



**The St. Louis Admirals R/C
Model Boat Club**
<http://stlouisadmirals.com>



BROADSIDE

Commodore – Jane Rivers (314) 355-8660 Secretary – Bob Keeler (314) 434-8640
 Vice-Commodore – Dave St. Clair (636) 671-5353 Treasurer – George Kirby (636) 978-6288
 Editor – Jane Rivers (314) 355-8660

**NOTICE: The next meeting will be held on May 4, 2015 at St. Stephen’s Episcopal Church,
 33 N. Clay Ave, Ferguson, MO 63135**

NOW HEAR THIS

FROM THE BRIDGE



I am happy to report that the members who ordered their shirts are now ready to look great in their new shirts at the next event.

Also, remember our Picnic will be at St Ferdinand Park, May 17, 2015 from 12:00 until 4:00PM, which is also our regular Sailing Day at the Park.

Hope to see you also at the Alton Lock and Dam, Saturday, May 30, 2015. The Parks Department will provide us with tents, tables and chairs. This should be a fun day.

Just received confirmation that Ballwin would like for us to be part of their event, which will be Saturday June 6, 2015. They will provide us with tents, tables and chairs. Thank you to Michelle Musgrave who helped get everything organized.

Jane
Commodore

I had the pleasure of meeting with Ken Mallen, the Grand Marshall of the VP Parade, Jeff Jones, the Mayor of Parade Town, Bill Griffin, Artistic Director, and of course John McCadden our Liaison, without whom we wouldn't be able to be part of the July 2nd and 3rd, 2015 events at Forest Park. I hope you all can join in this fun event.

If you haven't renewed your membership, dues are due by May 1st, as otherwise this will be your last newsletter. So, I hope you will continue to be part of this fun and informative club.

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 Sailing at St Ferdinand Park, Florissant, MO prior to dinner – weather permitting - 5:00 PM  
 Dinner at Applebee's, 2309 N Highway 67, Florissant, MO 63033, and 7:00 PM meeting at St. Stephens Church

Tentative 2015 meeting dates are:

Third Sunday every month – Sailing at St Ferdinand Park, Florissant, MO weather permitting – March - November

|                                                                            |                                                                      |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|
|                                                                            | May 17, 2015 – 12PM – 4PM Picnic – St Ferdinand Park, Florissant, MO |
| May 30, 2015 Alton, IL                                                     | June 1, 2015                                                         |
| July 2 & 3, 2015 Boathouse                                                 | August 3, 2015                                                       |
| September 14, 2015 - Meeting Regatta at Forest Park – Sept 26 and 27, 2015 | October 5, 2015                                                      |
| November 2, 2015 (Swap Meet)                                               | December 7, 2015                                                     |
| Subject to availability by St. Stephen's Church                            |                                                                      |

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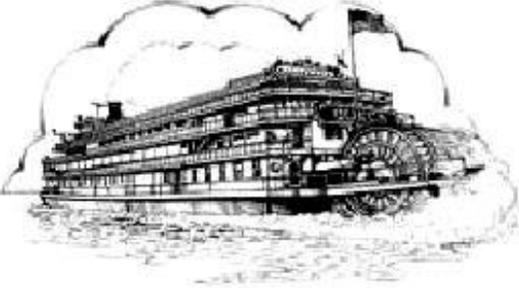
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Membership Dues ## Please take note of the following: ##

Dues for new members will be prorated on a per month basis based upon our beginning of May 1<sup>st</sup> dues.

Please make checks (no cash) payable to "St Louis Admirals R/C Model Boat Club" in the amount of \$30.00, if you want hard copy (mailed) please add \$10.00 for postage and printing. Send checks (no cash) to

George Kirby  
1146 Alyssa Ct  
O'Fallon, MO 63366

PS If you would like to have your e-mail address included for receipt of the Broadside and other publications please include it on a separate sheet of paper, to my attention. If you have moved since your last renewal, please note change of address, etc.

Thank you, George Kirby

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**The St. Louis Admirals R/C Model Boat Club**  
**Secretary's Report for April 6, 2015**

**Call to Attention:**

Commodore Jane Rivers opened the meeting at 1917 hours at St. Stephens Episcopal Church with the pledge of allegiance. There were 10 members and guest present.

