THE FOGHORN

Newsletter of the Marine Modelers Club of New England

2019-- Our 29th Year!!

April 2019

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Note: Use officers@marinemodelers.org to reach all the club officers as a group.

Upcoming Events

Saturday-Sunday, April 13-14, 2019: The WOODS HOLE MODEL BOAT SHOW. The show is almost here! At press time, we have 9 members attending, with 25 models.

Saturday, April 27, 2019, 11am – 3pm: Icebreaker Fun Float at Memorial Park Beach in Sharon, MA. This will be our first outdoor sailing event of the season. The theme for the day is "Sailboats", but all types of models are welcome.

2019 Membership Dues

It is that time of year-- time to pay your 2019 dues! The membership form is attached to this issue of the Foghorn, and is also available on the club website. You can pay Linda Arini in person at the next meeting, mail her a check, or use PayPal. (Use the PayPal button on the main page of the club website.)

Dues are $25 per year. If you need the form, you can always find it on the club website.

Important: Linda had to open a new club checking account, and she had to put her name on it. If you are mailing a check for your dues, please be sure to make it out to **Linda Arini.**

If you don't pay your dues soon, it will affect your receipt of the newsletter-- we'll start sending you two copies! (How's that for a threat? Better pay up!)

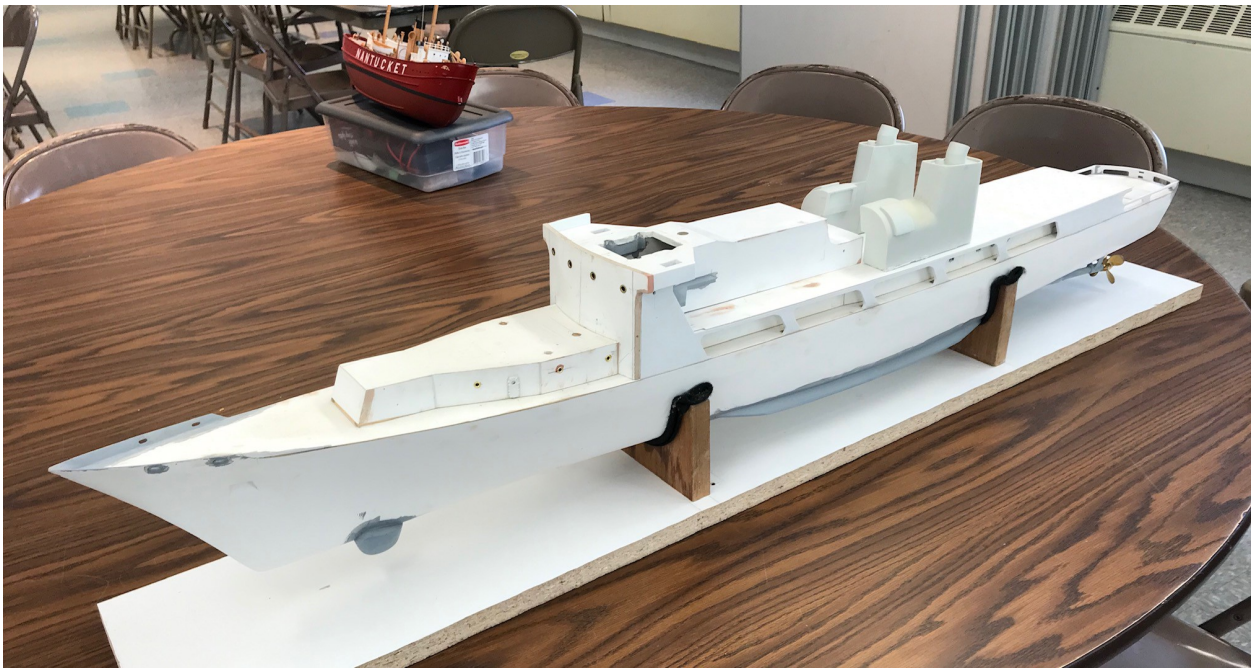
March Meeting Report

The March meeting was held at the UCC Church Hall in Medfield, MA. Members attending included Mike Hale, Charlie Tebbetts, Bob and Johanna Okerholm, Frank Cook, Bill Michaels, Alan Beeber, Lou Hills, Harold Cohen, Willi Zankel, and Gaspar and Joanne LaColla.

