

# THE FOGHORN

*Newsletter of the Marine Modelers Club  
of New England*

**2017-- Our 28th Year!!**

**August 2017**

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Note: Use [officers@marinemodelers.org](mailto:officers@marinemodelers.org) to reach all the club officers as a group.

## Salem Maritime Festival

**Saturday-Sunday, August 5-6! 10am – 5 pm on Saturday, and 10am – 4 pm on Sunday.**  
Setup will start around 8 am on Saturday, and break-down will be at 4 pm on Sunday.

We'll have the portable pond and the Noodle Tugs, plus our usual display tables under the tent. We will have our usual spot, right at the head of the pier. We'll have our usual awning and tables for the model displays, with the portable pool right in front of it.

This is an important event for the club-- the sponsors give us a \$400 donation for being there. We need club members to help one or both days. We need:

- Set up help on Saturday morning
- People to bring models to exhibit on Saturday and Sunday. We need a bunch of models to display!
- People to help man the tent and supervise the kids running the Noodle Tugs in the portable pool both days.
- People to help break down the pool on Sunday afternoon.

Please contact Ed Arini to let him know if you can be there, and when. Even if you can only be there for a few hours, your help will be appreciated.

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**IMPORTANT NOTE:** The plans for the Float on August 20<sup>th</sup> are still in flux. Updates will be sent via the email list and posted on the website

## Virtual Fun Float in Sharon

Because of confusion surrounding the parking pass program at Memorial Beach Park in Sharon, we had to cancel our Fun Float scheduled for July 9<sup>th</sup>. Apparently, we misunderstood the new policy at the Beach during swim season. Instead of the old way, where we needed to pay for passes per car, the new program is that visitors need to pay \$9 per person at the gate. (No family or kid rate.) Also, we would only be allowed in the main parking area to unload-- we then had to park across the street at the High School, behind the tennis courts.

Because of this, and because we didn't get this fully sorted out and understood in time, the Officers decided to cancel the event. Now that we fully understand the implications, we are actively looking for an alternate site for the August 20<sup>th</sup> float. The feeling among the Officers is that this is not a viable solution for the club on a recurring basis. (Note that this is only an issue during swimming season- our spring and fall events are not affected.)

Since we didn't hold the event in July, here are some pictures of things you might have seen had there been an event....

Below left: None of these guys were there. Below Right: Didn't happen in July.



If I had been there, I would have been there with a new model on its first sea trial. Here is a shot of my 1/144 scale USN Casablanca class WW2 Escort carrier. I'm building the model as the USS Guadalcanal, the ship that captured the U-505 during WW2. (That is the sub on display at the museum in Chicago.) The model is about 42" long, and is from the Glynn Guest stand-off scale design that appeared in Model Boats Magazine back in 2003, and again in the 2013 Warships Special Edition of the magazine. The model is powered by a 55-turn 550 size brushed motor used in rock-climber RC trucks. It is a lower rpm, higher-torque motor, and is a great match for this hull. This was the model's first time in the water-- I had to add 8 pounds of gel cells to get it close to the waterline!





Another model we might have seen is Eric Bertelsen's 1/96 USCG Juniper class Buoy Tender. This is a model of the new 225' Buoy Tenders that were the replacement for the WW2-vintage 180' foot class. The 28" long model has a working bow thruster, and is very maneuverable. Here is a shot of Eric's model on Redd's Pond, along with Paul Phinney's Royal Navy Type 45 Destroyer HMS Daring. Notable features on these models include the rotating air search radar on Paul's model, and the 3D printed crane on the Eric's Buoy Tender.



I am also happy to report that I have solved the motor issues in my Dumas USCG 36500 Motor Lifeboat. Back in April, at our first on the water event, I was running the model with a MACK 380 motor and 2.5:1 gearbox that a few other builders of the kit had recommended. I found the model to be too slow-- it looked like the max speed was about 30% of what it should be. I then swapped out the motor for an old Pittman I had, using direct drive. That motor gave good speed, and was incredibly smooth. But it was a huge battery hog-- I only got about 10-15 minutes of run time from a 5000mAh pack. I ordered a 385 motor from Cornwall Model Boats, and tried that next. (The 385 is a 5-pole version of the ubiquitous 380, with more torque and a lower rpm

than its 3-pole cousin.) That was a perfect match. The boat's top end is little faster than scale, and the battery pack lasts a long time- it was still going after an hour or running.



### **Editor's Notes**

This has been a tough summer for yours truly. I haven't been able to attend any club events so far this summer-- I was away for the May float in Wilmington, on vacation in France for the June float, and then we had to cancel the July float. But I will be at Salem!! (But I will be out of town and will miss the August 20<sup>th</sup> event, where ever we end up holding it!)

Because I haven't been around, my supply of photos has dried up. So, instead of reading about what others in the club are doing, you get to read about what I've been working on....!

Arduino micro processors: The Arduino is an inexpensive micro controller on a circuit board which makes it easy to receive inputs and drive outputs. (A micro controller is a integrated computer on a chip.) Some examples of inputs would be a temperature sensor, a motion sensor, a distance sensor, a switch, or a signal from an RC receiver channel. Some examples of outputs would be an LED, a light, a screen, an electric motor, or a a hobby servo.

