

# The Binnacle



Victoria Model Shipbuilding Society  
Victoria BC Canada



Yahoo! Newsgroup : VIRCB  
Vancouver Island Radio Control Boaters

**NEW!**

[vmss.ca](http://vmss.ca)

## VMSS Auction

### Len Gibbs R/C Model



### LEN GIBBS

Len is a western Canadian artist well known for his unique style of high realism. His original paintings and drawings have been widely exhibited and nationally acclaimed. Len is usually at Harrison pond every Sunday running his Tally-ho submarine. He has donated this square rigged R/C sailboat (motorized) to be auctioned off and all the monies donated to the Victoria Model Shipbuilding Society.

There will be other items to be auctioned at a later date. Contact: Bill Andrews  
(250) 479-2761  
[b-bandrews@shaw.ca](mailto:b-bandrews@shaw.ca).

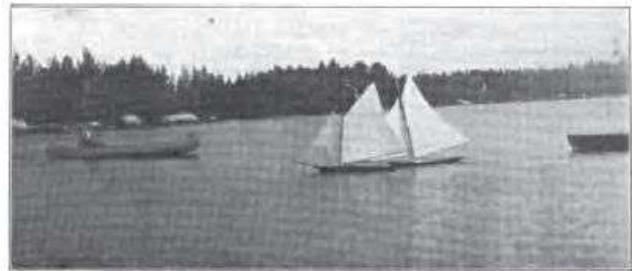
## ... a Much Neglected Sport

### THE FUN OF MODEL YACHTING

By EDWARD BRECK

ILLUSTRATED WITH PHOTOGRAPHS

*In Which an Enthusiast Endeavors to Explain the Fascination of a Much Neglected Sport*



ON MILFORD LAKE. THE LEEWARD YACHT CATCHES A PUFF; TROUBLE AHEAD FOR THE STAKE-JUDGE

**Y**EARS ago the Berlin Golf Club, made up mostly of American and British residents of the German capital, used for its links a tract of land in Charlottenburg, which it shared with the surveying classes of the great Polytechnicum. As the club's treasurer I once had occasion to meet the professor in charge of these classes, and, after our official conference, I asked him whether he wouldn't care to have a go at golf. Looking at me through his spectacles with an expression of mingled wonder and contempt, he replied, "No, thank you; when I grew to manhood I put childish things behind me!" And the fact that the next couple to us was composed of the British Ambassador and the German Secretary of State for the Treasury altered his opinion not one whit.

Now it may well be that one of the great reasons for the almost complete neglect of so fascinating a sport as model-yachting lies in the general opinion held by the community that it is intrinsically a childish pastime, quite unworthy of grown-ups. This comes undoubtedly from the fact that the general public's idea of the sport is gathered from watching children sail tiny craft from shore to shore of some small ornamental pond in a city park. The little boat, usually bought in a toy-shop, is launched on one side and the youthful owner then runs round to the other edge to receive it. But this is not model-yacht sailing,—it is merely splashing about with toy boats.

Nor are the exquisite model imitations of famous racing yachts real model-yachts, that is, they are not racing models; and, strange as it may seem to the uninitiated, an exact model of the *Reliance*, or the *Columbia*, embodying all the proportions of weight and dimen-

To see more, go to: [vmss.ca](http://vmss.ca)





## Victoria Model Shipbuilding Society

General Meeting – February 11, 2010

Call to order: 7:30 pm (36 members in attendance)

1. Welcome: Four new members joined tonight. **Nick Berben, Jim Cox, Thomas Gardner** and all the way from Nelson, **Jerry Filippo**.
2. Outreach: **Ken Ensor** passed away. His Memorial Service will be held on Sunday, February 14<sup>th</sup> at the Navy Cadet Hall in Langford.
3. Club Finances: **Mike Creasy** and **Barry Fox** gave a detailed breakdown about what it costs to operate as a club and the projected finances for the coming year. Possible ways to increase revenue were discussed.
4. Upcoming Events: The All Island Sailing Series begins on February 28<sup>th</sup> at Beaver Lake. So far, 19 IOM's have registered. **Dave Denton** will run the rescue boat. On March 7<sup>th</sup>, the first of 6 races in the Fun Sailing Series begins at Beaver Lake. All classes of sailboats are welcome to compete for the Club Championship. Pirate School at the Maritime Museum is on March 9<sup>th</sup>-11<sup>th</sup>. There were enough volunteers signed up to help out to continue with this event.
5. Open Forum: The current bid on **Len Gibbs's** donated boat is \$500. The other ships will not be offered until this current sale is complete. Ron Armstrong knows someone who has a "Sovereign of the Seas" and some scrap metal in exchange for fixing a piano stool. An unfinished model of the "Britannia" was available for a good home.
6. Show & Tell: **Dave Denton** showed his Navy Boat he started after seeing **Dave Taylor's** at the Hobby Show. He found some accompanying plans in our library. **Mark Giles** had some plans for a Schnell boat. He would like to get a few members to make some so we can launch a small flotilla of them.
7. Adjourn business portion & break
8. **Barry Fox** demonstrated the process he undertook to make his own goosenecks for his sailboat.