**Skipper's Tales:**

- A. Dave St. Clair was the only member to sail at Ferdinand Park on Monday. He ran his American Enterprise fishing boat to which he had just finished adding lights, smoke and sound.
- B. John Ziemer is working on a fireboat. Paul Kirby is constructing a runabout from plans from a Sterling kit; just the plans, no kit. Mike Alligood has started building another pleasure craft to add to his fleet. George Kirby is working to add a rotating beacon to a lighthouse which he can use for both his garden railroad and nautical activities.
- C. Commodore Jane Rivers received an email from Dick Marshall's nephew in Scotland. Dick, who is deceased, had attended previous club regattas. Also she heard that we may have attendees from Colorado and Iowa at the 2015 Regatta.

**Report from Homeport:**

- A. Status of Club Members:** Robert Schmidt is still in the hospital with a major medical allergy. He possibly could be released by middle of April.
- B.** Emil Wolfshoeffler will not be able to attend meetings for a while. He is taking guitar lessons on Monday nights.
- C. Secretary's Report:** The February minutes were published in Broadside newsletter. There was no meeting in March due to inclement weather.  
**Note: Check to see if your SSMA is due for renewal**
- D. Treasurer's Report:** George reported the current financial status and also the amount donated to the St. Stephens food pantry.

**Fleet Information:**

- A.** The club has received an invitation to the Wisconsin Maritime Museum 39<sup>th</sup> Annual Midwestern Model Ships & Boats Contest and Display in Manitowoc, Wisconsin on May 15-17, 2015.
- B.** Dave St. Clair obtained the motors which Don McEntree donated to the club from Father Tom and brought them to the meeting.
- C.** Club picnic will be held at **St Ferdinand Park on 3<sup>rd</sup> Sunday in May (May 17)** in conjunction with the normal sailing day. Each member is to bring his/her own food.
- D.** The club received a notice of acceptance to participate in the Great Rivers Festival at the Melvin Price Lock and Dam in Alton on May 30, 2015 from 12 noon to 6 PM. Bring boats for

display and small boats for running in a small pond in front of the museum. Club insurance has been obtained for the event.

- E. Commodore Jane has received confirmation for the club to sail at Forest Park Boathouse on June 1, 2015 on our regular 1<sup>st</sup> Monday time, from 1 PM to 4 PM with reservations to eat dinner there afterwards.
- F. The club will also be participating at the New York Life Insurance sponsored event at the Boathouse in Forest Park on July 2,3.
- G. Bob Keeler will set up a meeting of the 2015 Regatta Committee sometime this month. Volunteers are Chris Kunz, Commodore Jane, Kent Morgan, and John Ziemer. More volunteers would be welcome. Commodore Jane received confirmation from the Boathouse in Forest Park for our Regatta on September 26-27, 2015.
- H. Commodore Jane is waiting to find out about participating at Benton Park and Vlasik Park in Ballwin.
- I. The September Meeting was changed to September 14 since the 7<sup>th</sup> is Labor Day.
- J. Commodore Jane has club shirts for \$8.00 each. She also has the embroidered club logo computer program and checking to see who wants a hat with the logo already attached or wants the patch only and they get their own hat and/or shirt and sew it on. Hats with logo will be \$18.00
- K. Remember that Commodore Jane has asked for club members to write about their favorite boat and their reasons behind their choice. It can be more than one boat. I'm sure each boat has a story (even if you've built the same boat 13 times Dave).

### Raffle:

The winners for gift cards to Mark Twain Hobby Center were Phil Frisch, Dave St. Clair, John Ziemer and Luther Disher.

### Show and Tell:

- A. Dave St. Clair displayed his American Enterprise, showing all the lights, rotating radar, and smoke which exits at the stern (diesel exhaust). Unfortunately, he had run the sound battery down and couldn't demonstrate sound.
- B. Bob Keeler had a few tidbits from the Blue Jacket newsletter to pass on.

