder

If you haven't mailed your annual dues in for 2001, please send them to:

Caroline Phillips, Society Secretary  
164 Sturbridge Road  
Charlton, MA 01507

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## Handicap / Measurement Guidelines for Sloop Owners

The Race Committee will be happy to equitably handicap any member sloop for which a completed handicap application is received prior to July 13th. New handicap rating applications are available from the race committee or the handicapper, Dick Salter, 151 Bridge Street, Manchester, MA 01944

All sloops with a handicap rating dated prior to 1997 will be considered to have no handicap rating after this year (2001) due to the expiration of the handicap data.

Sloop owners must file an updated handicap application for their vessel every five years, whether or not changes may have been made to the hull or rig. However, when such changes have been made, it is necessary to immediately reapply for an updated handicap.

New owners of sloops are required to submit an application for a handicap rating before entering their first regatta. Beginning in 2000, owners declining to file an updated handicap application in a timely manner will receive a dockside handicap, which will include a severe penalty!

# 1st Annual Chesapeake Bay Friendship Sloop Regatta

By Thomas Berry

We expected 3, maybe 4 sloops at the museum in St. Michaels for this first-time event. On the Wednesday before, I received an email from **Ansa's** owner saying that he couldn't come. (No need for details, but he had a most important reason for bowing out.) My **Wenonah** arrived at St. Michaels at 1615 Friday afternoon expecting to see Dave Niebuhr and his **Perseverance** tied up with rums in hand for our crew. Alas, Miss P wasn't there. We shortly received word from the museum staff that Dave had called and the message was that he was "in Reedville, VA, where cell phones and diesel mechanics don't work." Reedville is more than a day's sail from St. Michaels, so I knew then that Dave wouldn't make it. I felt very sorry for him because he'd put so much effort into planning this event with me. But I wasn't sorry enough that I couldn't pour rums from our own rations. The 4th sloop, which we believe was **Yankee Lady**, never materialized through the rain and overcast.

Saturday dawned with continued overcast, but the rain had ceased. So had the wind. It was dead calm and stayed that way all day. We never left the dock but won the race that never was by default. That \$10,000 Rubber Check Award that everyone missed will sure come in handy!

David and Charly Holmes, owners of the ferocement sloop **Bluenose** in Annapolis, stopped by with their grandson, Duncan. Jarvis Newman, who's just purchased a home in nearby Oxford, came by Saturday afternoon. Several other folks who'd expressed an interest in the regatta came by over the weekend. But, alas, with but one sloop and no wind, we couldn't even take anyone for a sail.

Sunday arrived with continued overcast and threatening rain. We departed at 0930 and shortly raised all five sails. Smartly sailing out the Miles River on a broad reach, **Wenonah** thudded and shook like hell. I thought some rigging had given way. All was well, so we looked behind us to see the largest piece of waterlogged milled wood I'd ever seen come to the surface, sporting a 12" spike dead center. I rushed below to check the bilge for rising water. Thankfully, all was well. To the western shore and Galesville we continued.

Not a great beginning for an event we hope will become a Bay mainstay, but we'll do it again next year. The folks at the Chesapeake Bay Maritime Museum made us most welcome and said they'd have us back anytime. It is a terrific venue. The weather, on the other hand, was less than hospitable and, I'm sure, kept many people away. In general, the local media were quite receptive to this event and helped with our promotion, resulting in several calls of interest. **Wenonah** and her crew certainly had a good time and only wish that other sloops could have joined us. But there is next year and we'll give everyone plenty of notice.

# Cruising Division Proposed for Homecoming Gathering

The following is a proposal to the membership in general. Namely, the creation of a cruising division at the Homecoming Regatta in Rockland.

The proposal is twofold:

First, to offer sloop owners who do not enjoy racing another venue to participate in. Second, to encourage a larger attendance at the regatta. This division III would operate as follows:

- Division III participants would pay the same nominal fee to enter.
- Participation in all other activities is welcome, but strictly voluntary.
- Division III skippers would attend the morning briefing. After the racing division business is over, the cruising division would decide what to do or where to go.

Some of the activities suggested include:

- A leisurely sail to Isleboro for a picnic on the beach.
- A short cruise to High Island Harbor for a rafting party or a hike to the quarry.

All this is weather permitting. If Mother Nature does not cooperate, there is always the ever increasing number of galleries and shops to visit, and of course, the Farnsworth Museum should not be missed.

