



The Binnacle

Victoria Model Shipbuilding Society
Victoria BC Canada
vmss.ca



Yahoo! Newsgroup : VIRCB
Vancouver Island Radio Control Boaters

Strawberry Festival



Thanks to **Bill Andrews** for the photos





Victoria Model Shipbuilding Society

General Meeting – June 14, 2012

Call to order: 7:45 pm

1. Welcome: New member **Ken Scotten** was introduced. Ken took three years off but missed us so has re-joined!
2. Outreach: **Dave Marryatt** was reported to be out of hospital.
3. Club Finances: **Mike Creasy** reported that we have a net income of \$848.00 for the year. \$300 was received from Government House for the club's involvement at the recent Maritime Pacific change of command.
4. Recent Events
 - It was reported that the Victoria Day Parade was a success although there was limited TV exposure for the club
 - The Maritime Pacific change of command event went well and it was a well dressed group from the club who turned out!
5. Upcoming Events:
 - There will be a fun run at Harrison Pond on June 24th. The BBQ will be going and there will be a course or two set up.
 - On July 21st Western Speedway will have its R/C event on. We are waiting for confirmation that they will fill the pond for us.
 - On August 4th, the Sidney Air Museum will have its open house and the club has been invited back again.
6. Business from the Floor:
 - The August meeting for the club will be held at St. Peters Church on Quadra Street. A map will be included in the next Binnacle. It was reported that the library will not have a place there so members are encouraged to see if there is anything they would like to take home. The rest will be donated. **Glen Newmeyer** suggested donating the cabinet to the Crofton Art Cooperative
 - **Ron Armstrong** and **Dave Denton** provided a ship control clinic including "Rules of the Road" for ships.
 - **Dave Denton** showed the club his stantion jig.

2012 Executive Committee

President: Barry Fox	294-0350
Vice-Pres: Ron Armstrong	385-9552
Secretary: Graham Smith	477-8234
Treasurer: Mike Creasy	888-4860
Show Coordinator: B. Andrews	479-2761
Binnacle Editor: Scott Munford	382-1673
Quartermaster: Bob Rainsford	383-2256
CRD Liaison: Barry Fox	598-4619
Parks Liaison: Mike Claxton	479-6367
Sailing Director: Fred Herfst	652-8445
Librarian: Dave Denton (Plans)	478-1800
Publicity: Ron Armstrong	385-9552
Director@Large: Jim Briante	590-5708

All above (250) area code



Your Executive meets the last Thursday of every month!

The Victoria Model Shipbuilding Society is a non-profit club, open to all, established in 1978 under the Societies Act of B.C.

Mailing address:
106-4480 West Saanich Road
Box 55
Victoria, BC V8Z 3E9

7. Show and Tell:
 - **Dave Denton** showed the club a nifty little tug kit that is made from laser cut wood and will be available to club members for \$30.00.
 - **Ron Armstrong** gave the club an overview of his HMCS Columbia model.
8. Adjourn and Break: The 50/50 was won by **Jack Lenfesty** and the prize was won by **Ian Fraser**.

9. Entertainment:

Respectfully Submitted
Graham Smith, Secretary





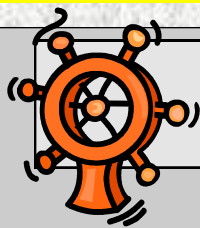
Meeting Moments



Dave Denton showing the Thomas Tug kits he is selling for \$30.



(above & left) **Ron Armstrong & Dave Denton** giving tips on steering your boats



The Prez Says...

Prez Says

For me the time is counting down to the end of my term as President. I understand that in my absence at the last meeting you received the word (again – but without me saying it) that we need a candidate for President as the VP is not going to be able to that position as might normally be the case (but not always). My report this month is that nothing has changed and that need continues.

Someone at the Strawberry Festival today (you should have been there - more later) that I only had done 3 years as President and that it was more normal that Executive terms in our kinds of organizations often were more along the lines of 5 year commitments. That is likely quite true. But for me I have been attending Executive meetings since I arrived back almost 7 years ago, some of those in other positions. Before that sounds all high and mighty I do want to say that there are people doing Exec jobs on our current version who have served much longer than I have and you are very fortunate that they continue to do excellent jobs representing your club. So step up and serve your club.

