September 2006 Volume 28, Issue 9

The Binnacle

Yahoo! Newsgroup : VIRCB
Vancouver Island Radio Control Boaters

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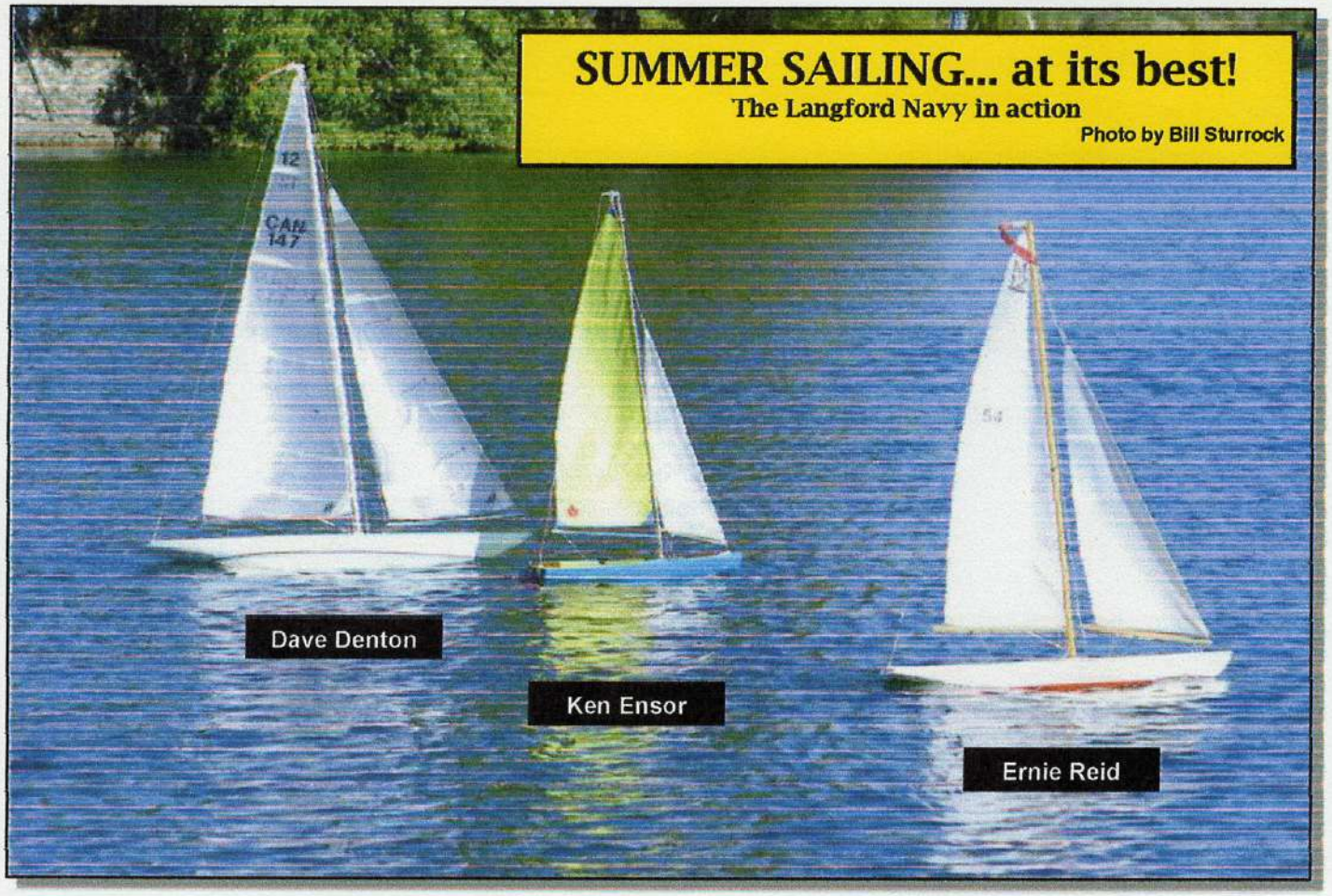


SUMMER SAILING... at its best!

The Langford Navy in action

Photo by Bill Sturrock

From the Bridge

Hello again boaters, floaters, modelers and the Faithful. Short report, this is all the room Bill left me. As you read this the Saanich Fall Fair is over, presumably another successful event. Now we can stand easy until Christmas. Think of what tools you may need, so that you can plant the seed in the most receptive ear. In the meantime, we should think of traveling to Gabriola and SaltSpring and Nanaimo to establish contacts with other like minded boaters in our area. K.Y.A.U.
President Dave Denton.