After conduction a small amount of business, Bill and Alan did a presentation on using LED Lighting in models. There was a wide variety of LED types and sizes on display. Bill opened with a rundown on the basics, and Alan took over and talked about some of the electronics that can be used to control the lights. Lou Hill had also brought in some cabin parts from his 1867 tugboat project, and talked about how to simulate oil lamps with a LED.

We then moved to Show and Tell. Frank Cook brought his Christmas gift from wife Sandy-- a Billings Kit of the African Queen. Franks was looking to collect ideas and tips on how to build it, and he left with plenty!

Gaspar LaColla brought in a 1/96 scale USCG Hamilton class cutter. He is building it as a static model, for a former USCGC DALLAS crew member. Gaspar is using some of Eric Bertelsen's Laser cut foam board superstructure parts.



Gaspar also brought in his large 1/96 scale French Ocean Liner, the Normandie. Gaspar had been working on the model for a few years, when he ran into trouble with come of the many, many windows. He then set it aside for a few years to focus on other projects, but is looking at resuming work on it soon.

Below: The aft lounges and galleries on Normandie. Gaspar reported he cut hundreds of windows and drilled out about a thousand ports by hand!

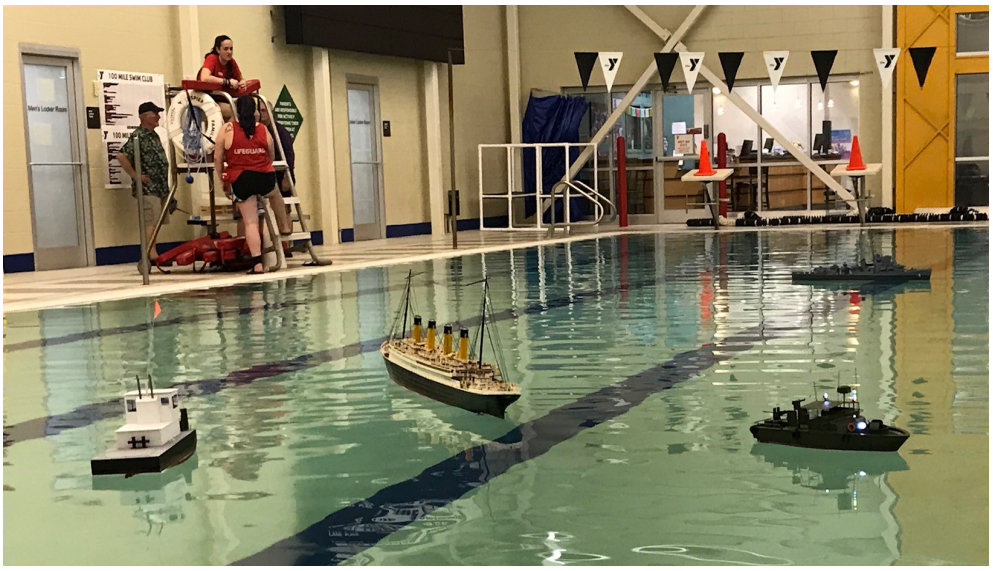
Indoor Fun Float: Saturday, March 23, 6-9 pm

We tried something new last month-- an indoor Fun Float. I think everyone who attended would agree it was a good time. It was held at the Foxboro MA, YMCA pool. We had exclusive use of the pool for a three hour window, from 6-9pm. Members attending included Charlie Tebbetts, Shaun Kimball, Bill and Kaja Michaels, Luis DeOliveira, Greg Evers, Mike Hale, and Frank Cook. We also had several guests in attendance, including Luis' daughter, Greg's two brothers, and five additional members of the Tebbetts family. I had my Springer Tug on the water with the remote camera mounted in the pilothouse, and took a bunch of photos...

Greg Evers had his 1/96 scale Destroyer Escort USS Evarts. Small warships can be tricky in 1/96 scale, but Greg's model is a graceful, stable model.