This month is our last meeting at the Garden City Church. Maybe we'll have a gala affair to celebrate our change of meeting places. In August we move to our new venue on St.Peters Street. I haven't seen the place yet but I understand that it is very good and that there is excellent parking available with minimal stairs to climb, a big improvement over the sometimes very dark ones we navigate now during the winter months.

So come out to say goodbye to our current meeting hall and then come again in August when our new digs are unveiled.

Strawberry Festival. Another, low key but really enjoyable day at Beaver Lake. A great variety of boats on the water at various times putting on a show for the thousands in attendance. A great



ON THE RADAR

INFORMATION ON UPCOMING EVENTS

**July 21st & 22nd: All Fun Weekend
Western Speedway**
August 4th: Sidney Air Museum



Meetings: Second Thursday 7:30-9:30
4050 Carey Road
Next is: August 9th, 2012



POWER: Sundays 10 – 12
Harrison Model Yacht Pond (HMYP)
Dallas Road at Government Street



SAILING: 1st and 3rd Sundays 1 – 3 PM
Beaver Lake
Next is June 15th, 2012



LANGFORD LAKE NAVY
Wednesdays 9:30
Langford Lake, Leigh Rd at Trillium

chance for our club to be seen by a lot of people that don't even know we exist. A good turnout of members and a long but quite relaxing day.

Elsewhere you will see (or hear) about our summer of events. We are back to Western Speedway for two days of boating in crystal clear water and a chance again to maybe find some more new members. And then in August we get back to the Air Museum to show ourselves off at their annual Open House Day. Another low key but fun kind of day. Think about coming out (with a boat) and help us display our wares and skills.

See you at a meeting our at the shore side.

-Barry



THE SUB SUBJECT

In closing the May column, it was mentioned that for June an antique would be “studied” and that, for July, the same would be done with the high-speed Russian torpedo.

Dealing with the workings of the Märklin toy sub, in spite of the years of ownership it took to grasp her “science”, was simple. It is set out in the June Binnacle. But the Russian Shkval and its first or second successor(s), the Stallion, proved far more challenging.

Both or, by now possibly all three, of these rocket-driven torps are known as SUPERCAVITATING, rocket-driven torpedoes. The first to receive publicity was the Shkval (squall) VA 111. At 200 kn, it was fast all right but it had a range of only about 4.35 miles, and could not be made to travel in anything other than a straight line. It was a Straight Shooter, some 26' long with a 21" diameter and weighted in (dry?) at $\pm 5,952$ lbs. It could carry a warhead (if that were necessary) of ± 465 lbs. – conventional or nuke.



Note the absolute elegance of the Shkval's body. Looks more like a bomb or rocket than a torp.

It was that first operational weapon that was taken to the weaponry shows. Apparently it did find buyers in China and Iran. France was also mentioned, but that seems a tad doubtful.

Getting to the supercavitating aspect. It is achieved by the torpedo's head blowing a stream of gas bubbles forward, through the cavitator. The illustrations on page 7 make it look as if it has a 1.5" inside diameter.



That three-tiered skirt below the mobile cavitator looks like an uncommon example of fine craftsmanship.

Immediately below that main cavitator are at least three rings with numerous rearward nozzles that fully gird the head. The effects of the forward and rearward jet flows is the formation of an enveloping air bubble that enables the whole rocket to stay dry and free of water friction.



Artist's rendering of the supercavitating missile in its cocoon. Note that not all illustrations show the same longitudinal position of the fins on the body.

Somewhere in the literature obtained it reads that these torpedoes are manufactured in Kyrgystan by a state-owned mill in which the (now) Russian government now holds 75 percent ownership. Apparently, it

(Continued on page 6)



(Continued from page 5)

involved the write down of debt owing by Kyrgystan to Russia.