July 2001 will be the 41st anniversary of the Homecoming Regatta. The efforts and impetus of the founders as well as the contagious enthusiasm of regatta participants make it one of the most worthwhile activities in the summer. So whether you want to test your mettle and compete in the races, leisurely cruise or just hang around and enjoy the camaraderie, come and join us this summer in Rockland.

For questions or comments, please contact:

Dr. Ruy Gutierrez  
57 Heritage Drive  
Auburn, ME 04210

Telephone: (207) 782-8199

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## Chandlery Help Needed

The chandlery is in need of help at this year's gathering at Rockland. If you can volunteer a few hours at the Chandlery table on any of the days, please contact Commodore Paul Haley at 781-631-4902.

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## Bob Brown

Bob Brown of Auburn Ma, who has crewed onboard Bernard MacKenzie's **Voyager** since the first race in Friendship in 1961, passed away recently at the age of 80. Bob also was onboard **Voyager** in the Boston Power Squadron Race in 1960 that was the inspiration for Bernie founding the Friendship Sloop Society.

## 2001 Schedule of Events

### Chesapeake Bay Regatta

May 18th - 20th

Chesapeake Maritime Museum - St. Michaels, MD

### New London Regatta

July 14th & 15th

### Southwest Harbor Rendezvous

July 21st

### Homecoming Rendezvous & Races at Rockland

July 23rd - 26th

### Friendship Days

July 27th & 28th

### Marblehead Regatta

August 11th - 12th

### Gloucester Schooner Festival

September 1st & 2nd

### Annual Meeting

November 10th

New England Center, Durham, NH

## Rockland Schedule of Events

Monday: Sloops Arriving - Barbecue (bring your own food) under the tent

Tuesday	9:00	Skippers' Meeting
	11:30	Start of Race 1
	4:30	Rowboat Races (Blindfold Race ) Everyone is invited
	5:00	Barbecue Under the Tent
Wednesday	9:00	Skippers' Meeting
	10:30	Parade of Sloops
	12:00	Start of Race 2
	4:30	Public Viewing and Tours of Sloops at Dockside
	6:00	Dinner under the tent
	8:00	Music by Society Members
Thursday:	9:00	Skippers' Meeting
	11:00	Start of Race 3
	4:00	Awards Ceremony
	6:00	Barbecue under the Tent
Friday:		Sloops Depart Rockland for Friendship Days

## Recent Magazine Articles

The July issue of "Maine Boats and Harbors" has three articles regarding Friendship Sloops and our members.

The first article, "Honoring Anne Frances" describes the finishing and shakedown cruise of this sloop in 1975 on their way to the races at Friendship.

Ralph Stanley's article "The Origins of the Friendship Sloop" with the subtitle: "The Friendship sloop didn't originate in the town of that name" has many photographs by Benjamin Mendlowitz.

"Sailing with the Duncans" recounts Roger and Mary's recent building of the schooner **Dorothy Elizabeth** and a daysail with the couple on their schooner in Linekin Bay.

The latest issue of "WoodenBoat" has a great photo of Harold Brunham onboard **Chrissy** hauling traps under sail. The article "Lobstering Under Sail", written by Harold, describes his hauling of lobster traps as well as his rebuilding of **Chrissy**. A great article for everyone to read.

## Racing Numbers

The Race Committee is asking skippers to use sloop numbers for racing. Numbers do not have to be permanently attached to sails, they can be attached to shrouds. Numbers should be large enough to be read from a reasonable distance.

## 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.

## Rockland Tides July 22 - 27

Based on Eldridge Tide & Pilot Book

	AM High	PM High	AM Low	PM Low
<b>Sunday</b>	12:05	12:46	6:31	6:45
<b>Monday</b>	12:58	1:38	7:22	7:39
<b>Tuesday</b>	1:53	2:31	8:14	8:35
<b>Wednesday</b>	2:49	3:25	9:06	9:32
<b>Thursday</b>	3:46	4:20	10:00	10:31
<b>Friday</b>	4:46	5:17	10:55	--

## Free Sloop

**Cockle** needs new frames, fastenings, keel repair, maybe some planks. Available free in exchange for promise to restore. Must be removed from Miller Place, Long Island, or she will be broken in the fall. Call 631 744 6064, John or Bob.

## New London Windezvous

Saturday and Sunday, July 14th & 15th - the Thames River in New London, CT, is the place to be for the 15th annual Friendship Sloop Society Windezvous.

There will be a new venue for 2001 - the **Amistad** Pier at the historic U.S. Custom House. The Society has been invited to return to our roots in downtown New London and to be a visible part of Sailfest - entertainment and fireworks along the magnificent new waterfront.