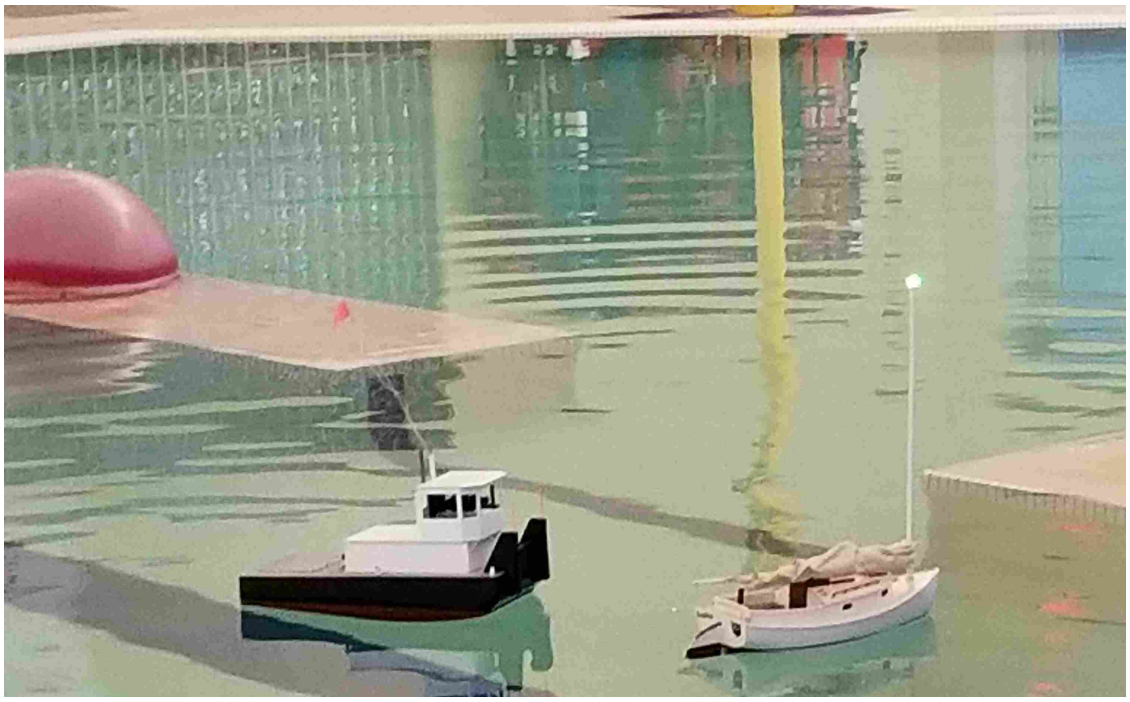
Shaun Kimball brought a trio of models. His big 1/150 scale RMS Titanic was back in service with a repaired propshaft- it was the first time it had been in the water for some time. The great thing about sailing in the pool was that it allowed Shaun to identify and correct a slight trim problem in the calm waters. Shaun was happy that the model passed its “Sea Trials” in the pool.

Shaun also had his 1/96 scale Destroyer, and a new (to him) fishing boat he acquired from Arthur Perlmutter. The camo on the destroyer was effective-- the auto-focus in my little camera didn't like it, so there are no photos of that model this month!



Left: Four models underway in the pool. The USS Evarts is in the distance, and Mike Hale's PBR is in the lower right. On the left is my Springer tug, trying to get into position to take a photo or two of Titanic.

Mike Hale brought along his dynamic diving submarine, which means the sub has to have headway on to enable the dive planes to force it beneath the surface. Pools are the best place to run a sub- you can see them the whole time, and there's no worries about getting caught in unseen weeds. The black sub only disappeared when stopped over the pool's swim lane markings!



Above: The “Paparazzi Springer” chasing Charlie Tebbetts' new Cape Cod Catboat “Sophie”. Charlie's boat had a nifty little all-in-one red-green-white masthead running light. This type of light is often seen on real small boats, but is seldom modeled.

Below: “Got her!!!”

Above: Shaun Kimball launching his fishing boat "Orlando". The pool was a great place to test out a new or recently updated model!

Left: Four members of the Tebbetts clan.