MINUTES
Victoria Model Shipbuilding Society
Regular Meeting – 10 August, 2006

The President welcomed members, and guests Ken Ensor and Ron Marwood.
Thanks to all who participated in the very successful HMYP Birthday Party and *Luminara* Festival.
Bob Rainsford will conduct a boat-building class for a maximum of five persons.
Members were asked to be on the lookout for a new rescue boat for Beaver Lake.
Following the break was Show and Tell, plus a demonstration of steam engines.
Respectfully submitted,

T. Pound
Secretary-Treasurer

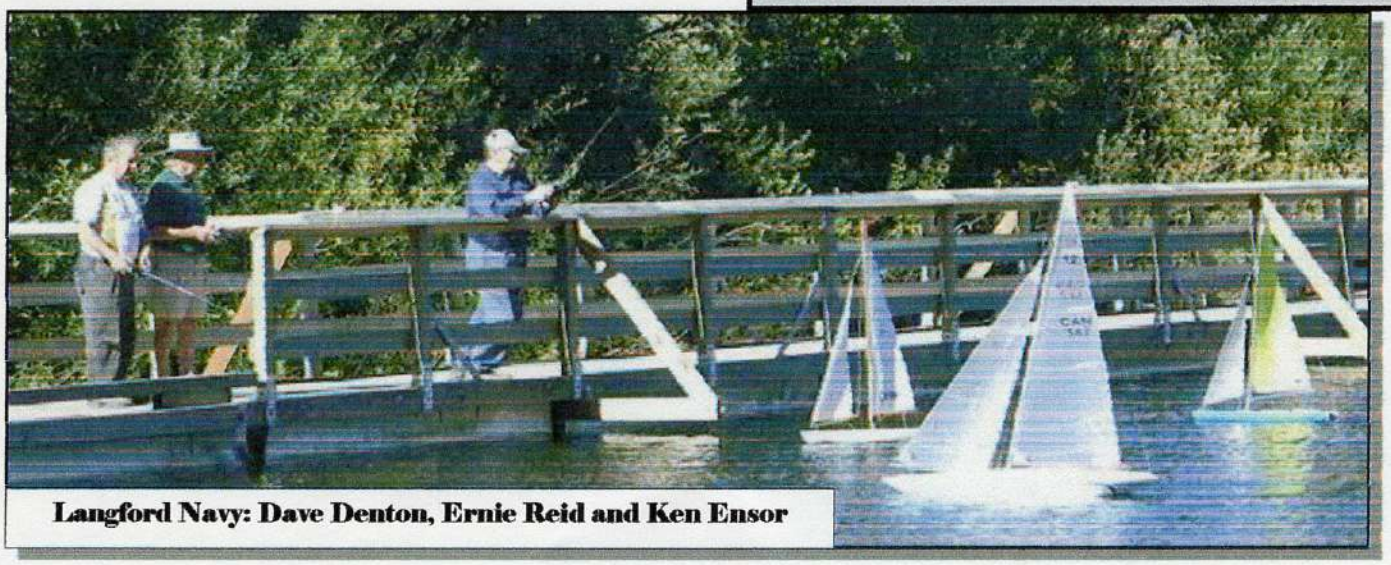
	**MEETINGS:** Second Thursday 7:15-9:15 313 Brunswick Place **Next is October 12**
	**POWER:** Sundays 10 – 12 Harrison Model Yacht Pond
	**SAILING:** 3rd Sunday 1 – 3 PM Beaver Lake **Next is Oct 15**
	**LANGFORD LAKE NAVY** Wednesdays 10:00 Langford Lake

2006 Executive Committee

President	*Dave Denton*	*478-1800*
Vice-Pres.	*David Taylor*	*652-6480*
Secretary/Treas	*Tom Pound*	*595-6487*
Show Coordinator	*Bill Andrews*	*479-2761*
CRD Liaison	*Ken Lockley*	*477-5830*
City Parks Liaison	*Mike Woodley*	*598-8379*
Editors	*Ron Hillsden*	*479-5760*
	Bill Sturrock	*479-0239*
Quartermaster	*Bob Rainsford*	*383-2256*
Entertainment	*Mike Claxton*	*479-2258*
	Mike Creasy	*658-1731*
Librarian	*John Gough*	*479-1843*
Publicity	*Jack Ross*	*478-3191*
Director at Large	*Ken Scotten*	*472-6187*
Director at Large	*Derek Woollard*	*658-1150*

Next Year's Event Calendar

The next Executive meeting at the end of September, will be planning the schedule for shows and club events that will be supported for 2007. If you didn't like something from this year, want something new for next year or enjoy some events specifically and would like them retained, please contact an Exec member so they may be considered at this meeting. We need your comments and input.