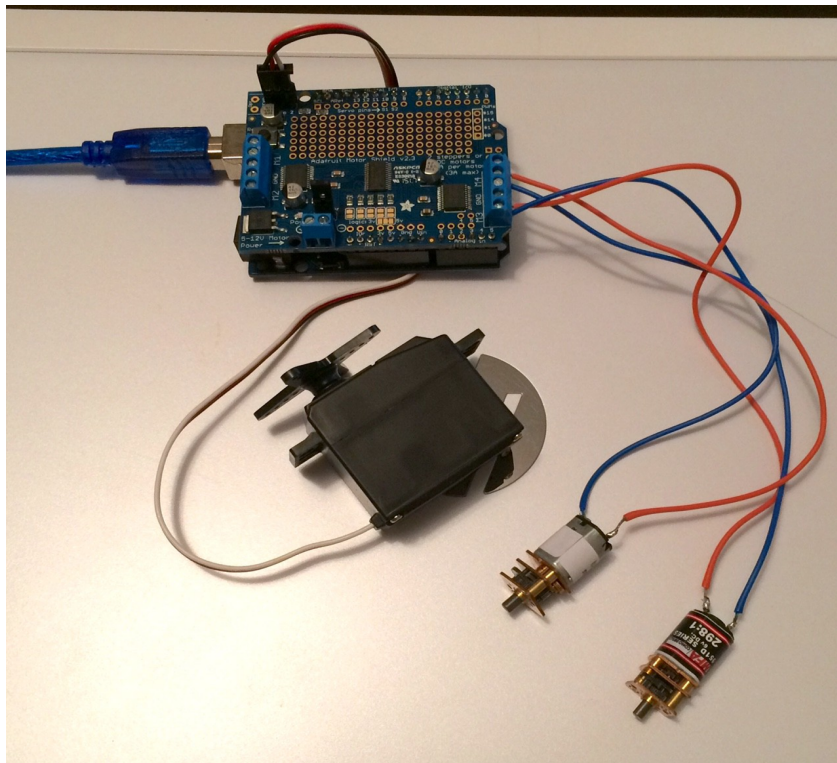
The Arduino is popular with robotics hobbyists and electronics experimenters. The board itself costs about \$20. I bought an add-on, a motor controller board that plugs into the first one, for another \$20. I now have the ability to control up to four brushed motors and two servos. There is a ton of help online-- including tutorials and sample programs. The programs are written on a computer, and downloaded to the board using a USB cable.



I've been playing with the Arduino for about 5-6 hours over the course of a couple of weeks. I went through the step-by-step tutorial, where I learned how to install the software on my PC, and download a sample program to the Arduino. I then learned how to add a simple LED circuit, and edit the program to make it blink at different rates. Then I moved on to using brushed motors and servos.

Why am I doing this?

I see real potential here for automating features on RC scale boats. As it stands today, I have a program that when launched, will rotate a servo a specified amount, pause, run a little brushed motor in forward, then in reverse, pause, then do the same with a second brushed motor, pause, then rotate the servo back to its starting position. Imagine if this was installed in Destroyer-- I could open the hangar door, then push a helicopter out onto the flight deck, then close the hangar door-- and then do the reverse and put the helo away. Another application would be in controlling a crane- driving the rotation, boom lift, and winch in/out functions.



Here is a picture of my test bed system. That is a standard Futaba S3003 servo plugged into the Arduino. The blue cable is the USB cable that connects it to my laptop. The little brushed motors came from Cornwall Model Boats- they are 6 volts, one has a 60:1 gearbox, and the other has a 298:1 gearbox.

I am mixing a servo and DC motors here because I can-- to explore the possibilities. It would be pretty easy to add a flashing LED to the mix if I wanted, too!

The Arduino runs on 5 volts. It can be powered by the USB cable, which is handy during

the development phase, or by a separate power source using the included barrel pin socket.

If you are interested in learning more about the Arduino boards, I highly recommend [www.adafruit.com](http://www.adafruit.com). The site has all the parts and supplies, and a terrific online learning section.

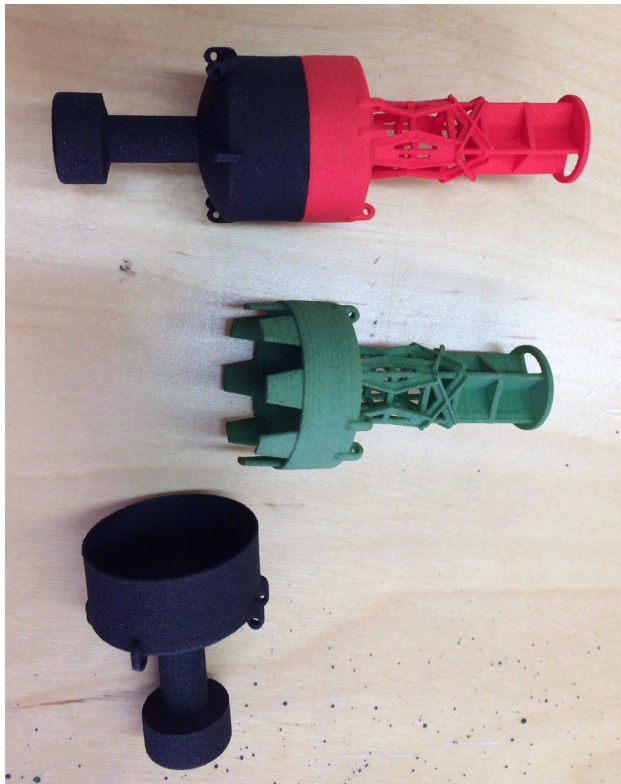
**Dave's R/C Electronics:** I recently found David McCormick's little company while searching for servo speed reducer. While aimed primarily at RC aircraft pilots, Dave's offers a bunch of little electronic RC goodies that may be of interest to us boat guys. I needed a server speed