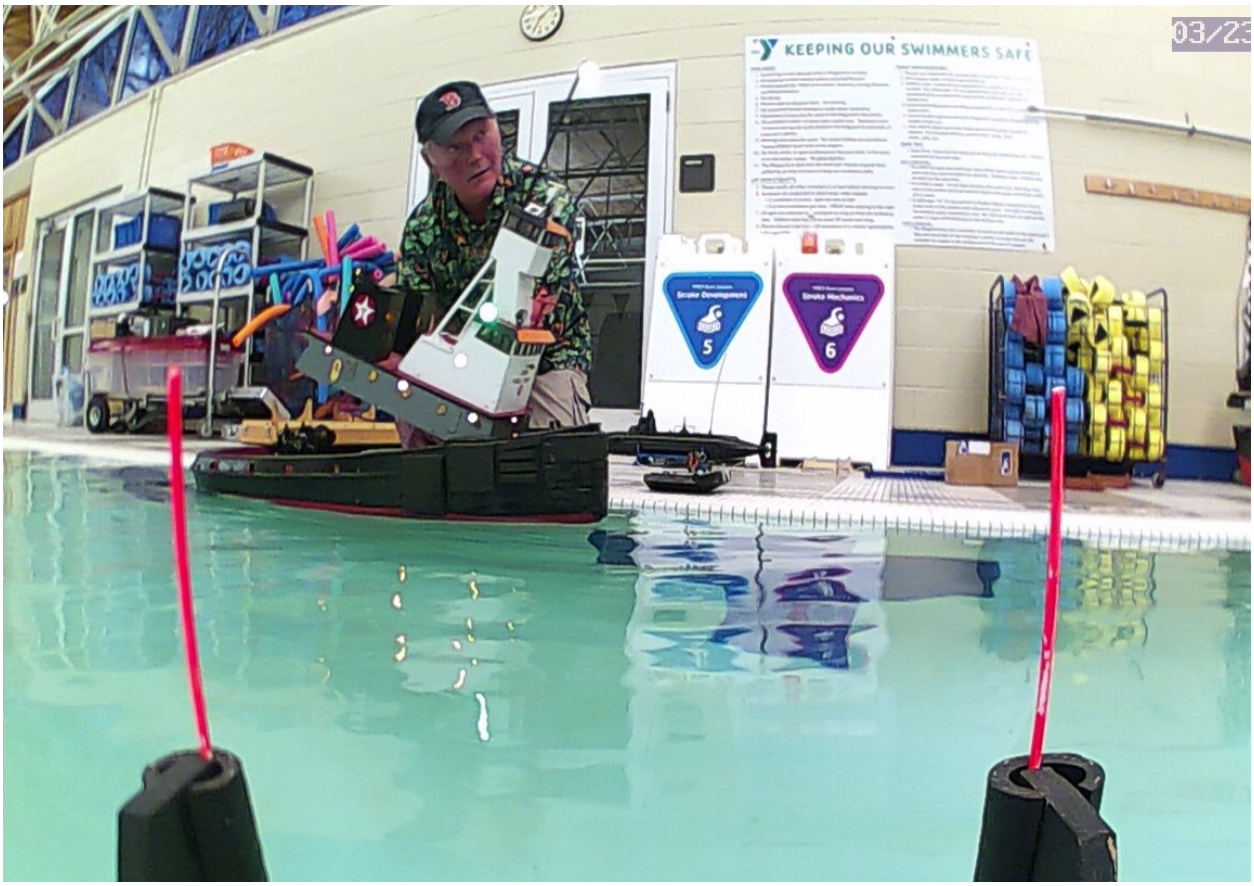
The pool at the “Y” was a great layout-- there was a the main lap pool, and a smaller kids' area with wide, gradual steps along one whole end. There was a wall separating the two areas with a small opening-- think of it as the gap in a breakwater that you passed through to get form the harbor to the open water!

Here is the view from the back of the “harbor” area looking out towards the open water of the main lap pool.

Editor's Notes

I don't have much to add this month-- except to publicly thank our Events Officer, Charlie Tebbetts for all his efforts to get us into the pool for this indoor sailing session!

Here's a shot of Charlie poolside, getting his big Texaco tug ready to go.....



Reminder: Meeting Cancellation Notices

If you would like to get notifications that a scheduled event has been delayed, postponed, or canceled, we need your text number. Please send me your cell number, and I'll add it to the list to share with the other officers.

The best way to get your number to us would be send an email to the officers@marinemodelers.org list. You can also text me directly (978-760-0343), and I'll add you to the list. (Please be sure to identify yourself in your message- otherwise I won't know who 781-555-1234 is!) I will compile the master list and then give it to Charlie, our Events Officer, who will likely be the one sending out a notice if needed.

Boating Basics

This month's “Boating Basics” feature is the background material form the LED presentation that Alan Beeber and I did at the March meeting. (I had promised people I'd run it in the next newsletter.)

Using LEDs in scale models

LED Advantages over incandescent bulbs:

1. Available in a variety of shapes, colors, and sizes.
2. Generate no heat.
3. Can last for 10,000 hours or more.

Some typical ways to use LEDs:

- Lights for instrument panels.
- Red and green Navigation Lights.
- Interior lighting for any vehicle with an interior. You could use a strip of white lights to light the portholes of an ocean liner, etc. You could use red or white lights for the inside of a hangar on a ship.
- Masthead and towing lights
- Lights inside a model to allow you to see a detailed interior.