Langford Navy: Dave Denton, Ernie Reid and Ken Ensor

Burnaby Regatta – August 7, 2006

In previous years the Burnaby Regatta has been held on the same weekend as the Foss Cup down south. This year it was on its own weekend in early August thus requiring an additional adventure to the mainland. With ferry reservations being a must we went over on the Saturday in order to be able to have access to a table at the park on Sunday. Those 10am starts usually mean the regular members arrive around 7:30 – 8 am! This year the weather was great, sunny, a light breeze and shade under the trees. The Burnaby Club had a good presence, a small group from the North West Washington club came up, Ron came over from Ladysmith and one from Victoria attended. There was quite a cross-section of models to look at, from the very large aircraft carrier and destroyer down to the small tugs – probably 55 boats on display. The regatta course was fairly long but very manageable for all operators. There was lots of time to run more than one boat through the course. There was sufficient wind on the lake in the morning that allowed the sail boats an opportunity to race as well. Lunch was provided by the Burnaby Club.

For anyone considering going next year, I discovered that hotels are booked in advance by normal travelers, not by spur of the moment ones such as myself. We stayed in Coquitlam – you can go to one shopping area there and catch Ikea, Princess Auto, Lee Valley, Canadian Tire and another tool place all within a five minute radius, not counting the hours in the stores!

It was an enjoyable day away from the work environment and thanks to the Burnaby members for their hospitality.

Report and Photo by Mike Claxton...thanks Mike.

THE SUB SUBJECT

Huge sigh of relief here, for a first time in a long time, the column is written from personal experience. No research; no interviews involved. As announced then, we'll revisit the model submariners' bugbear: keeping water away from electronics. Waterproofing, together with ballast systems (to be re-covered in a fall or winter Binnacle are commonly the first two detractors for modelers tempted to tackle a first sub.

There are no simple, short answers, yet every step toward solutions is rather "undifficult".

For a feel good at the start: only a portion of the model, the so-called PRESSURE HULL, must be kept dry. All other space can take on water all it likes – weight you didn't have to bring out or lug back, and for which no one collects coin.

To put a perspective on pressure hull sizes as a percentage of a model's displacement, I took measurements of three among my own boats.

1:96-scale L.A. -Class Miami	38.33%
1:11-scale Molch (Bratwurst)	30.26%
1:100-scale Ohio-Class Florida: the "Boomer	20.83%

Note that those percentages for Miami and Florida exclude their ballast tanks–which Bratwurst lacks.

All three of the tabulated models have what's known as an INTEGRATED pressure hull, i.e. a semi-circular box, built into the hull's lower half (below the waterline) with transparent, hydrocarbonate (Lexan for me) that fits onto the Neoprene gasket of the pressure hull's crutch-held down by 24 to 26 bolts 'n' nuts - spaced from 1.1/8" to 1.7/8 " - depending on the lid's thickness (flexibility).

An integrated, all Lexan pressure hull is made up of just four pieces: two semi-circular bulkheads, a crutch or frame to support the lid, and the lid itself. The hull's bottom also functions as the pressure hull's bottom. Sounds simple? It is simple, but the construction calls for a copious dose of care.

After early failures under water pressure, I started to "key" the bulkheads and crutch into the fibreglass hull well before epoxying them into permanent position. To that end, the circular part of the bulkheads are first beveled to fit into a Dremel-cut, V-shaped groove in the fibreglass hull. Likewise, the crutch's longitudinal sides are shaped to fit into grooves cut into the hull - just below the horizontal rim of the hull's bottom half. Taking account of the gasket, the top of the lid should closely line up with bottom half's rim.