Respectfully Submitted

**Scott Munford**, Secretary



## 2010 Executive Committee

<i>President:</i> <b>Barry Fox</b>	<b>294-0350</b>
<i>Vice-Pres:</i> <b>Rob McDonough</b>	<b>598-4619</b>
<i>Secretary:</i> <b>Scott Munford</b>	<b>382-1673</b>
<i>Treasurer:</i> <b>Mike Creasy</b>	<b>888-4860</b>
<i>Show Coordinator:</i> <b>B. Andrews</b>	<b>479-2761</b>
<i>Binnacle Editor:</i> <b>Bill Sturrock</b>	<b>479-0239</b>
<i>Quartermaster:</i> <b>Bob Rainsford</b>	<b>383-2256</b>
<i>CRD Liaison:</i> <b>Rob McDonough</b>	<b>598-4619</b>
<i>Parks Liaison:</i> <b>Mike Claxton</b>	<b>479-6367</b>
<i>Sailing Director:</i> <b>David Cook</b>	<b>388-5994</b>
<i>Librarian:</i> <b>Dave Denton</b>	<b>478-1800</b>
<i>Publicity:</i> <b>Rob Ross</b>	<b>592-6866</b>
<i>Director at Large:</i> <b>Ken Ensor</b>	<b>deceased</b>



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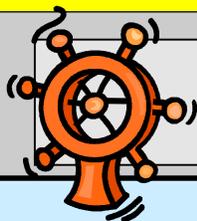
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**The Prez Says...**

**March Musings**

Everyone else does such a good job of writing about their boat building, marine history, etc., that I'll stick to Club business this month.

At last month's meeting we discussed the Club's finances at length and heard ideas from a lot of you concerning ways to improve our position. We need to be clear, we are not in any financial difficulty but we need to be careful to keep from being there in the future.

The Executive spent a good deal of time at their last meeting talking about which of these ideas had merit and which weren't so good. And, out of that, a few decisions were made. We decided that taking the nickel and dime approach was not good so things like a "loonie bucket" at the pond and charging a 50 cent or buck meeting fee are not going to happen.

Starting January 1<sup>st</sup>, 2011 the annual membership fee is going to go up by \$5 (for both the single and family rates). But, returning members can enjoy saving that \$5 if they rejoin by the end of January. That might not change our income by very much but we should have a good handle on where we stand for member count by the end of that first month and know what we are up against as far as finding new members is concerned.

At last month's meeting we held a raffle of some tool equipment donated by **Len Gibb's** (thanks again to Len for his generosity) and someone got a nice piece of equipment and the Club made a nice return. We have a large amount of this kind of thing to work with so you can expect to see a raffle for something every month. With any kind of luck, the return from these raffles will completely offset the cost of renting our meeting room and maybe even a little extra.

From time to time we are given larger items (complete boats, bigger shop equipment, etc.) and the plan is to hold auctions for those items. The plan will be to display what will be auctioned the month before the auction will take place to allow you to save your coffee money for a month to fund your bid.

So in those last two instances you have a chance to get something tangible in return for your investment. Another item is connected to the 4 or so more major events we hold each year. These are things like the Battle of the Atlantic day, Naval Salute (this year), and a couple of larger sailing events that are routinely held each year. For those events, some number of members put in quite a bit of effort to organize those events. A survey of those who routinely do that work reveals they don't want any compensation for their effort but that there is a common belief that the Club should. So there will be entry fees charged for those events. Not for the routine Sunday sail-



**ON THE RADAR**

INFORMATION ON UPCOMING EVENTS



**Meetings: Second Thursday 7:30-9:30**  
**4050 Carey Road**  
**Next is: April 8, 2010**



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



**SAILING: 1st and 3rd Sundays 1 – 3 PM**  
 Beaver Lake  
**Next is: March 21, 2010**



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

ing at Harrison Pond or Beaver Lake but for things where there is some amount of legwork undertaken.

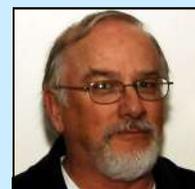
This past weekend we hosted the first regatta for the annual All Island Spring Series. 21 boats registered and sailed. We charged a nominal \$5 per boat entry fee. We incurred maybe \$15 of expense for prizes and the club will net the best part of \$90 from the one day event. And a good time was had by all.