Meanwhile, in spite of widely known supercavitating theory, it is estimated that other nations with a yen for torps could need up to 15 years to kick the ball as far as it has advanced, in Russian hands. That, then, could explain why the U.S.A. in 2000 hired a retired USN intelligence officer, Edmond Pope and a Russian henchman, Anatoly Babkin. Pope, apparently got caught in a sting operation when he forked over \$30,000US to Babkin, who turned out to be a double agent. Pope was tried, convicted and jailed. His release was negotiated at the highest level by Vladimir Putin. It's not reported if Comm. Pope got some interesting stuff through customs – other than crocks of the best vodka, of course.

Since first writing about Shkval in the July 2010 Binnacle, the Russian scientist have done way more than just gathering around their samovars. Firstly, they have managed to increase the missile's range to give or take 13 miles -- a nice jump from the initial 4.35 miles or so. Secondly, perhaps more important than range improvement, they have come up with manoeuvrability.

The electronic steering is achieved by combinations of three features: the flat cavitator at the very tip of the torpedo. By having it move back or forth from the vertical as well as back or forth from the straight fixed position at the head's sides, the shape of the bubble cavity can be modified to allow up or down and left or right movement. In addition the rearward gas-emitting jets can also be controlled in density. Then there are four fins that penetrate the overall bubble/cavity. The tips of the fins would no doubt function in similar fashion to the "X" shaped planes used by the Collins-class in Australia and a number of German and Scandinavian submarines. Thus to change direction the fins on the inside of the turn are extended and the opposing fins are retracted. Someone, it is surmised, must have observed the rowers on Elk Lake and elsewhere. All in all, those combined measures change the shape of the bubble and the torps go along with that.

The mentioned guidance fins are barely visible. Fully extended they'd be at least 1.5' to 2.0' long. Their tips have to extend through the cavity. Mind you, at the speed mentioned, it wouldn't take much to affect direction. There is no mention of the function of the eight tubes surrounding the engine's exhaust. They could be part of the cavitation or steering system.



All these happenings are simple and logical, but think of the speed under which it all takes place.

As far as fuel (propellant) is concerned, it was said to be a metallurgical, powdered aluminium based fuel. Currently (?) there is mention of a separation of the fuel used in the rocket engine (something that need no CO² to combust) while the "bubble machine" is fed a diet of 1.5 tonnes of hydrogen peroxide and about 1/3 kerosene. Great clarity on that and other systems features is closely guarded. Meanwhile it all seems to work with the weapon's range extended and improved steering and a load of additional and more refined electronics, it looks as if the improved Shkval and younger Stallion will be irresistible targets for numerous spies.

