

The Binnacle



Victoria Model Shipbuilding Society
Victoria BC Canada
vmss.ca



Yahoo! Newsgroup : VIRCB
Vancouver Island Radio Control Boaters

The BRAtt World Debut page 8



VICTORIA MODEL
SHIPBUILDING
SOCIETY SALUTES
THE CANADIAN NAVY

Our brick...
Photo by Bill Andrews

BATTLE OF THE ATLANTIC SAIL PAST
(More on page 12)

Supply ship: "Atlantis"



VMSS Auction: May meeting!

CREATED
BY

LEN
GIBBS





Victoria Model Shipbuilding Society

General Meeting – April 8, 2010

Call to order: 7:30 pm (27 members in attendance)

1. Welcome: One new member joined tonight, **Robert Ames**
2. Outreach: All is well.
3. Club Finances: **Mike Creasy** reported that so far this fiscal year; we have an income of \$3905 and \$4500 in expenses and \$8015 in the bank. With the large donation of items from **Len Gibbs** and with the money from Pirate School, the club is in good shape.
4. Upcoming Events: On April 18th, the next leg of the VMSS Handicap Club Championship Sailing takes place at Beaver Lake. The entry fee for this event has been changed to \$10 for the whole series. The next two races for the All Island sailing series takes place on April 24th at Long Lake and May 16th at Cameron Lake. The Battle of the Atlantic is on May 2nd at Harrison Pond. Maple Bay is holding their regatta from May 22nd –24th. On June 13th, the Naval Salute takes place at HMYP. Set-up is at 8am with a 10am start. July 11th is the Annual Strawberry Festival at Beaver Lake.
5. Open Forum: **Ron Armstrong** had some extra posters for the Battle of the Atlantic to give to members if they knew a place where they could be displayed. **Mark Giles** had a guy come into the hobby shop looking for someone to build some sails for him. **Dave Taylor** brought in some 6 & 12v batteries to give away.
6. Show & Tell: **Dave Denton** showed some plans he was given by **Len Gibbs**. **Scott Munford** demonstrated his bilge pump he recently purchased. **Ron Armstrong** won the raffle prize for the night, two soldering irons. **Robb McDonough** conducted the auction for the Proboat Black-jack donated to the club by **Norm Farley**. New member, **Robert Ames**, purchased it for \$100.
7. Adjourn business portion & break
8. **Rob Ross** showed us his mold for his new fibreglass hydro he is building. Then he showed a video taken with his new camera that can be mounted on boats.



Respectfully Submitted
Scott Munford, Secretary

2010 Executive Committee

President: Barry Fox	294-0350
Vice-Pres: Rob McDonough	598-4619
Secretary: Scott Munford	382-1673
Treasurer: Mike Creasy	888-4860
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Binnacle Editor: Bill Sturrock	479-0239
Quartermaster: Bob Rainsford	383-2256
CRD Liaison: Rob McDonough	598-4619
Parks Liaison: Mike Claxton	479-6367
Sailing Director: David Cook	388-5994
Librarian: Dave Denton	478-1800
Publicity: Ron Armstrong	385-9552
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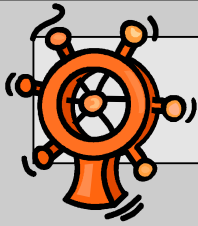
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The Prez Says...

President Notes . . .

A third of the year through the year and we are enjoying quite a bit of activity.

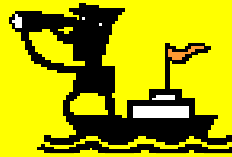
On the business side we are seeing a good number of donations in the form of complete boats, tools and other modeling paraphernalia coming to us. The nice thing about these kinds of things is that the club has a chance to take in a little extra income and all of the members have a chance to acquire some nice tools and boats for not too much money.

We have had some good events already taken place and even more to come. Most recently, the **Battle of the Atlantic Salute** took place. Not really too bad for weather, a good turnout of boats and a good turnout of public to watch. The publicity we have gained from these kinds of events has a longer reaching effect that most of us can see. For instance, as a result of the good show we put on for this most recent one we are being asked to participate in more shows. Not all of them will pay like we are used to getting from our main shows but they can afford us the chance to be seen by more people and that, in turn, can become more members. More members = better club (mostly). There will be more talk about some of these at our next meetings.