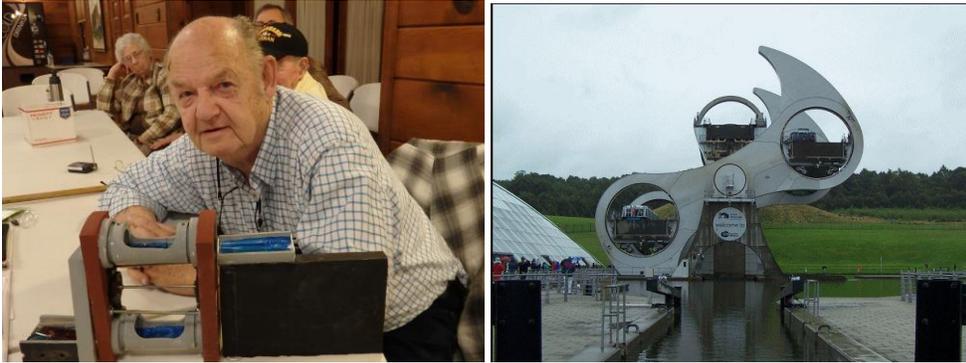
### The next meeting will be May 4, 2015.

The meeting terminated at 20:24 hours.

Respectfully submitted, Bob Keeler, Secretary

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Dave constructed a model of a boatlift – here is the real one

**The Falkirk Wheel is a rotating boat lift in Scotland**, connecting the Forth and Clyde Canal with the Union Canal. Named after the nearby town of Falkirk in central Scotland, the lift opened in 2002, reconnecting the two canals for the first time since the 1930s as part of the Millennium Link project.



The wheel has an overall diameter of 35 meters (115 ft) and consists of two opposing arms extending 15 meters beyond the central axle and taking the shape of a Celtic-inspired, double-headed axe. Two sets of these axe-shaped arms are connected to a 3.8-metre (12 ft) diameter central axle of length 28 meters (92 ft). Two diametrically opposed water-filled caissons, each with a capacity of 250,000 liters (55,000 imp gal; 66,000 US gal), are fitted between the ends of the arms.

The caissons or gondolas always carry a combined weight of 500 tons (490 long tons; 550 short tons) of water and boats, with the gondolas themselves each weighing 50 tons (49 long tons; 55 short tons). Care is taken to maintain the water levels on each side, thus balancing the weight on each arm. According to Archimedes' principle, floating objects displace their own weight in water, so when the boat enters, the amount of water leaving the caisson weighs exactly the same as the boat. This is achieved by maintaining the water levels on each side to within  $\pm 37$  millimeters (1.5 in) using a site-wide computer control system comprising water level sensors, automated sluices and pumps. It takes just 22.5 kilowatts (30.2 hp) to power ten hydraulic motors, which consume just 1.5 kilowatt-hours (5.4 MJ) per half-turn, roughly the same as boiling eight kettles of water.

The two caissons are 6.5 meters (21 ft) wide, and can hold up to four 20-metre-long (66 ft) canal boats. Watertight doors at each end match doors located on the upper structure and

lower dock pit. Due to space concerns, where a normal hinged door would dramatically reduce the useful length of the caisson, vertically rising doors were chosen. The doors are raised from a recess in the base of the caisson and powered by a hydraulic lance when docked.

### **Engine room**

The area housing the machinery to drive the wheel is located in the final pillar of the aqueduct, and contains seven chambers connected by ladders. Access is by a door located at ground level or an entrance halfway up the tower with a gantry crane to facilitate the installation of equipment.

The ground floor houses the transformers for powering the wheel. The wheel has an overall diameter of 35 meters (115 ft) and consists of two opposing arms extending 15 meters beyond the central axle and taking the shape of a Celtic-inspired, double-headed axe. Two sets of these axe-shaped arms are connected to a 3.8-metre (12 ft) diameter central axle of length 28 meters (92 ft).[33] Two diametrically opposed water-filled caissons, each with a capacity of 250,000 liters (55,000 imp gal; 66,000 US gal), are fitted between the ends of the arms.

### **Mechanism**

A reconstruction of the mechanism using Lego. Lead architect Tony Kettle used a different Lego model to demonstrate the mechanism to clients and funders.

The caissons are required to turn with the wheel in order to remain level. Whilst the weight of the caissons on the bearings is generally sufficient to rotate them, a gearing mechanism using three large identically sized gears connected by two smaller ones ensures that they turn at precisely the correct speed and remain correctly balanced.