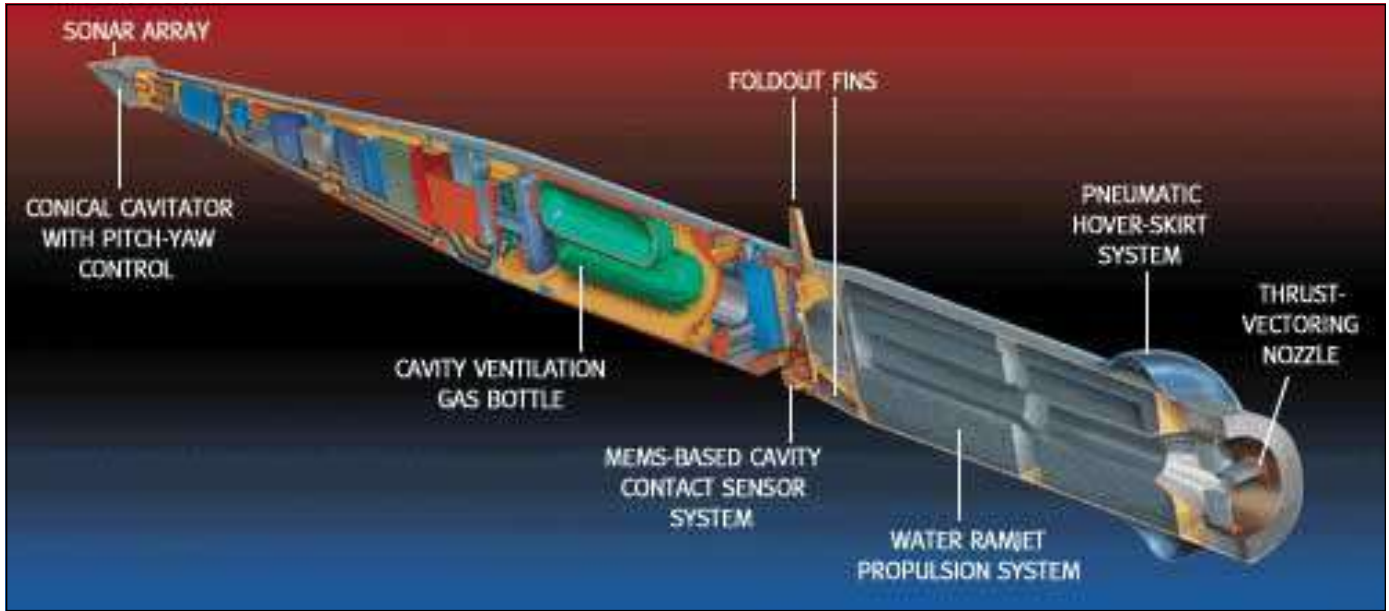
For next month, the tedious task of compiling an updated index awaits. Next, for September and October, Rob Ross's pneumatic torpedo launching system will be examined and, next, a bit of history of Vickers building WW1 subs in Montreal.

Be looking out for summery days; keep track and report late in fall.

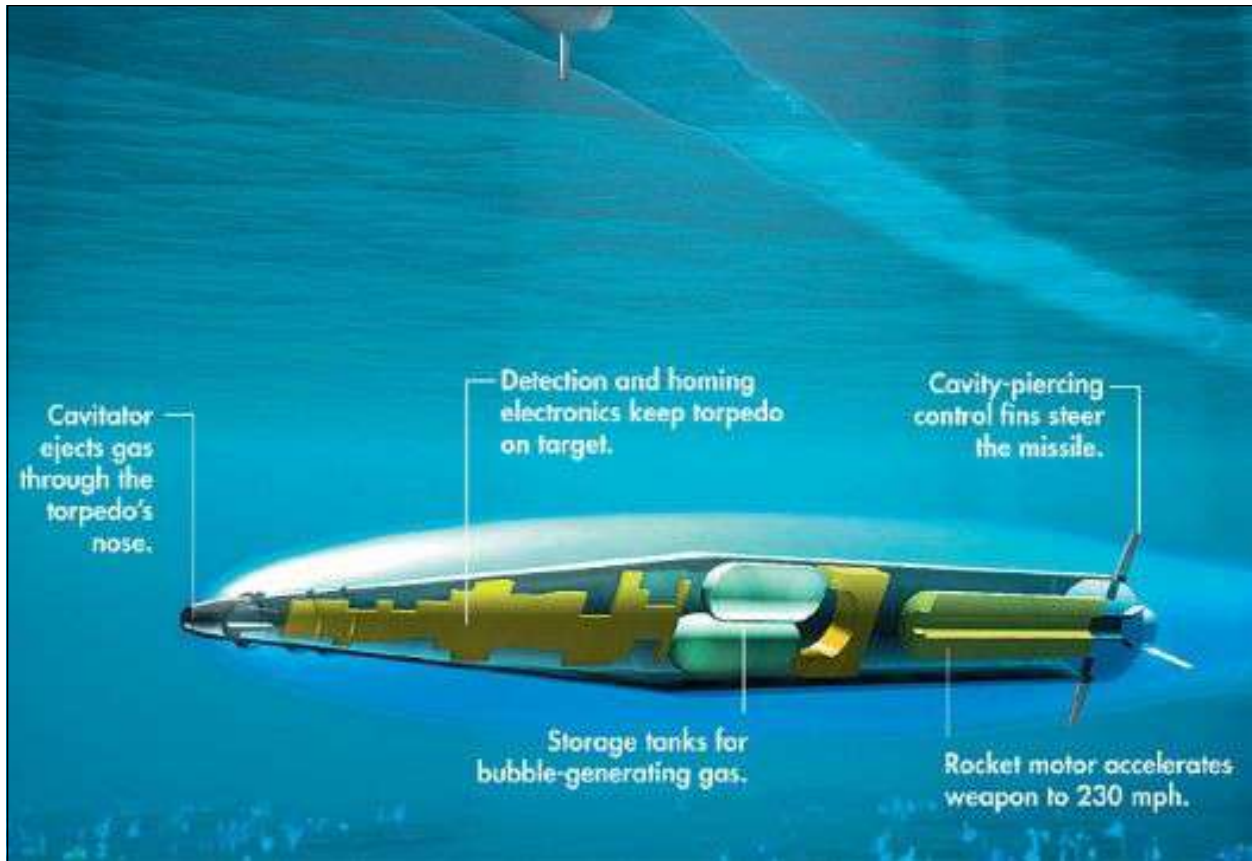
Thanks to **Greg Sharpe** for his extensive research.