Powering LEDs:

All you need is a simple DC circuit- like a flashlight. Most LEDs need between 2.2 and 3.4 volts to light- if you go below their minimum they won't light at all. Given that most single cell batteries (AAA , to D cells) are all 1.5 volts; you will likely need two or more cells.

The other item you'll need in an LED circuit is a resistor. This essentially restricts the amount of current going through the LED, so it doesn't get burned out. See Circuit Design Tips below, for more info.

LED Shopping tips

LEDs can be found in all sorts of sizes and shapes. A couple of the most common ones are cylinders, domes, and flat surface mount types. LEDs typically come with a some key technical specs:
Voltage: The minimum amount of voltage needed to light the LED, you can go higher.
Current: Two values are given Continuous and Maximum. For long LED life, we want to stay close to the continuous value-- and we exceed the max value, the LED will be toast.
You need to know the continuous current value and the voltage to compute the size of the resistor.

When ordering, pay attention to the "Viewing Angle"- some are bright over a small range, while others are much larger. Many LEDs are designed to work as indicator lights in a piece of electronics so they are only bright when they are pointed at you-- from the side, they aren't very bright. These LEDs may have a viewing angle of only 15 to 30 degrees.

The "Forward voltage" is the minimum voltage that it will take to light the LED. Values typically fall in the 2.4 to 3.6 volt range. You can often string a few LEDs in series- a 7.2 volt source could easily power two 3.4 volt green LEDs in series (with the appropriate resistor.)

LED tips and tricks:

1. The clear plastic part of the LED can be worked with modeling tools. You can work as much of the material as you'd like, just don't expose and damage the metal core.
2. If you want to use an Led to shine out one side only (such as a ship running light), paint the back side with silver paint, then black. That will make it mirror-like, and reflect more of the generated light out the front.
3. Blinking LEDs are available, but they are usually larger in size. If you use them in series with standard LEDs all the lights will blink together. I once put two mini LEDs in the sponsons of a small helicopter, and wired them in series with a big flashing LED. The flasher was hidden away below decks, so all that showed was the flashing lights on the helo.
4. The size of an LED is usually given as a diameter, in millimeters (mm).

Circuit Design Tips:

LEDs are polarized-- they have a (+) and (-) leads. If you connect them backwards, they won't light at all. The longer of the two leads is the (+) side.

LEDS need to have a resistor in series-- if you hook them up directly to a battery, you will quickly burn them out. The key is to get the current down to the level the LEDs are rated for-- typically between 20 and 30 mA. (Mili-Amps.) I find that generally, the brightness of the LED doesn't change a whole lot between these two values. If I am mixing two colors of LEDs in the same circuit, the LEDs often have different recommended current values-- I just use the lower one, and both LEDs still light fine.

http://led.linear1.org/led.wiz is an example of a site that will help you design your LED circuit.

When you are looking to put a couple of LEDs in series with a battery on a circuit, you add the voltages together.

Useful References/Sources:

www.superbrighteds.com Carries a wide variety of LEDs-- look at the "Component LEDs" tab.

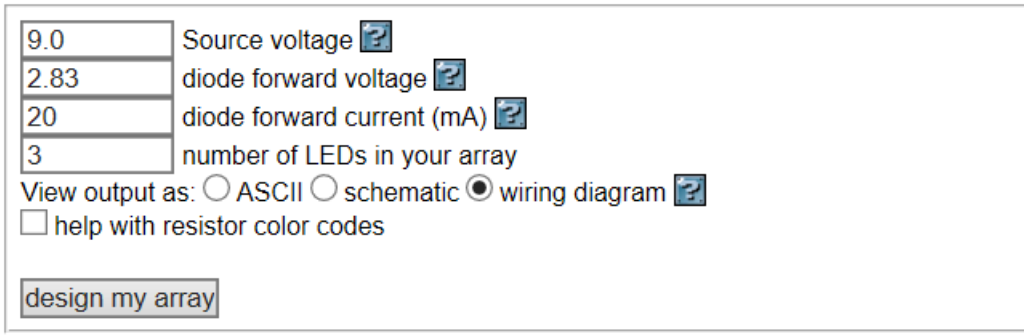
You Tube-- there are a number of "Using LEDs in models" videos there.
Modeltrainsoftware.com has a number of pre-packaged sets, plus components.

