

# The Bilge Pump

The Official Log of the Northwest R/C Ship Modelers www.shipmodelers.com

#### December 2023

#### Look Ahead Events

#### JANUARY

- 4 Meeting at The Facility 7 pm 6 Fun Float at SYC 9 am
- 6 Fun Float at Port Madison 9 am

#### **FEBRUARY**

1	Meeting at The Facility	7 pm			
3	Fun Float at SYC	9 am			
MARCH 7 Meeting at The Facility 7 pm					

/	Meeting at the Facility	7 pm
9	Fun Float at SYC	9 am

More events information and updates on calendar page later in newsletter and check our club's website for latest updates.



Read more about members' projects.

#### **2024 DUES ARE DUE IN JANUARY**



Annual dues are \$40. If you have not paid yet, please forward your dues payment to:

Bryan Morse ( new address ) 1630 NE 186th St, Shoreline, WA 98155

Make checks payable to: NW R/C Ship Modelers

# From the Bridge

Steve Sunich

Well, we are into the winter season and are still running in the great Northwest. Even though we have had some wind and rain, the fun floats continue and so does building boats.



Right again! The December 9 fun float had good weather. Yeah, winter chill but, not raining.

What a meeting turnout for show and tell. Keep building and keep sharing your knowledge and tricks of the trade. The building methods are limitless and I always learn something. Remember, there is a computer there that is capable of showing pictures of your projects along with any PowerPoint you would like to create.

We are starting our planning for the coming year. The first major event will be the Hobby Expo. The lack of a pond last year was a problem. So, this year we are planning to build a pond. This will require a little effort as it is a big job. I will be asking for a couple volunteers to help with building and assembling it. The Hobby Expo would really love to have the pond back so hopefully we can make it happen. There will be more to come at the January meeting.

Coming up on a new year, remember to join or renew your membership to SSMA (Scale Ship Modeler's Association of North America at www.ssmana.org). We get our event insurance through them and need a minimum number of members to qualify. They also provide an excellent quarterly newsletter that includes what the rest of the clubs in the United States are doing.

Also, see the meeting minutes, dues were voted to increase to \$40 per year.





April 12, 2024 – Friday - Setup Only April 13, 2024 – Saturday 9 am to 6 pm April 14, 2024 – Sunday 9 am to 4 pm

Evergreen State Fairgrounds located at 14405 179th Ave SE, Monroe, WA 98272, USA

More information at EXPO's website www.nwmhe.com

# Mark Your 2024 Calendars!

Meeting Minutes - Dec. 7 By Steve Sunich Photos by Robert Osmond, Steve Sunich & Paul Williams

**Steve Sunich** kicked off the meeting with 17 in attendance at The Facility Makerspace at Edmonds Community College in Lynnwood, WA. There was some very brief business and summary of the last functions. We



discussed the diminishing membership. We now have around 50 paid members. So, Steve requested everyone that knows a member that has not renewed their membership, to do so.

From the membership discussion, the group wanted to increase annual membership dues to \$40 per year. That was moved, seconded, voted on, and was passed.

Members were again reminded to join the SSMANA (Scale Ship Modeler's Association of North America at www.ssmana.org). We need a minimum number of SSMANA members from our club to get insurance for NWRCSM's two Regattas and special events.

Steve said that he and Robert Osmond have been discussing the possibility of building a pond that can be used at the Hobby Expo. The Hobby Expo has been asking about getting one because it is a big attraction. He will be asking for volunteers to help design and build it.

There is a fun float on December 9<sup>th</sup> at SYC. Members should not let the weather forecast bother them as the fun floats seem to get a break in the weather.