Once again, you get something over and above the normal sailing day in return for a very nominal fee. In addition, it is recognized that we over subsidized the annual Christmas Dinner this past year. Any subsidy in coming years will be reduced to the amount that we have previously spent. At the same time, feedback so far is strongly in favour of continuing with a style something similar to this last event so that is the path we will follow for the end of this year. Whew!!!

On the other hand, it looks like there is a lot of new building going on in the club these days and a lot of enthusiasm that has maybe been a bit missing. That is good to see and maybe is well reflected in the turnout at the last couple of meetings. A good thing to see.

Maybe a more light-hearted column next month.

Keep on sailing.  
**-Barry**





**THE SUB SUBJECT**

AS YOU MAY GATHER, I CANNOT COME UP with monthly-column material and details all out of my head. So my main sources are published books and internet print-outs from friends who knew what I was after, *i.e.* MIDGET SUBMARINES; but books, if they existed at all, seemed to be particularly hard to come by. Then I got a tip from **Mike Gibson**—a then regular at the pond. He had a book about midgets. After weeks of searching in vain, he gave up. Tried Amazon.com. No luck. At Bolen Books (where I should have turned to in the first place) they found what Mike had lost, and ordered it for me. Weeks and weeks went by 'till they found a single copy. I promptly bought it and showed it to Mike. Yes, that was what he'd lost: Underwater Warriors by Paul Kemp—copyrighted in 1996.

It made for fairly dull reading, but complete beyond all my expectations; also as unbiased as can be.

By the time I'd read and summarized it in my notes, it resulted in enough material for four "Sub Subjects" that were published in May, June, July and August 2006 Binnacles. Then, as a follow-up, on December 2009, **Editor Bill** and his Guardian (Nancy) presented me with the hardcover of U.W.S. (scared up in Denver, Co.) and I turned over mine to the VMSS library. But, the new hardcover had rekindled my appetite toward republication with additions, deletions and reorganization of the original 2006 versions. So here's what's coming:

**Part I** (herewith): the DKM's diverse fleet

**Part II** (April 2010): The JIN's midgets

**Part III** (May 2010) : Italy's Decima Mas open air manned torpedos

**Part IV** (June 2010): X-crafts.

Although first one and later, two, German engineers had presented the Kriegsmarine with concepts and preliminary plans for midgets as early as 1941, the highly conservative brass showed not a scintilla of interest. At the time, they considered their impressive armada of battleships, cruisers, Frigates, PT-boats, etcetera fully adequate to defeat the RN. Furthermore, was this twosome not aware of how well Admiral Donitz's U-Boats were doing against the Atlantic convoys? But oh yes, Prof. Drager and Dipl. Ing. Schneeweiss also knew all that. They'd also taken the time, brains and a jewel-

ers' loupe to assess the fine print of the writing on the wall. To them, it looked ominous in the extreme. Success couldn't last. All for naught. The Kriegsmarine wouldn't budge.

Meanwhile, in other quarters, an eye had been kept on British midget efforts (two of the RN's very flawed Welmans had been captured and dissected) as well as on how the Italians and Japanese were moving ahead. Italian experts were invited to monitor the Germans' nascent frogman training, and the ambassador in Tokyo was instructed to get answers to a list of questions about the Imperial Navy's midgets. (The diplomatic delegation did get some answers, but not to the whole list of how thises and how thats)

Meanwhile, it had turned to 1944 on the calendar and the German forces were getting beat up on all fronts: On land, in the air and at sea. So, very suddenly and hastily, primarily with the pending Allied invasion of Western Europe on their joined political minds, the Nazi High Command came at last to realize that, despite the Organization Todt-built Atlantikwall, there wasn't a whole bunch they could bring to bear in fending off the estimated thousands (turned out to be about 8, 000) of ships, boats and other watercraft, such as D.U.C.K.S. that the allies would toss into the fray. At that point even Admiral Donitz got seduced into supporting (reluctantly) formation of a Kriegsmarine branch dedicated to the belated development and deployment of MIDGET SUBMARINES that, en masse, would sink or otherwise impair all this stuff that would bring men, materiel and logistics to continental Europe's Western shores. But where? No one knew--not even the Allies.

So, in a most un-Teutonic hustle, the formation of and funding for Das Kleinverband (Small Battle Unit) were approved. K-V was to be headed by Rear-Admiral Helmut Heye, but higher-ups vetoed that. He couldn't be spared from his more serious tasks. Instead, the post was plonked onto Vice Admiral Weichold's shoulders. Weichold screwed up very soon, and Donitz had his way: Heye got the job. Some job.