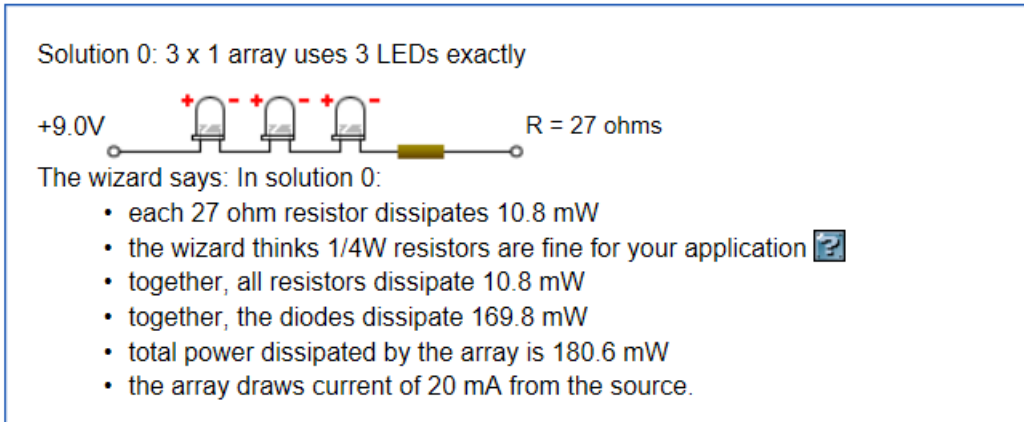
An Arduino chip can be used to program a bunch of LEDs to light at different times. That is more of an advanced topic, for another time.

Here is a real-world example. I want to add working running lights to a small motorboat-- red and green running lights, and a white stern light. The specs of the LEDs I picked are:

Red: 5mm 360 degree LED: 1.9 volts, 20mA continuous, 100mA max.
Green: 5mm 360 degree LED: 3.4 volts, 20mA continuous, 100mA max.
White: 5mm 35 degree LED: 3.2 volts, 30 mA, warm white 3100K, 30mA/100mA. (The only warm white in this size has a 35 degree viewing angle, but that's OK, because it will be mounted in a metal fitting so that's all I'll need. (If I needed a 360 degree light, I would have to get a colder white LED.)

The model runs on a 7.2 volt battery, but that wasn't enough voltage to drive three LEDs in series. They need a total of 8.5 volts. I also like the idea of a separate lighting circuit so I can leave the lights on if I want, without running down the model's drive battery. So, I opted to use a 9 volt battery to drive the lighting circuit. The LED wizard can only handle one set of values of the LEDs, so I used the average of the three, and entered the data as three LEDs at 2.8 volts, at 20 mA. and get the output that I need a 27ohm resister in the circuit:





2019 Events Schedule

Here is the 2019 Club Schedule. Note that this is subject to change, and that updates will be posted on the club website, as well as sent via email.

Date (Saturday, unless otherwise specified)	**Event**
March 16th 1-4 pm	Indoor Meeting at the UCC Church Hall in Medfield, MA.
March 23rd, 6-9 pm	Indoor Fun Float at the YMCA Pool in Foxboro, MA. ($10 co-pay)
Saturday-Sunday, April 13th - 14th	Woods Hole Model Boat Show
April 27th, 11-3pm	Fun Float at Memorial Park Beach in Sharon, MA Theme: Sailboat Day
May 18th, 11 – 3 pm	Fun Float at Memorial Park Beach in Sharon, MA
June 1st, 9am - 5pm	Piscatagua River Fest, Portsmouth, NH.
Thursday, June 20th, 10 am - 4pm	Joint Fun Float with the Mid-Coast Maine Ship Modelers, at Rogers Park Pond in Kennebec, Maine.
July 20th, 12:30 - 4pm	On-the-water event, Redds Pond, Marblehead, MA.
Saturday-Sunday August 3rd-4th	Salem Maritime Festival
August 24th, 12-3pm	Fun Float and Club Picnic at Memorial Park Beach.
September 21st, 9 am - 2pm	Steering Course Regatta at Memorial Park Beach in Sharon, MA.
October 5th, 3- 7pm	Day/night run at Memorial Park Beach in Sharon, MA.
November 16th, 12-4 pm	Club Trip to Herreshoff Museum Tour, Bristol, RI.
Sunday, December 8th, 12-4 pm	Annual Holiday Dinner at Prezo Bar and Grille, Milford, MA.