There will be two fun floats on January 6<sup>th</sup>. The regular float will be at Seattle Yacht Club and members are welcome to attend. A parallel float will be sponsored by Seattle Yacht Club at their R/C Derby at their Port Madison outstation on Bainbridge Island. It is put on by our own member Bob Brown. The Pacific Northwest Model Yacht Club sailboat club will be there to put on races. SYC would love to see some model tugs, ships, yachts, etc. there too. Lunch is provided and complimentary. In case of weather, there is a club house on site where we will display boats. Tables will also be provided. If you are interested in the SYC fun float, please contact Steve Sunich.

Show and Tell was great again, with some very neat projects in the works. Great presentations were made on the full-size screen.

**Allan Wing** kicked off show and tell with the repowered noodle boats. He has been experimenting with different motors. He gave us a dissertation on how to get information about the RPM and power of electric motors by reverse EMF. He simply used a drill motor, with a known RPM, to turn electric motors and measure their output with a voltage meter. He had one extensive research on motor RPM's and power output and create charts of information for many motors. *(Please see Allan's separate article in newsletter).* 



**Lee Buse** brought a miniature Springer tug from Germany that is 3-D printed in nine pieces. It is twin screw and is run with a DX-6i transmitter.



David Zanzig showed a birthday present of the sternwheeler "Major" kit.



Of course, ever dependable **Dave Green** participated with the gadget he built to run a light for his light ship. It is made to give a certain timing with the light. It appears to work similar to an old victrola where a disk turns and makes an electrical connection at certain points in the turning disk. For his lightship, he will be adding a fog horn and a working anchor winch built from an old fishing reel. However, he needs to plan the deck opening carefully to fit everything in.



Robert Osmond showed us an old small plastic battleship model.



**Richard Goodrich** showed us a quick setting epoxy adhesive (from Harbor Fright) for which he has been successful. He also uses a kick starter and super gold quick glue (from Hobby Town).



# December 9th Fun Float-SYC By Steve Sunich

Photos Allan Wing and Robert Osmond

Well, again, I was right. The weather was good to us at the Seattle Yacht Club. It was threatening, but held off for us. That held true again on December 9. Five were in attendance. **Darlene and Allan Wing, Robert Osmond, Chris Merrill, David Zanzig** and I were brave enough to see that the weather was good for running. We were on



the outside dock so there was plenty of calm water. So, don't forgo the winter floats because of the weather. As we know, it always changes.

David Zanzig got some good testing done with his awesome paddle wheeler. Robert ran Pacific. Chris ran his patrol boat. And Steve ran his, perpetually under construction, super yacht.



# Bellevue Pond Ice Skating Rink By Robert Osmond

In the colder months, the Bellevue City erects an ice-skating rink in the pond where we usually run our boats.

When they first started making the skating rink, it was only a small part of the pond but over the years, they have made it cover almost all of the pond. It looks like quite a nice facility. One of the side benefits is that all the missing model boat parts have a chance of being found and the pond is cleaned each year.





Northwest Remote Control Ship Modelers



# New Function - Seattle Yacht Club R/C Derby - Jan. 6

In addition to the Fun Float, at SYC, on January 6, 2024, NWRCSM has also been invited to their Port Madison R/C Derby! The Fun Float at SYC will still be held, but there is an added opportunity for something new. SYC's Port Madison outstation is on Bainbridge Island in a calm bay. You would be running off of nice docks in the salt water. The clubhouse provides warmth and shelter in case of weather. Our own NWRCSM member, Bob Brown, is heading this up. Below is the actual invitation containing pertinent information about this event. We will need some boats, dock and barge so please let Steve Sunich know if you are interested in attending so we can start gathering the necessities.

#### Hello fellow model boaters!

I would like to invite your members to join us at our Port Madison Outstation for our 2024 Remote Control Derby. It's the same plan as last year. We will set up a day where your members will demonstrate your vessels during at various times, and we will have a lovely complementary BBQ for you to enjoy. Please save this date on your calendars and pass the word to your memberships.

From PNMYC, we'd love to see an exhibition race, as well as allowing interested SYC members to try out your vessels under supervision. Please feel free to bring boats under construction or boats you'd like to display. At this event I plan on having one or more tables set up in the Clubhouse for you to have a display, and where you can perhaps even recruit new members!