The sole lubricant offered Heye was this: He was granted almost absolute carte blanche to hire or fire, pick or reject "volunteers," approve, solicit or reject possible midget designs, commit Das Dritte Reich's

bankroll to builders' contracts and so on. The limitation--the "almost"--to his sceptre of authority was that Donitz blocked him from drawing on highly-trained U-Boat ranks. That was verboten--until the (now) Grand-Admiral relented late in 1944. Even then, no were allowed to

**Table 1: K-VERBAND'S EQUIPMENT**

Type	Tons	SizeFeet	Power	Crew	Torps	Built	Lost
Seeteufel	20.0	44.2x 5.8	Gas-Electric	2	2	1Scrapped	
Type 227	17.0	?	C-C Diesel	2	2	0	-
Seehund	14.9	39.4x 5.6	Diesel-Elec.	2	2	285	35
Type XXVII	11.8	?	?	2	2	0	-
Moloch	11.0	35.0x 5.9	Electric	1	2	393	?
Biber	6.3	29.5x 5.2	Gas-Electric	1	2	324	?
Marder	3.0	27.0x 1.6	Electric	1	1	300	150
Neger (Linsen)	2.7	25.0 x 1.6	Electric	1	1	200	140
<b>Totals</b>						<b>1218</b>	<b>325</b>

(Continued on page 5)



Table 2: K-VERBAND'S RESULTS (SUNK OR HEAVILY DAMAGED)

Sunk/Damaged	Cruiser	Destroyer	Merchant	NavalAux	TankLander	Tanker	Trawler	Other	Total
Neger		3	5	1			1	5	15
Seehund			6			1			7
Biber		1	2		1				4
Marder	1								1
									27

(Continued from page 4)

transfer to K-Verband. That, as may be appreciated by and by, could have helped the midget outfit somewhat, perhaps and maybe.

All that out of the way, Rear-Admiral Heye made post haste to approve numerous midget designs that looked as if they stood a chance at success. He negotiated building contracts in a frenzy. On that, as Table 1 is meant to show, he was, considering Das Reich's dire straits, incredibly successful. As Table 2 should make clear though: to little or inconsequential avail.

The reasons for Kleindienstverband's inefficacy are legion, but these are the four (interrelated) prime pin pointables:

**□ Timing**

Way too late in the game. Some three years plus into fighting a losing war. Most all of the other identifiable causes of KVerband's woes derive from impossible-to-meet deadlines.

**□ Equipment**

Far too wide a type array, inadequately engineered, under-tested and under equipped midgets. Some had neither scopes. navigation instruments, nor trim tanks.

**□ Personnel**

Short training courses, with drivers recruited "off-the-street." Some of the "volunteers" were mere teenagers. Among the few taken POW, some admitted they'd joined K-Verband to get out of reform schools and other correctional institutions.

**□ Shore Facilities**

No adapted docking and repair/maintenance facility had been readied in time. Further: All of the sundry types of midgets had to have their one or two fish attached while clear of the briny.

After weighing all of that and more, it is stunningly amazing and admirable that Admiral Heye's efforts bore any fruit at all. Yet, as shown, he caused a tad of indirect damage, by tying up the Allied watchdogs.

As far as wartime-records reliability goes, the gathered and tabulated data seemed good enough to draw a modicum of conclusions. Useless and, "on the surface" ineffective as K-V's sacrifices may have proven to be, isn't it remarkable that despite raw materials shortages and the interfering attentions from the R.A.F. during the night and the U.S.A.A.F. while there was daylight, the boys at sundry wharfs whipped up some 393 Molches between mid-, June

1944 and the end of February 19451 That calculates to an average production of about 1.5 copies a day. Not bad. Not bad at all.

Meanwhile, shortages of steel and other materials had become so severe that parts of the midgets had wood substitutes where steel should have gone, e. g. for the Seehunde hull extensions that carried the upper end of the rudder a wooden beam was fitted. But it worked. Then the makeshift engineering.

The poor suckers who drove the Negers (little more than a G7e torp with a plexi bubble covering a tight cockpit) had virtually nothing to look at once the canopy was oil covered by the slicks stretching from the landing beaches. Also, most unfortunate in the Type Neger, the torpedo release system was quirky.

Upon pulling the "Launch!" lever, two things were meant to happen. The torp's motor would start, and the weapon was to slide forward on a rail, and make 20 knots toward its target. But it often happened that the motor got spinning okay, launch rail didn't let go of the G7e. Thus the torp dragged the Neger forward at breakneck speed--fully out of control. All the pilot could do, if he felt that way inclined, was say his prayers—seldom to great avail, one must surmise despite the "Gott mit uns" battle cry.

Next month, an overview of Japan's midget actions will be trotted out, but Italians, as it happens, were the champs.

**Romanus Unicum**

**Notes to Table 1:**

The electric motors usually were torpedo motors. The six cylinder gas engines were Opel (German General Motors) and the diesels were Busing N.A.G. 60 HP truck engines.