The thrill of that construction method is to see the

generously applied glue squeeze out equally to both sides of the bulkheads. For the crutch, not as much epoxy should be applied initially. Its (to the gasket) surface ha to stay neat and smooth. Welding in the crutch calls for two steps: (1) sparingly apply epoxy to the sides, smear the (preferably 3/8" thick) tops of the bulkheads: Weld-On #16 or any Ca. (2) give time for the bulkheads' epoxy to set, then tilt the hull about one-quarter turn plus to port, load in epoxy by the spoonful to the crutch's underside, and then, after some hours or longer, repeat the same for the hull's other side. Given time, the not-too-thick epoxy will have formed a uniform, triangular support that may be wide enough to cover the bolt heads, and after another pause, treat the bulkhead-crutch joints similarly.

In the described procedure(s), it will pay handsomely to go for close tolerances. We all know the saying, "Good enough is never is", and it's not water's fault that it exerts about 0.42 lbs/sq."/' of depth.

As an option to the integrated pressure hull, which I favour, there is the modular alternative - known as the WTC; the initialism for WaterTight Cylinder.

The pressure hull is then built out of a length of 3.00" to 4.00" carbohydrate (not acrylic) tubing and sealed fore and aft with lathe-turned bulkheads, machined to fit tightly into the tube's i.d. with about 1/16" left as flange for easy removal. The fit-in part of the bulkhead is t to be grooved at one or more points to accommodate the ± inside half of one or two Neoprene "O" seals. These "O" rings/seals, by the way, need a vaseline-like lubricant to ease inserting and extracting when necessary. V.M.S.S.'s Craig Patterson is an -in-house source of advice on that.

WTCs are easily built, but are available from several U.S. of A. sources. Prominent to me is D. & H. Miniatures - an outfit headed by David Merriman, who claims inventorship of the WTC. And well he may be. D. & M. sports a website, no doubt, but that's beyond my ken.

The fans and adherents of the WTC claim as its main advantage that it is readily transferable from one model's hull to another. I've not yet seen that done and, with regard to ballasting/trimming...I'm neither convinced nor am I skeptical.

A helpful feature of D.& H.'s WTCs is that they also house the ballast tank in their ± middle. But, however, though...ballast tank sizes must very much be geared to the weight of the above-the-surface portion when running topside. Victoria's Greg Sharpe of Deepsea Designs got around that potential difficulty by having one readily transferrable WTC that hooks up to his models' individual ballast tanks.

With the hope that the foregoing may alleviate some candidate subbers, I want this out: Integrated pressure hull or WTC, mount all electric and electronic gear on a platform or raft in such manner and fashion that an at least 3/8" to 5/8" bilge is left to take the brunt of any H2 0 intrusion.

At the outset, it was intended to now deal with (A) waterproofing pressure hull penetrations and, (B) minimizing their number. Already absorbed Binnacle space dictates a delay till October, which will then shove back the intended update of the "Sub Subject's" index to November. And so it goes.

Romanus Unicum

ON THE HORIZON

INFORMATION ON UPCOMING EVENTS

Oct 12 - Meeting: Show 'n Tell

Nov 9 - Swap Meet, Annual General Meeting, Election of Officers, and Videos about sailing

Dec 14 - Christmas Social

VMSS MODEL BOAT PHOTOGRAPHY CONTEST

OPEN TO MEMBERS OF ANY MODEL BOAT CLUB

Just a few Rules:

1. Maximum of 3 entries per amateur-photographer/member: **PRINTS only!**
2. Print size: 4 X 6 to a maximum of 8.5 X 11 inches; may be colour or B&W inkjet on any paper (or commercial prints), but, **please**, no mattes and no frames and especially no glass!
3. Must have member name and club name on the back along with signed consent to use in our VMSS calendar (see below). Entries will not be returned.
4. Model ships and related topics only, please.
5. Deadline **November15th, 2006.**
6. **SNAILMAIL** or courier or in person to **VMSS Binnacle Editors, Photo Contest,**