Romanus Unicum





The pneumatic hover-skirt system is not described in the various texts. Most all likely, this is an illustration of the more advanced Stallion. It could be a means of modifying the shape of the bubble, or it could have a brake function.



Obviously an alternative or improved version. Quite clear in some ways. No payload area shown. Who needs explosives for something as fast and heavy to hit an enemy's vessel?



Rare photo of "Harry" the Harrison Pond Monster. It is rumoured to come out on Sundays and feed on boats, small children and the occasional dog.

Unexpected Failure by Ron Armstrong

To test the power systems in both my tug and destroyer I used alligator clip wires bought from The Source many years ago. The results showed either battery or motor failure. Knowing that the battery was recently charged and the three test motors were little or unused, I was stumped. Then I touched one motor terminal direct to a battery terminal, and used a file to make the other connection. The motor sang like a banshee. As did the other two. The only conclusion was that the test wires had failed; probably by an unseen break caused by heavy use or tangled storage.

I bought a new set at the Source (the only store that sells them apparently) and hang them straight when not in use. Just goes to show that the humblest tool can cause major grief if not properly cared for.



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: **DIGITAL (jpg) only!**
2. Send by email attachment to: newsletter@vmss.ca **subject line: "PhotoContest Entry" (important!)**
3. Model ships and related topics only, please. **Limit of 3 (three) entries per person.**
4. **Deadline November 14th, 2012.**
5. Judges decision final; prizes to be announced at a later date in **The Binnacle**.

NOTE: It is intended that the top 12 BEST entries will be used in our VMSS Calendar for 2013. **Questions:** email to: newsletter@vmss.ca

GOOD BOATING AND SHOOTING!!



July 5 Sailing on Salt Spring Island

A few of us make the trek to Salt Spring probably monthly, or more often sometimes, through the summer. We have the pleasure of sailing on a very clean spring fed pond that is on private property. It has pretty low weed count anyway but that is kept even better by one of the Salt Spring crew who doesn't sail with us much but spends hours in his rubber dinghy pulling weeds all around the edge of the pond. It is a very clean pond, partly because the water is actually moving a little and a great place for thermal winds that creep up the valley and run straight along the length of the pond. Just great, and deep.