The 393 Molch were built from June 1944 to Feb 1945

The Seeteufel had tracks, so it could self-launch and come back for more torpedoes. Unfortunately, the tracks were too narrow and the beaches too soft, The one and only Seeteufel was scrapped so it wouldn't fall into Allied hands.

**Note to Table 2:**

The two totals of Table 1 (1,218 and 325) divided by the 27 total of Table 2 show that about 45 midgets were built and delivered (never mind the numbers ordered) for every recorded hit. Alternatively, it took some 12 K-Verband losses for each Allied loss. Pretty lopsided, What?





# Old Wood & Rusty Iron

by MIKE CREASY

[This column will return next month. Ed.]



## Space. . . . or at least . . . . Web Space

Hopefully you have had a chance to go to our new webpage (www.vms.ca) and look at the content that is there at this point. It is basically all the content from the old page, sometimes rearranged, and a lot of new things. So go poke around a bit and look at what is there. Suggestions for layout, content, etc. is welcome. If you have some content suggestions then be ready to back those up with the actual content.

One other feature that is just ready to go is a Forum where we can exchange ideas about specific topics. We have set up some very general categories to start with and may expand those as we see how much of what kind of use is generated.

To get onto the Forum to leave a message or question, you will need to register. When you first go to the Forum (there will be a link to it from the main webpage) (or go to www.vms.ca/forum) you will see that the topic main category is called Rules and Registration. There are two documents under that category. Guess what? One is called Rules and the other Registration.

You should read the Rules but I suspect most will get through the first paragraphs and decide that it is fairly normal verbiage (it is) for using Internet sites and move on. The Registration one however should be read thoroughly (it is a lot shorter) because it has some definite instruction

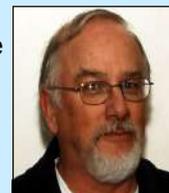
for how your User ID and Signature must look like on this Forum. What we aren't going to do is let those clever names that everyone dreams up be used. We want everyone to know who they are "talking to" when they get answers to questions or provide information.

As an example, my User ID on the system is Barry Fox CAN 262. It is my name and my IOM hull number. Clear as to who it is and unique as no one else has that hull number anywhere else in the world.

One of the things you have to provide to register is a valid email address. Some people are concerned about leaving their email addresses on these systems but that email address never shows up on the site for people to get their hands on. Even if someone sends you an email from within the forum they don't get to see your email address. Over time we will provide more information about using the forum and the new web site. Hopefully that will get us all building more models, using them and sharing how we do things.

IF you have any problems getting registered please contact me by phone or by email and I'll try to walk you through the steps.

**-Barry Fox**



**Note: The Binnacle has spared no expense to bring you the latest in breaking news of our members in action.**



Photo by Jim Briate

David Cook with torch



Pirate School 'A' Team

## America's Cup Sailing

While on a recent cruise along the Mexican Riviera, we stopped in Cabo San Lucas for a short visit. Though my wife and I had fun on excursions in the other ports, I was really looking forward to Cabo. While she went on a shopping tour, I had booked the sailing adventure months in advance.

The company, Cabo Adventures, has 4 retired yachts from the America's Cup, two from New Zealand and two from Australia. At first, our guide gave us a brief sailing history of the America's Cup. Following that, we proceeded down to the pier to board our boats. The premise is that they take out two boats and have a match race. Each boat has 5 actual crewmembers with the 16 guests making up the rest of the crew. Our guide, Alberto from New Zealand, gave us a brief run down on what to expect and about boat safety. The running joke was when the company bought the boats from New Zealand; they threw in a free Kiwi.

My boat was NZL 82. It raced against the Swiss challenger, Alinghi SUI-64 in 2003. Unfortunately Alinghi won 5 wins to nil. One member of our crew actually participated in the America's Cup. Reinhardt "Rhino" Rausher had been a member of Team Shosholozza for South Africa in the 2007 America's Cup. He was a grinder and with a nickname like 'Rhino' what else would you expect.

As we exited the harbour, it was time to raise the sails. I took a spot on one of the grinders and we started to crank on receiving the order. We cranked until I thought I couldn't anymore but kept going. After what seemed like an eternity but in actuality was probably about a minute or two, the sails were up. We were proud of our work. Our guide, Alberto, said it was not a bad job. But for comparison, Rhino can do it in 12 seconds.

We leisurely sailed around until the 2<sup>nd</sup> boat (NZL 81) left the harbour. A support boat had placed a marker buoy in the water and headed a mile or so out fur-

ther to act as the second marker. The plan was to cross the start line, tack up and then drive down, turn and repeat to the finish. The timer started and we jockeyed for position with the other boat. Our skipper's tactics paid off as we crossed the start line moments after the horn sounded.