From NWRCSM, I'd like to see your vessels participate in a 'Fun Float'-like event where they 'strut their stuff', perhaps even demonstrate a regatta event like an exhibition docking or barge pull (?) event. Also, if you would allow SYC attendees to try maneuvering your boats under supervision, that would be great. You will also have tables available for you in the Clubhouse for static display and promotion of your organization.

As we get closer to the event, I will share with you a schedule with the specific events of the day.

When you are able, please let me know about the amount of interest, and how many of your members we may expect (so we lay in a proper supply of goodies for the BBQ!). We hope to see you there!

Best wishes,

Bob Brown Co-Chair, 2024 Port Madison Remote Control Derby

# Noodle Tugs By Allan Wing

At the beginning of this season I took on the task of taking 2 Noodle Tugs that were built by David Zanzig and completing them so that theycould be used by children at our Fun Floats. We felt that this might be away to get younger people and their parents interested in R/C boating. I completed the boats by adding a battery and speed control from my spare parts and purchasing 2 pistol grip transmitters. I showed the completed boats at the next meeting and was advised that the motors were running too fast and that the throttle input from the transmitter needed to be reduced. Since the transmitters I had did not have any dual range capability this was accomplished by taping a small piece of wood under the throttle trigger to limit the transmitters to about 1/2 throttle. The Tugs were ready for their first running for the August Tug event at the Bellevue pond.



The Noodle Tugs were a hit with many of the kids but it quickly became apparent that the motors still ran too fast and drew too much current such that the batteries would only last a short time and the motors would get hot.

I decided to look for replacement motors that would have a much slower free run speed. I found some motors that were rated at 4000 RPM at 6 volts that were the same size as the existing motors. I installed these motors and tested them in the bathtub. I found that the slower motors would drive the tugs at what appeared to be an acceptable speed and draw only about 1/4 the current of the original motors.

I showed one of the modified boats at the December meeting. In preparing for the meeting I felt that there should be some way that a person could determine the speed of a motor when building or modifying a boat. A review of brushed DC motor operation showed it was clear that if you could spin a motor at a known speed and measure the generated voltage you could determine the KV of the motor. KV is the RPM of the motor per volt of the applied battery. A KV of 1000 means that the motor will turn 1000 RPM per volt or 6000 RPM when connected to a 6 volt battery. I found that by attaching my drill to the motor to be tested and running the drill at full speed I could measure the

voltage and determine the KV in just a few minutes. I had used an optical tachometer in the past and that had proved difficult to set up and the propeller stick or whatever I used to interrupt the light affected the measurement. Using the drill and a volt meter was quick and easy as well as being very accurate.

I then tested several motors including the original motors used in the tugs and the replacement motors. I used a fairly powerful 20 volt drill that would be affected very little by any drag of the motor. I found that the drill was rated at 2000 RPM. So each motor was tested at that speed. The original used in the tugs tested at 0.7 volts and the replacement motors tested at 3.3 volts. This means that the tugs using a 7.4 volt NIMH battery would have a free run RPM of about 21000 and 4500 respectively. The 21000 is just way too fast and unachievable with a 40mm prop. The new motors 4500 RPM is well within the desirable range of operation.



I ran tests on several motors in addition to the 2 different motors from the Noodle Tugs. One of the motors tested was a Graupner Speed 600 which we have used for many club boats for years. The results were consistent and the Speed 600 results matched published numbers from Graupner. I believe that the results from this test are very accurate to 10% or less. This test method represents a quick and easy method to test any DC Brushed motor and is not affected by variations in manufacturing, motor size or number of poles. This test does not work on brushless motors.

Please direct any questions or comments to me at webmaster@shipmodelers.com.