Victoria Model Shipbuilding Society 303-2151 Haultain St Victoria BC V8R 2L8

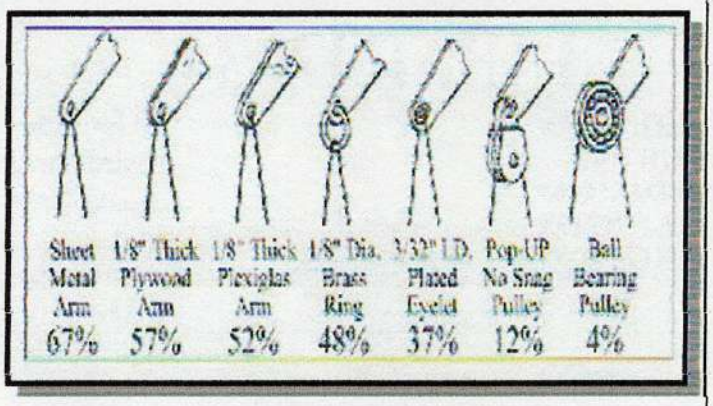
7. Judges decision final; prizes to be announced at a later date in the Binnacle.
8. **NOTE:** It is intended that the top 12 BEST entries will be used in our VMSS Calendar for 2007. Those photographers will be requested to supply their entries in digital format (JPG).

Questions: email to: vmss@shaw.ca

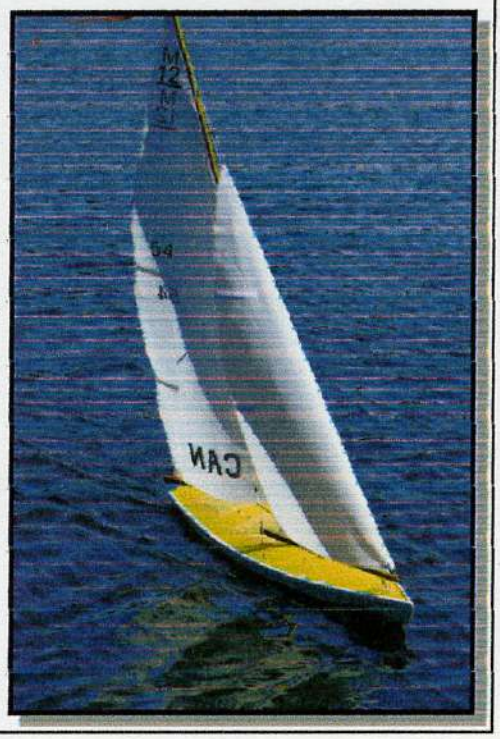
GOOD BOATING AND SHOOTING!!

As The Sails Flap

A few things on the sailing scene this month.
We have had a pretty good sailing season so far this year. Attendance has been anywhere from good to great at each sailing day. I expect that we might get back to leaning toward the great side once fall settles in and everyone gets back to a more normal schedule.
Your sailing Coordinators have presented a couple of new ideas to the Club Executive and with their approval will work toward implementing these schemes.
First, the schedule for sailing won't change from its twice monthly format unless we get a bunch of feedback to increase the number of sailing days. But we are going to change the format just slightly. We will break the sailing days into sets of 3 with the first two continuing our regular more relaxed format as we have done all year. That has worked out very well and I think we generally see that all of our boats are sailing better. With the boats sailing better we see a bit more close competition during our races and an increase in collisions or near-miss kinds of situations. So, we are going to take that 3 weekend in the set of three and make it into an education kind of day.
The intent will be to focus on some particular aspect of sailing, and the rules that apply to it and focus on that for the first part of the day. Once we practice that activity/rules set for awhile we will then hold a series of races for the rest of the afternoon (hopefully 6 or more races) and score them. We have to work out how we are going to do the scoring exactly so that the difference between boats is accounted for but we'll work on that for the rest of this year and get it right before we kick this all off for the entire year next year. Out of that scoring we will declare Club Champions of some sort and we will need to look at whether we break the year into a set of series or do one all year long one. We'll work out those details over the next few weeks now that we have agreed on the basic concept.
The first of these rules/racing days will be the first sailing day in October so get your boat tuned up this month and come join us for the October sailing(s)
The second thing is that a series of regattas is being planned that would have us host one event at our sailing site and then travel to other club sites and participate in this series. At the moment this is envisioned to be a 4 race series, mostly conducted up the east side of the island with a couple of short ferry rides to some close in Gulf Islands. This should be real fun and get us out sailing with some of the other active sailing groups in our area. These will all be one day events and will be scheduled to allow you to get there and back home in one day so the expense of travel will be minimized. If we do a little planning and organizing we can likely car pool to some extent and keep the gas, ferry fees, etc. under pretty good control. There is a multi page document that outlines the format, scoring, boat eligibility, etc. and I will post that on our Yahoo site in the Files section so you can go there and have a good look at all the current details. The exact locations for the other events are still being finalized and as soon as the schedule is set we will be advertising that very thoroughly. The first of these series will likely start in February next year and run at a rate of one per month.
I think those are great pieces of news and will add some more to our already great sailing endeavors.
Ken Lockley and I have talked about who and how we coordinate our sailing activities in the Club. We have decided to continue our team approach to this for the next year and we have jointly offered to be the Co-Sailing Coordinators for the next year.
When we rig our boats we have pieces of cord running all over the place. They are tied off at one end and then routed through deck holes, through eyelets, around pulleys and ultimately attach to the sails. Each of these routing points introduces some friction into the equation and, depending on what you do, you can eat up the available torque in your servo fairly quickly. I recently saw an analysis of these friction points and have re-created it here.