It was quite an experience racing the other boat. Our skipper kept saying we were in the lead but we were behind the other boat, until we tacked. Then it made sense. It was a cat & mouse game to the support boat to make the turn. I was really surprised how close the boats get, as evident by the picture. NZL 81 made the turn first by using some improper and questionable sailing tactics as reported by our skipper. We were trailing but not by much as we approached the marker buoy. Just then our skipper announced we were coming to the finish. A number of us were perplexed. We asked what happened to the 2<sup>nd</sup> lap? Alberto said they were stopping the race after one. Not until we looked at the back of the boat and noticed one of our fellow crew members leaning over the side of the boat being very sick to say the least. They called over the support boat and off loaded him to return to shore. I know we would have caught & passed the other boat next lap. That's my story and I'm sticking to it.

We spent the rest of the time just cruising at sea, enjoying the beautiful weather. Everyone got a chance to helm the boat. And I thought my radio control sailboat was sensitive. After that we headed back to the harbour. We went back to their building for a free drink and a chance to look at and purchase pictures and merchandise. Besides some pictures, I picked up a polo shirt with my boat's name on it. I highly recommend if anyone gets a chance to do this sailing adventure, don't let it pass by.

You will not be disappointed it. It's a blast!!



**Scott Munford**  
America's Cup Sailor

## 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: [vmss@shaw.ca](mailto:vmss@shaw.ca) **subject line: "PhotoContest Entry"**
3. Model ships and related topics only, please. **Limit of 3 (three) entries per person.**
4. **Deadline November 15<sup>th</sup>, 2010.**
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 2011. **Questions:** email to: [vmss@shaw.ca](mailto:vmss@shaw.ca)

**GOOD BOATING AND SHOOTING!!**



## Water, Water Everywhere

The very nature of our hobby is that we put boats, and their parts, made of many different material types, into water. That water seems to have different properties as well, depending on where it is.

And, water has different effects on those different material types.

We are all fairly tuned into keeping the electronics in our boats as dry as possible. That includes spraying and coating connection before going out for a sail, draining any accumulated water inside the boat from time to time, and then some spraying or drying of connectors after a day of sailing.

We live in a fairly moist environment and so getting everything dry is sometimes a challenge. For very minor water intake it is often enough to simply take a hatch cover off and let it air dry over the time between sailings. But that isn't a very quick process, particularly during our more moist seasons. What happens is that, even though you have removed the standing water in the hull, there is some form of water vapour trapped inside the hull. If you remove a hatch to let the hull breathe and that hatch is at one end of the boat, it may take a long time for that vapour to all dissipate. In the meantime that moist vapour is working its way into all of your electronics, coating all the metal parts inside the hull and starting to corrode all those things that you may not have re-treated in sometime.

For those of us with fiberglass hulls, decks, fittings, etc. that moisture is working its way into any unfinished surfaces. Many people think that fiberglass is waterproof when it is actually only highly water resistant in its natural state. Most of these hulls are painted on the outside and that helps seal the material from water absorption. But a lot of hulls are not painted or finished inside. In some cases, such as IOM sailboats, the boats are using class rules that prohibit painting the interior of the hull. Over time the fiberglass will absorb some amount of moisture if it is not subjected to something better than simple atmospheric air drying. This is particularly the case where some of these boats are seeing weekly use.

How all that has an effect on your interior mechanical and electrical piece is that if there is any moisture inside the hull and you take it out on a nice sunny day with the hull all closed up, the heat of the sun on the deck will warm up the interior and get the vapour loose, again, and working its way into and on all those things you want to keep dry.

So the better answer is to make sure you do something to absorb the moisture from inside the boat or

to force a lot of airflow through the hull to carry the moist air out of it.

A lot of medications and electronic equipment come with little moisture absorption packets in their containers. These dry out over time and can be re-used. So if you start saving them you can take a few and put them in the hull after sailing (and getting rid of excess water) and they will draw moisture from the interior of the hull. It is interesting to put them in what you think is a dry hull and then weigh them when you take them out after a few days and find them heavier by a few grams.

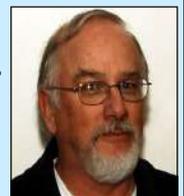
The other more obvious thing is to blow air through the hull for a number of hours each time you sail. There are a number of ways to do this. A common way is to find a fan off a computer or other electronic device and find a way to mount it on an opening at one end of the hull and open a deck hatch near the other end of the boat so the air is pushed through the whole length of the hull. For most of these fans you need a DC power source to make them work.

I found a cheap hair dryer and disconnected the heating element and it moves a lot of air. It also plugs into the wall so it may be a better way for some to go.