Arrangements have been made for visiting Friendship sloops to raft up at the new **Amistad** pier right along the downtown waterfront Friday evening July 13th through Sunday, July 15th. Staging for the Grucci fireworks extravaganza will be at the end of the pier on Saturday night. The north side of the pier will be for the visiting schooner **Ernestina**.

Skippers meetings and end-of-race finale will take place in the nearby custom house. Arrangements for food, especially for Saturday night's "picnic", have been made at the Thames Landing restaurant next to City Pier and the train station. There are many other spots in town as well.

Our races will start at 1100 on Saturday and Sunday in the Thames off New London and Fort Trumbull.

For further information contact Greg Roth at 1-800-845-3156 or Jack Vibber at 1-860-442-7376.

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## 17th Annual Gloucester Schooner Festival

*Submitted by the Cape Ann Chamber of Commerce*

The Gloucester Schooner Festival is all about tradition. Ever since 1982, there has been a one-hundred year old schooner sailing in the Mayor's Race and often two - Ernestina and Lettie G. Howard! And in recent years, we've had a two hundred-plus year old design sailing with us - the Essex Building Museum's Chebacco boat Lewis H. Story!

But the Festival Committee is not above change, as witnessed by the resurrection of the spectacular Parade of Sail in 1999 - a move that has made the entire weekend more meaningful to shore side viewers. Our innovation for 2001 - a Saturday night party for visiting crews - has been suggested by a few of our Committee members who have attended other sailing regattas.

We hope that America and Hindu will return to defend the titles they won in the 2000 Mayor's Race. In addition, over a dozen large schooners have already indicated their intentions to be in Gloucester. We also expect the Navy to send the USS Carr to join us in the festivities.

The Schooner Festival will be similar to prior years, with a record number of boats expected to participate. Major events on Saturday, September 1, will include: Traditional small boat races for traditional gaff-rigged, traditional marconi-rigged, Friendship Sloops, PHRF class, Rhodes-19, and multihull classes; a Yankee Fish Fry with musical entertainment, the lighted boat parade, and fireworks over the harbor. Sunday, September 2, will see a parade of sail as large fishermen-type schooners (45-125 feet on deck) sail out for the start of the Mayor's Race, and a Reception and Awards Ceremony wrapping up the whole weekend.

## 31st Annual Races at Marblehead

This year is the 31st year of continuous Friendship Sloop races at Marblehead. The races will again be hosted by the Corinthian Yacht Club on the second weekend in August; specifically the 11th and 12th. Friendship Sloops are invited to compete for the Ridgway Trophy, named in memory of Lincoln Ridgway, a long-time member of the Corinthian Race Committee and supporter of the Friendship Sloop Society before he passed away several years ago.

There will be single races for each day of the two-day event, with FSS Division 1 sailing a somewhat shorter course inside that of Division 2. For example, Division 1 might be given a 10+ mile course, while Division 2 could be facing a course nearer 15+ miles. The start and finish line for each race will be set to accommodate both divisions and at a planned single location.

As in the past, a banquet will be held at the Corinthian on Saturday evening and it will be a no coat - no tie informal event. The weekend of August 11th and 12th is an excellent opportunity to once again compete among Friendship Sloops; to renew friendships with Society members; to promote the FSS seasonal race program; to have some good fun racing; to compete for trophies and to enjoy the yacht club facilities that will be available to you, as members of the Friendship Sloop Society.

In a short time, you will be receiving you notice of race for the Marblehead regatta. However, should you have any questions in advance of the notice, you are encouraged to contact event chairman, Dave Graham. Dave can be reached by e-mail at [DWG@SHORE.NET](mailto:DWG@SHORE.NET) or by phone at (781) 631-6680.

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## Do You Play a Musical Instrument?

Over the last few years at the Rockland Homecoming, a number of our members have brought their musical instruments and performed under the tent on Wednesday night. We listened to Tim Sullivan play the bagpipes, Ralph Stanley with his fiddle, Richard Stanley also with the fiddle, the Merrill family trio consisting of cellos and violins and many others. It has always been a good time, so we have decided to ask our members again to bring their musical instruments. Don't be shy, start practicing now, and come and have a good time!