Each end of each caisson is supported on small wheels, which run on rails on the inside face of the eight-meter diameter holes at the ends of the arms. The rotation is controlled by a train of gears: an alternating pattern of three eight-meter diameter ring gears and two smaller idler gears, all with external teeth, as shown in the picture. The large central gear is fitted loosely over the axle at its machine-room end and fixed in place prevent it from rotating. The two smaller gears are fixed to each of the arms of the wheel at its machine-room end. When the motors rotate the central axle, the arms swing and the small gears engage the central gear, which results in the smaller gears rotating at a higher speed than the wheel but in the same direction. The smaller gears engage the large ring gears at the end of the caissons, driving them at the same speed as the wheel but in the opposite direction. This cancels the rotation due to the arms and keeps the caissons stable and perfectly level.

### **Docking-pit**

The Falkirk Wheel in action. The wedge-shaped building on the right is the visitors' center. Note the Docking Pit at the bottom canal.

The docking-pit is a dry dock-like port isolated from the lower canal basin by means of watertight gates and kept dry by means of water pumps. When the wheel stops with its arms in the vertical position it is possible for boats to enter and exit the lower caisson when the gates are open without flooding the docking-pit. The space below the caisson is empty. Without the docking-pit, the caissons and extremities of the arms of the wheel would be immersed in water at the lower canal basin each time the wheel rotated. The buoyancy of the lower caisson would make it more difficult to turn the wheel.

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From the BlueJacket Ship Crafters Newsletter - Nautical terms and origins

**Bonaventure** - A lateen sail on its own (fourth) mast, way aft; in use on galleons of the XVI and XVII centuries. It may have been named for a vessel owned by England's Queen Elizabeth I, the the *Elizabeth Bonaventure*, or possibly because so many ships carried a trading document so named in that period.

The mast was called the bonaventure mizzen, and often was adorned with pennants and flags. As such it may well have been the predecessor of the stern (ensign) staff.

**Fiddle** - A rack or rail on the edge of a table, dresser, counter or stove; to keep dishes, cookpots, etc., in place in rough seas. The term very probably originated from the fact that early fiddles often were little stanchions with light lines stretched taut between them like fiddle strings.

**Limbers** - Holes in the frames close to the keel or keelson, to allow for restricted flow of bilge water. The word is believed to come from the Old French *lumiere*, one meaning of which was hole. (Of light, there was little)

**Top Maul** - A special mallet or maul for driving a fid into or out of the topmast doubling in a sailing ship. It was so called because it was always kept at the top.

*Information is from the book "Origins of Sea Terms" by John G. Rogers copyright 1985 Mystic Seaport Museum, Inc. and available from BlueJacket.*



This model came to us for repair. It was custom made some time ago for the owner, and has absolutely exquisite metal work, as well

as nice bright finish wood. When the owner died, his widow gave the model to our client, and it was suffering from years of neglect and disrepair. Our client actually was one of the crew, and worked the fore end of the vessel.

Here's what the model looked like while disassembling it for repair: NOW  
**TIP OF THE MONTH – SCALE**



My predecessor, Jeff, talked about scale in his February 2012 ShipShape, but there is enough confusion that it is worth explaining again.

There are two distinct and different ways to measure scale. One is a pure ratio, and the other is a comparison of units of

measurement. People are often comparing the two up, because they do not understand it, even though it is just two different ways to describe the same thing.

Scale Ratio is dimensionless, meaning it has no unit of measure, like inches or millimeters. It is the pure comparison of one size to another. It is usually written as *model:original* with a colon separating the two numbers. For example, 1:48 means that one piece on the model is 48 times smaller than the same piece on the original. 1:64 means that one piece on the model is 64 times smaller than the same piece on the original. Get the idea?

Units of Scale has dimensions, and is written as  $x \text{ model dimension} = y \text{ original dimension}$ . This way of describing scale does have units, and in the USA we commonly use inches on the model and feet on the original. As an example,  $1/4" = 1'$  means that a quarter of an inch on the model is equal to one foot on the original. This is distinctly different than the scale ratio, but the two systems are describing the same thing.

These two systems, since they describe the same thing, do have equivalents:

1:48 means the same as  $1/4"=1'$       ( $4 \times 12 = 48$ )

1:64 means the same as  $3/16"=1'$       ( $16 \times 12 / 3 = 64$ )

1:96 means the same as  $1/8"=1'$       ( $8 \times 12 = 96$ )

I hope this has helped to make sense out of using scale terms properly. So remember that 1/4 scale is NOT the same as 1/4" scale.

## PLEASE SUPPORT OUR ADVERTISERS



Jane Rivers  
12020 Rosevalley Ln  
St Louis, MO 63138