So how much water is there held in the hull when it appears to be dry? Last spring I did a "down to the bare fiberglass" rebuild on one of my boats. Lots of sanding, lots of dirty, wet sanding residue left in the boat after a thorough wet sanding. So I had to give it a big washout after each sanding session. Basically I would flood the hull in my shower, slosh it around to get in all the corners and rinse it a few times. Then I would dry it as thoroughly as possible and hang it up to finish drying. Part of my exercise was to reduce the weight of the boat so knowing how much weight I had taken off when I got rid of the paint was of interest to me. So I would weigh the boat after sanding and washing, and drying. I would invariably be a bit surprised at how little lighter it actually was. So one time I decided to weigh it before I sanded, knowing what it weighed after the last session and discovered that over night, just hanging on a hook in my work area, the hull had gone down 10 gm without doing anything more than just hang on the wall. So my routine changed to weighing it after it had dried out, not just after I finished for the day.

So the idea that fiberglass will eliminate water absorption is flawed.

**Barry Fox.**





Hi Bill

I took a few photos with my new camera yesterday at the MCC.  
 The consensus was that the tour was enjoyed by all who attended, both educationally and socially. There was also a navy lieutenant overseeing the waters for the Olympic games which was an added bonus.  
 The tour on both days was conducted by Teresa ( supervisor, also see photo ) she gave a complete run down of the whole operation around the island , stations north, south, east and west to Tofino.  
 The tour was of particular interest to our members who are full size boaters.



I have the names of three members who would like to visit the centre at a later date so if anyone else would like to join I could arrange another tour. Looks like the end of March or early April. They can contact me at 250 652-8579 or ecreid@shaw.ca or for a personal tour contact the centre direct at 250 363-6333 and ask for the supervisor.



Here is a brief resume of the whole operations at the IOS

***Institute of Ocean Sciences (IOS) is also home to the Pacific Geosciences Centre, the main centre in western Canada for monitoring earthquakes. A seismic fault is located on the grounds. Also stationed at IOS is the Canadian Coast Guard Pacific Fleet (Patricia Bay Base) as well as the state-of-the-art Marine Communications and Traffic Services Centre. In addition, offices for the Canadian Wildlife Service and North Pacific Science Organization or PICES, Institute of Ocean Sciences an international scientific body devoted to oceanography, are part of the modern 300,000-square-foot facility. IOS also builds active links with industry, both as an active partner and an information resource.***



Located at:  
 9860 West Saanich Road  
 (on Patricia Bay, at the west end of Victoria International Airport)



Regards

Ernest



Photos by Ernest Reid

### MARCH DOOR PRIZE: Dremel Moto Lathe



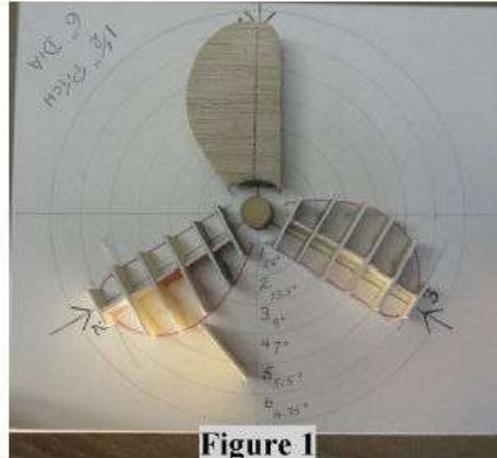
Kindly donated by Len Gibbs.



## Casting a Model Boat Propeller by Ken Ensor VMSS

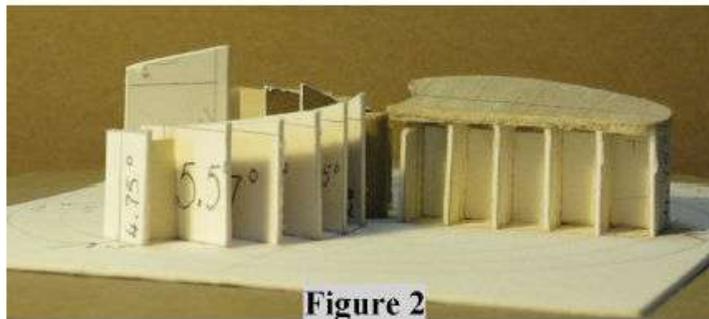
This article outlines a method of building a jig to produce a planked plug and a core box for casting a 3 bladed propeller. This method is completely general and can be employed to produce any size propeller. The only tools required are a pencil, ruler, compass and protractor.

### 1. Building the Jig



**Figure 1**

Jig employed to construct a plug for casting a 6", 1½" pitch 3-bladed propeller. The sections are spaced ½" apart in concentric circles. It is only necessary to plank one platform.