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## Jarvis Newman Boat Company Sold

C. W Hood Yachts Inc. of Marblehead, announced the purchase of the Jarvis Newman Boat Company of Southwest Harbor, ME. Hood purchased the Jarvis Newman molds, enabling the company to build and sell the Newman 30, 32, 36, 38 and 46 as well as the 25 and 31 Friendship Sloops, along with two dinghies. The company will build the hulls and fiberglass parts. The rest of the boats from the engines and electrical systems to the decks and hardware will be done by boatbuilders who buy the hulls. The Jarvis Newman hulls will be built somewhere in Maine, possibly Manset. The company builds its Wasque 26 and 30 powerboats in a Lynn, Massachusetts, manufacturing plant.

## Tech Tips #5

*By the "Old Salt"*

This column is a forum for sharing the vast range of practical experience accumulated by our membership and not just my favorite boat maintenance topics. It is intended to be the place where you, the reader, can ask technical questions and either obtain direct answers in this column or direction to appropriate reference material.

Since you have not asked for specifics since the last newsletter, I'll continue on course with the original list of topics. Just to refresh your memory the topics are: electrical wiring, alternators and regulators, batteries, grounding and bonding, radios and antennas, and instrumentation (depth, speed, GPS, LORAN, etc.). We have already covered wiring, alternators and regulators, batteries, bonding and grounding so let's look at the normal problems encountered with radios and antennas; poor performance or no performance. An interesting fact about these problems is that the radio and antenna are usually not at fault. The problems are usually associated with the quality of the original installation and/or how long they have been exposed to the marine environment.

Every topic we have covered so far supports the basic requirements needed to provide power to a radio or other electrical devices that you may have aboard. Radios have some special requirements that your starter motor or running lights could care less about. All of the other accessories onboard may be operating just fine but the radio, specifically the marine VHF, just doesn't seem to be working as well as it used to when it was new. What could be wrong?

Well, if you still have the operating manual that came with it, see if you can pry the pages apart and look at the specifications. Most VHF radios, fixed mount VHF radios and handhelds, come with a page of specifications that really don't mean very much unless you're an engineer. So most of us look at them when we pull the radio out of the box, look at the installation instructions, then proceed to install the unit where we want it, regardless of what the instructions say.

If you go back to the specifications you may discover that the hasty installation a few years ago set the stage for the problems you are experiencing now. Look at the specification table and find out how much current the radio needs to operate at its full power rating of 25 Watts. In most cases a fixed mount radio will draw 6 to 10 Amps and require between 11.5 to 15 Volts (at the fuse on the back of the radio) when it is operating correctly.

What size wire did you use to hook things up between the circuit breaker panel and the fuse? A few articles ago we looked at wire size and the amount of current a given size wire could conduct without a detrimental drop in voltage from one end to the other. If the wire size was marginal when the original installation was performed, or the power connector or any other connection between the power source and radio is corroded you are not providing enough power (remember Volts X Amps = Power (in Watts)) to the radio. Cleaning the connections (an easy task) or installing the correct size wire (a not so easy task) will allow the radio to operate the way it was designed.

An important thing to note here is that the total power required to operate the radio is HIGHER than the Radio Frequency (RF) power output from the radio. By law, marine VHF (Very High Frequency) radios are limited to a maximum of 25 Watts RF output. Due to the power lost internally, due to heating of components and other inefficiencies, you have to supply over twice the RF output power at the 12-Volt DC input. If you look at the typical specs in the last paragraph and multiply 6 Amps X 12 Volts you see that you have to provide 72 Watts at the input to get the rated power of 25 Watts RF at the output. Depending on your radio's specification this requirement could be much higher.

The other chief contributor to poor performance is the connection(s) between the radio's RF output connector and the antenna. Most Friendships have at least 50 feet of coaxial cable and two PL-59 connectors between the back of the VHF and its antenna. RF cable connections that are well sealed will normally last several years. The worst enemy to the connections and coaxial cables is moisture! Especially salt moisture! Obviously we get plenty of that on the ocean so our goal has to be to keep it away from the RF connections, especially the connection at the antenna.

Moisture that penetrates the plug causes two problems. First, it corrodes the connecting surfaces of the connector, which to a limited degree you can clean off; but the second problem doesn't have an easy fix. As the moisture builds up inside the connector it is carried down the braided outer conductor of the coaxial cable much like the wicking action in an oil lamp. Eventually the coaxial cable gets waterlogged. If corrosion doesn't ruin the cable where it joined the connector; the gradual saturation of the cable interior will either short circuit the inner and outer conductors or change the impedance to something other than the 50 Ohms called for by those specifications we mentioned earlier. If you have a leaky connector at the antenna you have set yourself up for gradual deterioration of the transmission system that carries the RF signal from your radio to the antenna, then out to the world. The only remedy for a saturated cable is to replace it.