#### For Sale

New boat model winch's from Ron Burchett. He has seven new models that are 12 Volt, 60 RPM gear dive's, using 540 motors, and are paintable with plastic paint. Cost are \$ 225 to \$ 400. Please contact him for other information at ronburchett@shaw.ca and/or phone 250-416-0608 in Canada.



# 2024 Northwest Model Hobby Expo

April 12, 2024 – Friday - Setup Only April 13, 2024 – Saturday 9 am to 6 pm April 14, 2024 – Sunday 9 am to 3 pm

Evergreen State Fairgrounds located at 14405 179th Ave SE, Monroe, WA 98272, USA More information at EXPO's website www.nwmhe.com

### 2024 NWRCSM Events Calendar

Remaining ?? dates will be determined as the year progresses. (Update 12/26/2023)

JANUA	ARY			
4 6 6	Meeting at The Facility Makerspace Fun Float at Seattle Yacht Club SYC R/C Derby (port Madison Outstation)	7 pm 9 am 9 am	The Facility Makerspace Our meeting location is in part of the	
FEBRUARY			Edmonds Community College buildings (Monroe Hall) located at:	
1 3	Meeting at The Facility Makerspace Fun Float at Seattle Yacht Club	7 pm 9 am	6606 196 <sup>th</sup> Street SW. Lynnwood, WA. 98036	
MARCI 7 9	H Meeting at The Facility Makerspace Fun Float at Seattle Yacht Club	7 pm 9 am	More information on this facility can be found at https://facilitymade.com/	
<b>APRIL</b> 4 ?? 12 13 14	Meeting at The Facility Makerspace Fun Float at Bellevue Downtown Park (?) NW Model Hobby Expo, Setup only ?? am NW Model Hobby Expo, Monroe 9 am t	7 pm 9 am to ?? pm to 6 pm to 3 pm		
MAY 1 2 ?? ??	Seattle Yacht Club Opening Day Fun Float Meeting at The Facility Makerspace Fun Float at Bellevue Downtown Park Twilight Float at Bellevue Downtown Park	9 am to 3 pm 7 pm 9 am Sunset Only	, Wednesday boats with lights can run after dark.	
<b>JUNE</b> 6 ??	Meeting at The Facility Makerspace NWRCSM's Model Boat Regatta	7 pm 8 am		
<b>JULY</b> ?? 6	Meeting at The Facility Makerspace Fun Float at Bellevue Downtown Park	7 pm 9 am		
AUGUS				
1 ?? ??	Meeting at The Facility Makerspace NWRCSM's Tug Boat Regatta Twilight Float at Bellevue Downtown Park	7 pm 8 am Sunset Only		
<b>SEPTE</b> 5 7 ??	<b>MBER</b> Meeting at The Facility Makerspace Fun Float at Bellevue Downtown Park Fishermen's Fall Festival	7 pm 9 am 11 am		
OCTOBER				
3 5	Meeting at The Facility Makerspace Fun Float at Bellevue Downtown Park	7 pm 9 am		
<b>NOVEI</b> 7 9	MBER Meeting at The Facility Makerspace Fun Float at Seattle Yacht Club	7 pm 9 am		
5 7	Meeting at The Facility Makerspace Fun Float at Seattle Yacht Club	7 PM 9 am		

2024 Club Officers				
* * * * ~ * ~ * ~ * * * *	President: Steve Sunich	Webmaster: Allan Wing		
****	Vice President: Richard Lenington	Skagit R/C Meeting Contact: Keith Schermerhorn		
	Treasurer: Dave White	YouTube & Meetup Master: Klaus Bellon		
A DEE	Membership Database: Bryan Morse	Newsletter Editor: Paul Williams		



Photo by Allan Wing

Our club meeting location is in part of the Edmonds College buildings (Monroe Hall) located at: The Facility Makerspace 6606 196<sup>th</sup> Street SW. Lynnwood, WA. 98036

More information on this facility can be found at <u>https://facilitymade.com/</u>