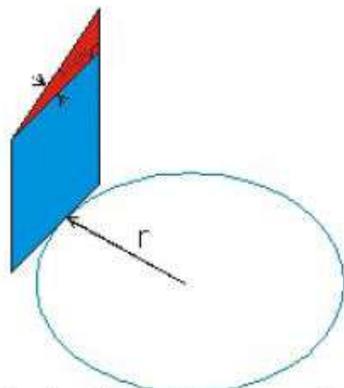
**Figure 2**

Side view of the jig showing the angle of elevations each section. The angles from the hub to the tip of the propeller range from 26 deg to 4.75 deg

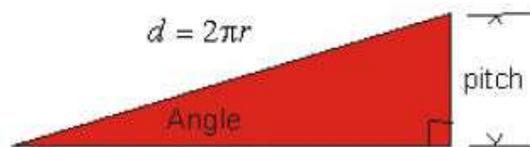
The above article was written by **Ken Ensor**,  
and is published here in his memory: we miss you, Ken.  
*[Thanks to Jim Briante. Ed.]*



**2. Geometric construction to determine by measurement the angle of elevation ( angle above the horizontal)**



Angle of elevation of a section at a distance r from centre

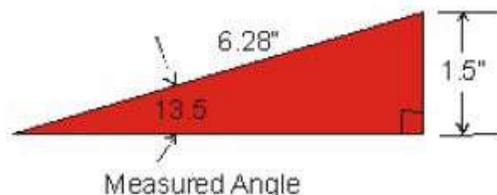


Right angle triangle construction used to determine angle

**Example:**

Triangle construction to obtain the angle of elevation for a section 1" from centre

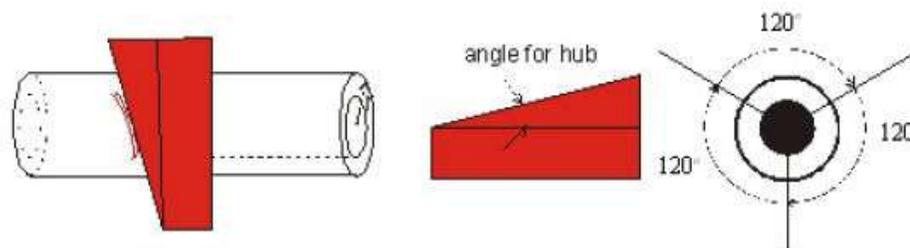
$$r = 1, \text{pitch} = 1.5, d = 2\pi = 2(3.14)(1) = 6.28$$



Construct right angle triangle with sides 1.5" and 6.28". Measure angle with protractor.

**3. Slotting the Hub:**

Use the same procedure as above to obtain the angle of elevation for a hub of radius r. On paper construct a trapezoid containing the angle of for hub. Wrap paper around the hub locating the slots 120° apart.



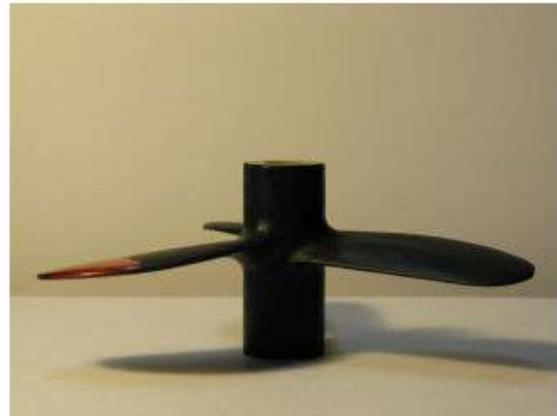


#### 4. Planking the plug for the propeller:

The hub is positioned on the jig with the centre of the slot aligned with the line on the jig platform. The blades are constructed one at the time by using 5/32 " square planks that are inserted into the slot and glued to follow the contour of the platform. When the planking is completed a filler is used on the hub to produce an even smooth contour that blended into each blade . The plug is then sanded and painted.



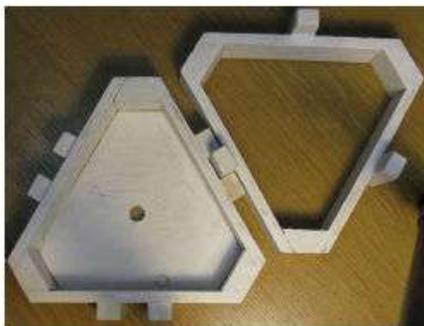
Propeller in jig



Finished propeller

#### 5. Core box:

A core box for this project was build in two interlocking sections. The size and shape of the core box was specifically designed to accommodate a 6" propeller and suitable for casting using plaster of paris.



Core box sections



Interlocking guides and markings

#### 6. Casting the Propeller:

To be completed later using the "lost wax method"