So how do you prevent moisture intrusion? Proper assembly techniques and quality materials will keep water out. Some of the basics are:

- Purchase good quality material. Equipment made for the marine environment is far superior to, in the long run cheaper than, home electronics or automotive products.
- Follow the manufacturer's instructions when assembling the connectors. (Personally, I prefer soldered connectors, but if you don't have good soldering skills have someone else install them; or use the new PL-259-CP solder-less connectors.)
- Never connect the connector to the antenna without lubricating the threads. The lubrication keeps moisture from "crawling" down the threads. Be careful not to get the lubrication on the center pin or base of the connector as this could act as an insulator and prevent a good electrical connection.
- Always tape or heat-shrink the whole assembly after the connections have been completed. An outer layer of self-vulcanizing tape, followed by a layer of vinyl electrical tape provides a good weather-resistant seal. Wind the outer layer of vinyl tape from the lowest point on the coaxial cable up to and over the connector body and finish off by locking the last turn of tape in place with a small black tie-wrap. (Winding from the bottom up gives the tape an overlap like the shingles on your house and the black tie-wrap is more weather resistant than a white one and will prevent the tape from unwinding as the adhesive ages.) Another good finishing touch is to coat the tape with liquid electrical tape or a product called Scotch Coat.

West Marine, Boat US, Defender, and other marine supply outfitters are good sources of material. The West Marine Catalog is an excellent reference book even if you don't buy anything. The West Advisor pages, included in each product section, provide accurate, informative articles on product selection and performance differences. Their prices may not be the lowest but the catalog is certainly the most informative.

Now before you go buying new wire, coaxial cable or connectors there are some easy tests you can perform to see if things are really as bad as you think or at least as expensive. Here are some tests you can perform and an interpretation of the results.

1. Turn off all power to the radio.
2. Perform a visual inspection of the 12-Volt wiring and antenna connections. If corrosion is evident, clean it.
3. Temporarily reconnect the antenna and 12-Volt power to the radio.
4. Turn the VHF on and tune in to one of the NOAA weather frequencies.
  - If you can hear the signal clearly, or at least as well as a nearby boat with an antenna as high as yours, the receive side of the system is probably working correctly.
5. Turn off all power to the radio.
6. Disconnect the antenna cable from the back of the radio. With an Ohmmeter, measure the DC continuity of the antenna cable and antenna. Ideally the meter reading should be about 1.5 W (Ohms) or less.
  - Yes this is correct! VHF antennas are designed to be short circuits to DC currents in order to provide a measure of lightning protection. This low reading indicates that the antenna and cable have good connections, and there are no open circuit conditions in the antenna, cable, or connectors. Additionally, the previous test of the receiver system eliminated the probability that the antenna or cable is short-circuited. If it was you would not have heard the weather broadcast.
  - But if the meter indicated a much higher resistance, which is what we were really testing for, the cable, a connector, or the antenna is either corroded or an open circuit and needs to be repaired. And yes, the receiver can still pick up the weather broadcast and other signals even though the outer conductor of the coaxial cable is not connected to anything.
7. If the Ohmmeter read more than 1.5 W but less than 5 W the antenna and cable may have a poor connection or the DC resistance of the antenna may be slightly higher than the average antenna, but odds are that the radio will work. (Note that different manufacturers have different resistance specifications for their antennas so there will be a small range of readings from antenna to antenna even though the systems seem to be equal. Differences in coaxial cable lengths also contribute to a slight difference in the measured resistance.)
8. If the previous test results are good you should be able to hook everything up and successfully use the radio. If it still does not work correctly there is another test that will show you much more than the simple Ohmmeter tests are capable of showing. The instrument used for this test is a RF Watt meter that measures the radio frequency power actually traveling from the radio up to and out of the antenna. More importantly it can also measure the power that cannot be radiated by the antenna due to some problem with the cable, connectors, or antenna. The

correct name for this instrument is VSWR Meter, which stands for Voltage Standing Wave Ratio meter. If you have never used one or don't have one to perform this test you should have a qualified technician do this test.

- The test will show you if there are any kinks, distortion, moisture or other problems in the transmission path that may not be visible during a visual inspection.

If you would like me to check out your VHF radio and the antenna system while we are in Rockland let me know. I'll have some of the basic tools and test equipment with me and will be happy to assist as long as you allow **Gaivota** to finish the races ahead of your boat. And please, if you do, don't be so obvious as to lower your sails before crossing the finish line.