The example given showed that standard kind of servo with a 3.5" arm had a bout 30 oz. of available thrust. By the time the sheets were run through a couple of brass eyelets (one for the jib, one for the main), around a rod to change the direction of the pull, plus out through a couple of deck fittings to let the sheets get above deck that the accumulated waste of power was right around 150% and left only 7.5 oz of effort to actually move the sails. The result is that in reasonable wind the servo would be overloaded most of the time and would not be able to pull the sails in, is drawing the maximum current and eating battery capacity at a great rate. Could this be the reason your boat won't sheet in on windy days, why you appear to be having radio problems or why your servo life is pretty short. Worth looking into.
See you on the water.



-Barry Fox

FOSS CUP 2006

Foss Cup 2006 took place on August 19 at the Bellevue Pond on the east side of Seattle. Trish and I escaped the office early Friday with a reservation on the 7am, a fifteen minute wait at the truck crossing and we were on the freeway to Seattle. A few stops at the fabric stores and a terrific find—Harbor Freight in Everett - those once in awhile tools at ridiculous prices! I also had a look at Galaxy Hobbies, one of the Foss sponsors - great wide selection of models and parts, boats, cars, planes and trains.

We stayed in Bellevue as I found a 10am start requires one setting up about 8am if you wish a space. I parked my boats under Kevin Klocke's tent and sent Trish across the park to the shopping areas.

The event consists of two parts - a barge tow through a course with other boats running, one has to watch the rules for passing. The second part was a salvage event, picking up a stranded hull on a towline and returning it to the dock in a maximum length of time. This was interesting as the underwater winch comes into play! I entered two boats, both ran the course in average fashion and didn't wind any cables around the props! Judging was done by two former skippers and they provided a bit of advise when required.

There were 32 entries, from San Francisco, Portland, Olympia, Victoria, Ladysmith, Burnaby and the local North West club members. Lots of fun, lots of food - this club has a terrific group of ladies that prepare chilli, hot dogs, salads, fruit, coffee, etc - no need to wander elsewhere to eat.

Models from the small class through to the large tugs participated - Voith drives and traditional prop drives, either towing or pushing the barges went through their paces. Congratulations to the Foss Cup winner at the end of the day - Alan Burchett with his Alan B - good old Hilbre version didn't quite catch him!

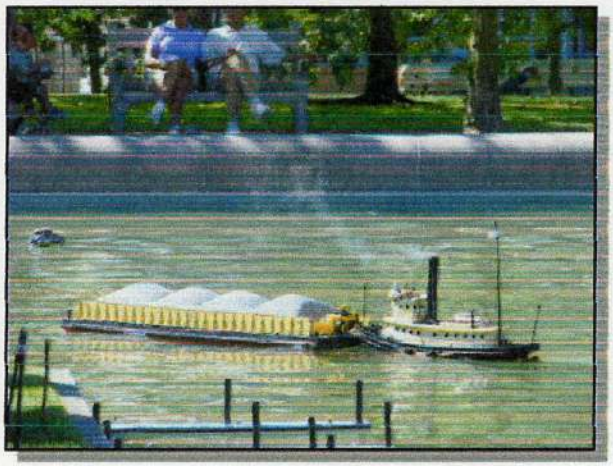
A great cross-section of Foss Cup photographs can be viewed at:

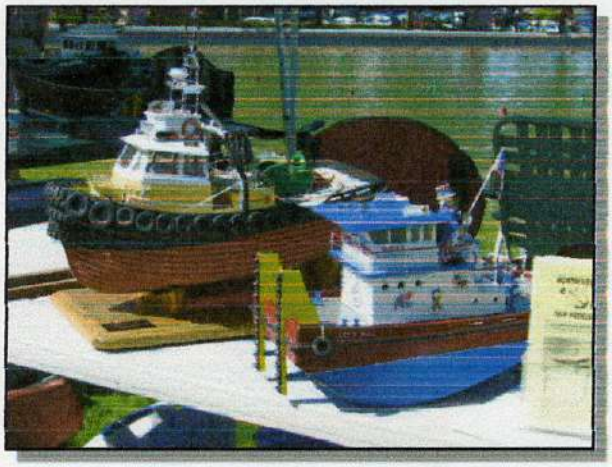
http://www.rcgroups.com/forums/showthread.php?t=558913 *[Copy and paste into your browser, Ed.]*

The event wrapped up around five in the afternoon so rather than trying to rush for the border and ferry we stayed over and the next day took a bit more relaxed run home. Caught the Sidney Foss going through the locks heading for Alaska which was interesting. The border at 2pm took about 15 minutes again but we got caught with a three sailing wait to finally return home. A great event and thanks to those there that always keep their events interesting to go to.

Report and Photos below by Mike Claxton...thanks Mike.

MORE FOSS CUP 2006





Photos above by Rick Rainsford...thanks Rick.

Strange times, interesting ships

By Mike Creasy

1906 saw the completion of a revolutionary new class of battleship – the dreadnought.
Lead ship of the class - HMS Dreadnought - brought together the latest technology in guns, armour, speed and endurance. Dreadnought was such a radical advance that all the big naval powers recognized the need to update their now obsolete fleets of pre-dreadnought ships. A naval building boom was on, with England, France, Russia and Japan leading the charge.

Not wanting to be left out, Prussia's Kaiser William insisted on some new toys for his bathtub. After all, the Kaiser was a grandson of Queen Victoria and a regular at the Cowes yacht race, where he liked to beat his Uncle Bertie – the future King Edward VII. He liked the big ships, and was an honorary Admiral in the Royal Navy.....as well as a Grand Admiral of the German Navy, an Admiral of the Imperial Russian Navy, and an Admiral in the Royal Navies of Sweden, Denmark and Norway.
With so many extravagant naval uniforms in his closet, it was no surprise that he wanted his very own rubber duckies, sorry, dreadnoughts.
In order not to lose valuable play time, Kaiser Bill hired Otto von Tirpitz to oversee the construction of a new Prussian/German Navy. Tirpitz did a masterful job, with powerful new dreadnoughts sliding down the ways at a great rate. Of course, the Grand Admiral had a slightly different agenda from the Kaiser. William wanted a suitable flagship and fleet to parade before his Uncle, while Tirpitz wanted to build a serious blue water navy with which to extend German influence.
Regardless, the new German dreadnoughts were some of the most powerful and advanced warships of the new dreadnought era. They were fast (up to 28 knots), well armoured, and had big guns mounted in centreline turrets (as opposed to single guns in side mounts used in pre-dreadnought fleets).
One minor little exception to all this technogical leaping.
Communications. Still done with flags and semaphore as in the days of Nelson. You can almost imagine it – the bushy eyebrowed old admiral saying ...harrumph, move the second flotilla to the left flank... and the word speeds down the voice tube to the flag office, the signal hoist is made up, and repeated through the fleet until it eventually gets to the flotilla. What happens if things change, or if the flotilla commander has a question??? Or, if visibility was bad and the signal flags weren't seen?
You get the picture. Communications were terrible, but they were adequate. Captains were issued fleet battle orders and the admiral's specific wishes could be signalled because naval battles were generally fought at short range – less than 5,000 yards – where all ships were close together and signal flags could be seen.
Up until now.....

10 to 14 inch guns had been around for over twenty years by the time Dreadnought hit the water. These guns were known to be able to fire a projectile 15,000 yards or more, but were considered to be too inaccurate to use beyond 5,000 yards. Aiming was done by individual gunlayers using the Mark 1 eyeball.
Fleet actions at very short range were the norm because there was no other risk; torpedoes were only lethal at similar ranges (1 to 3,000 yards) and nobody had a better main gun aiming system. Now, two major changes for dreadnought fleet commanders.
First, a new propulsion system (the heater system) made torpedoes lethal out to 5,000 yards or more. Second, a new analog computer system to aid in gun aiming, meaning that big guns could be accurate out to 10,000 yards or more.
Now, fleet commanders had to stay further away from the enemy to avoid torpedo attack while fighting the big gun battle. And they needed to stay away from accurate long-range enemy gunfire. As well, components of each fleet were more widely separated than before, making flags and semaphore almost useless in the smoke of battle.
Mr. Marconi's recent invention had been taken up by both fleets, but was very limited in it's application and seldom used in intra-ship signalling. Wireless signalling had its own set of problems, which was one of the reasons it wasn't more