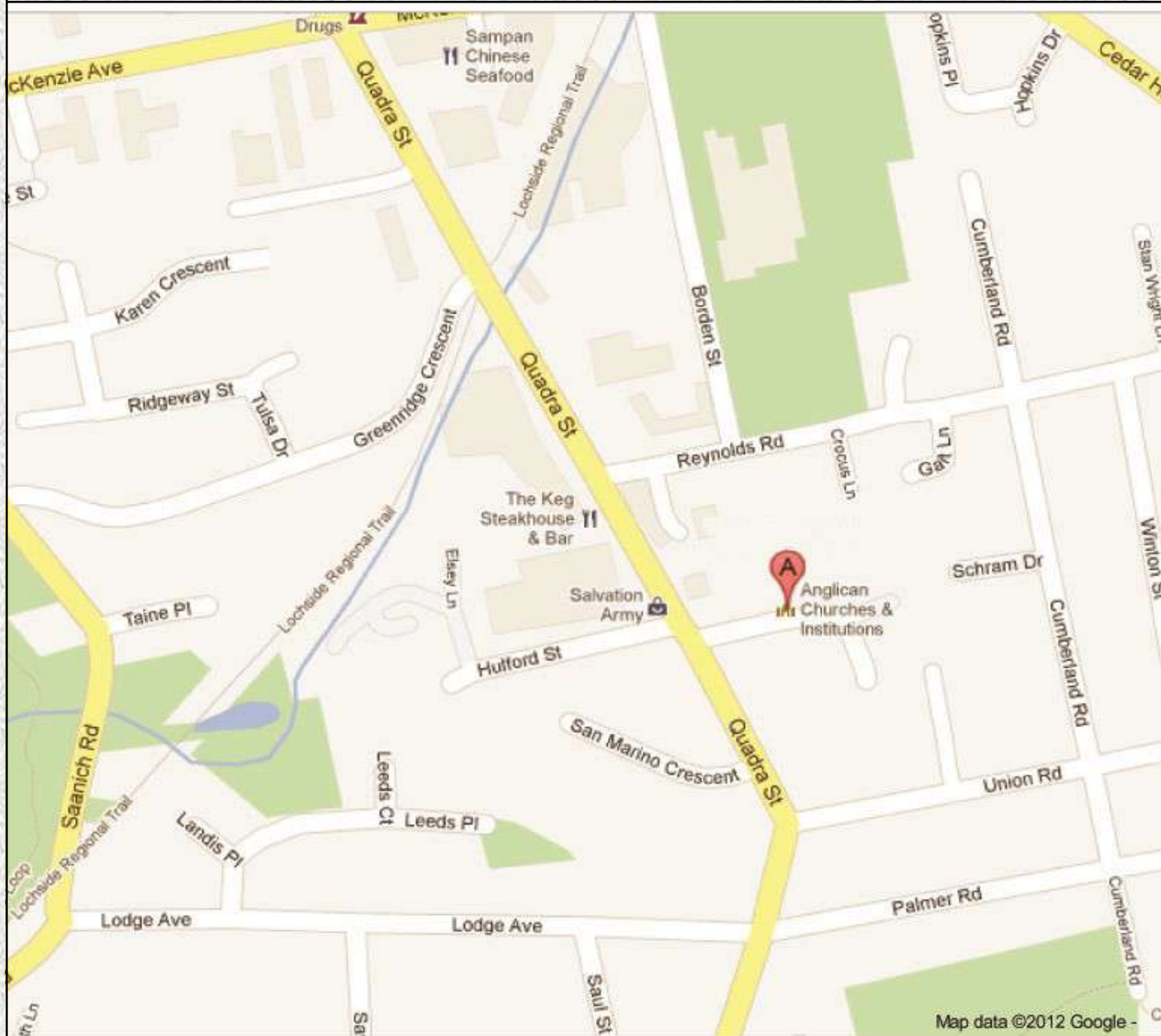
Last week, 8 VMSS sailors made the trip and enjoyed a great day of sailing. There are a few pictures here showing the boats sailing and everyone stopped for lunch (we are quite civil after all). Those attending from the Victoria area were **Jan Schmidt (#76)**, **David Cook (#09)**, **Colin Bussanich (#131)**, **Adrian Harrison (#23)**, **Fred Herfst (#25)**, **Mike Pednault (#19)** and **Barry Fox (#34)**. Also joining us was Parksville member **John Ball (#79)**. Not much scoring took place but we did have a total of 15 boats on the water at one point and some good close racing.

Another great day sailing model boats

-Barry



August Meeting Place



Starting August 9th, we have a new meeting place.

It's at **St. Peter's Anglican Church Lakehill**. The address is 3939 St. Peter's Rd.

Looking at the above map, "A" marks the spot.