reducer, and he had an adjustable one that would slow a servo down to about a 14 second transit time. I also got neat little adjustable voltage reducer- it can take an input of 4-38 Volts, and you can set it to drop the voltage down to a specified value between 1.25 and 34 volts. (5 Amp max current.) I'm going to use this to provide a steady 5 volts to my Arduino, when I need to use it in a boat.

Dave's offers various lighting harnesses, and he also has an interesting servo sequencer that may be of interest to us boaters. It was developed for the scale RC aircraft builder, who wants his retracting landing gear to operate in a scale-like fashion. The sequencer allows the builder to hit use the "retracts" channel on his radio to do all of the following: Open the door, retract the gear slowly, then close the door. It allows the builder to use two servos to do this, all driven (automated) by one RC channel. I could see this being of value on a scale RC boat, if you had a simpler need, and didn't want to go down the Arduino route.

In the course of my purchase, I emailed Dave multiple times. He was very responsive, and gave great advice. He can also customize his products to meet a builder's (including boaters) specific needs-- all you have to do is ask!

Affordable, customizable, great service-- I am a very happy customer. To find out more, go to [www.davesrce.com](http://www.davesrce.com).



**1/96 scale Buoys:** Eric Bertelsen showed me these really nice looking 1/96 scale buoys he designed for 3-D printing. He had them printed in color, and they are in two pieces so they can be opened up. He plans on using them as part of the deck load on his USCG Buoy Tender, but I think they'd look great in the water! (It shouldn't be too hard to light them with some LEDs.)

**Marine Modeling International Magazine:** I saw a note on a couple of the British model boating forums last week, announcing that the magazine's parent company Traplet had ceased operations and was going into the British version of bankruptcy. All of the Traplet hobby magazines were impacted, and the staff at MMI was "made redundant". (British version of "laid off".)

**Model Boats**, the other British magazine, is still alive and well. They are somewhat impacted by this though, as they had outsourced the processing of their plans service to Traplet. (You get a "Store Closed" message on the website.) The word is that it will take a little time for them to make arrangements to resume selling and shipping the orders for their plans.

## 2017 Schedule

(updated 28 July, 2017)

<b>DATE</b>	<b>EVENT</b>
Friday-Sunday, February 3-5	Providence Boat Show, Rhode Island Convention Center
<i>Friday-Sunday, February 24-26</i>	<i>AMA Expo East (Formerly the WRAM Show), Meadowlands Exposition Center, Secaucus, NJ</i>
Sunday, March 12, 1-4pm	Indoor Club Meeting UCC Church Hall, Medfield, MA.
Friday-Sunday, April 21-23	Woods Hole Model Boat Show
<i>Saturday, April 29, 9am-4pm</i>	<i>Northeast Joint Club Ship Model Conference and Show, New London, CT</i>
Sunday, April 30, 11-3pm	Icebreaker Fun Float, Memorial Park Beach, Sharon
Sunday, May 21, 11-3pm	Fun Float at Silver Lake, Wilmington, MA
Saturday, June 17, 12-4pm	Fun Float at Redd's Pond in Marblehead, MA
<i>Sunday, June 25, 8am – 6 pm</i>	<i>Empire State Model Ship Club Regatta, Flushing, NY.</i>
Sunday, July 9, 11am - 3pm	<del>Fun Float at Memorial Park Beach in Sharon</del> CANCELLED
Saturday-Sunday, Aug 5-6	Salem Maritime Festival weekend.
Sunday, August 20, 11-3 pm	Fun Float at Memorial Park Beach in Sharon NOTE: This event may be moved to another location--- check the web site for updates.
Sunday, Sept. 17, 11am-3pm	Fun Float at Silver Lake in Wilmington
Saturday, Oct. 14, 2-7pm	Day/Night run and Club Picnic at Memorial Park Beach
Sunday, Nov.12, 1-4 pm	Indoor Meeting at UCC Church Hall in Medfield, MA
Sunday, December xx	Holiday Dinner, location and date TBD

**Note:** Items in *purple italics* are not club-sponsored events- they are listed here because we felt they may be of interest to our members and friends.

Check the club website for the latest version:  
[www.marinemodelers.org](http://www.marinemodelers.org)