widely used as yet.
The shortcomings of the flag/semaphore system were highlighted during the Battle of Jutland in May 1916, when Admiral Beatty signalled a turn towards the enemy early in the battle. Flag signals were passed along throught the ponderous lines of battleships, battlecruisers, cruisers and destroyers, but one line of battleships missed the signal.
All the other ships in the fleet turned as ordered, but the big new battleship HMS Barham and her three sister ships sailed on.
Aboard Barham, intense oral communications ensued as Admiral Evan-Thomas was urged by his staff to follow suit. But Evan-Thomas was of the old school, and no action would occur without orders! In the ensuing confusion, Beatty's squadron lost the opportunity to strike an early blow as Admiral Scheer's small force of battlecruisers disappeared into the haze.
The Battle of Jutland continued for the better part of two days as both fleets struggled to find the enemy. Who won is still a matter of perspective, as the British lost more ships but achieved their strategic objective of keeping the German fleet bottled up in the Baltic for the rest of the war.
Many lessons in ship design and battle tactics were available to be learned from Jutland. Unfortunately, not all were applied to the design of one of the greatest warships ever built. Her keel was laid on September 1, 1916 at John Brown's Clydebank shipyard and her name is still well known; HMS Hood.
Next: Flagship of the world - HMS Hood

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Big Fleet Actions, Eric Grove, Brockhampton Press, 1998
Naval Battles of the First World War, Geoffrey Bennett, Penguin, 1968/2001

SPEKTRUM DX6 6 channel radio

Before I bought a new radio for my Mr. Darby tug I did a lot of research on the internet and talked to several VMSS members. I investigated 5 different radios. I bought the SPEKTRUM DX6 from the B.C. Shaver and Hobby Shop for $250.00 in July, 2006. I selected this one because it does not use the normal channels with crystals so there is never a channel problem with other boats at the same time.
Here are a couple of selections from the manual that came with the radio.
From page 2: "No longer will you have to wait for an open frequency. Your DX6 transmits on the 2.4GHz band and utilizes DSM Digital Spread Spectrum Modulation, making it impervious to interference. The system features patented DuaLink technology that actually transmits and receives on two frequencies simultaneously, offering multi-path security."
From page 24: "Each SPEKTRUM transmitter has a GUID (Globally Unique Identifier) code. With over 4.2 billion GUID codes the chances of having interference from another transmitter is virtually impossible."
Mike Woodley

Fyi: FINES FOR PARKING INFRACTIONS AT HARRISON

I have done some research in regard to the parking fines for violations around the HYP:
1. Handicapped $150.00 - commissionaires are very defensive about this one
2. Residential only $57.50 - residents phone mobile patrol for a quick response (I know)
3. Yellow hash marks $57.50 - no mercy! (boater, last summer - 7" in - wasn't me)
4. Reserved by our permit for July 22 (16 car bay) $35.00

Mike Woodley.

Sent: Tuesday, August 15, 2006 4:56 PM

Subject: HYP Improvement Committee members - re: Loading Zone

Here is the latest in our attempts to get a loading zone at the pond:

If approved by City Council at their meeting this week, the Traffic Engineering Department will install the following within the next 6 - 8 weeks.

Right beside the H spot they will put a sign: "Loading Zone, 15 Min. Max. "This will be for every day, 24 hours duration. This will be marked by a white line perpendicular to the curb and will be for one car. Beside that they will paint another white line to divide in two the remaining space to the yellow hash marks, thus making four lined parking spaces perpendicular to the curb: the first for H, the second for Loading, the third and fourth for unrestricted. This is not what we asked for: "three spaces wide from 10 - 4, Sat. and Sun, 10 minutes, year around," but it is better than nothing.

I said thank you to Traffic Engineering, for this. However, I said we did not get what we think would be best, and that we will watch what happens for a year and see if we are satisfied or if we re-apply for what we wanted originally.

Mike Woodley