Sailing has seen a good and steady turnout for our regular sail days and **David Cook's** Handicap Series has had some good results. We still need to fool with the staggered start times a bit but the last one was pretty good with the winds being better than our first event. I think it is fun for the slower (just the speed part) skippers in that they get to go out on the first winds after the start and work at staying ahead. The faster (again the speedy thing) have their work cut out for them to catch and get through the traffic so that is really a great practice thing for them as well. Just about any boat should be able to be competitive in this Series so if you have a boat with sails on it bring it down and have a go. It is very low pressure racing. Next up on the big list is the **Naval Salute** in June. My challenge from last month still stands; let's have a boat on the water for every year the Navy is celebrating; **100 boats for 100 years**. I'll have my "Navy Tug" on hand. There will be lots to do for hours of fun and entertainment so make sure you are there.

See you all on the water.

Barry



ON THE RADAR

INFORMATION ON UPCOMING EVENTS

May 16th, All Island Sailing, Cameron Lake

May 23, Maple Bay Boat Festival

June 13th, Naval Salute, HMYP

July 11th, Strawberry Festival, Beaver Lake



Meetings: Second Thursday 7:30-9:30
4050 Carey Road
Next is: June 10, 2010



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: May 16th, 2010



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



FYI: SOUTH OF THE BORDER-

See page 9...

VMSS AUCTIONS!

Just a friendly reminder that the auction for **Len Gibbs** Atlantis ends May 13th at 8pm and the Galleon ends June 10th. Current high bids are \$200 for the Atlantis and \$500 for the Galleon. To place a bid, contact **Bill Andrews** at 250-479-2761 or email at b-bandrews@shaw.ca.

THE SUB SUBJECT PART III: THE ITALIAN MIDGETS & MANNED TORPS

THE MORE ROCKS I TURN, THE BROADER THE MIDGET SUBMARINE topic seems to get. So this month, basics and highlights of the Italians' exploits are up.

Disregarding the September 1776 attack on HMS Eagle with Ezra Bushnell's egg-shaped wooden Turtle, it turns out that in "modern" history, the Italians were way ahead of the pack in the concept, construction and deployment of the midget sub as a weapon.

On November 1, 1918, one of their two MIGNATTAS (a converted [bronze] torpedo with two operators riding astride) attached two 600 lb. mines to the hull of the *Viribus Unitis*, one of Austria's capital ships, while she lay at anchor in Pula – on the Adriatic's east coast. To the Italians' elation, the battleship sank to the harbour's bottom, angled about 45 degrees to port.

Following the armistice, Italy put midgets on the backburner--but not all too far. By the mid' 30s, trouble in Ethiopia and elsewhere caused the Regia Marina [Italy's Navy] to revisit their 1918 success. As is often the case, just one man was the spark, the organizer, advocate mover and shaker of Decima Mas {Copied by Germany's K-Verband [see May '06 Binnacle]}. was a submarine commander: Junio Valerio Borghese--a blue blood as were many of his officers.

Borghese set out to harvest the creme de la creme for his 10th Light Flotilla (i.e. Decima Mas) to conduct nefarious but always chivalrous undersea warfare. He filled the ranks with the physically fittest, most intelligent and dedicated (not fanatical) men that Italy offered. Then they were trained to such level that all their risky and difficult tasks became second nature. In all Decima Mas counted no more than 30 to 40 crew and divers--plus, course, technical support staff.

Decima Mas went about giving (primarily) the Royal Navy migraine headaches three ways: (1) with PT boats, (2) Gamma men (divers) and, (3) the two-men MAIALES ("pigs") which the British, once they'd built their own versions, called CHARIOTS.

Torpedos were not part of the Decima Mas arsenal. What it did was get under RN and merchant vessels at anchor, attach explosives (mines, really) to the bilge keels, set the timers and exit stage left as best they could--waiting with bated breath to see or hear the hoped-for results.

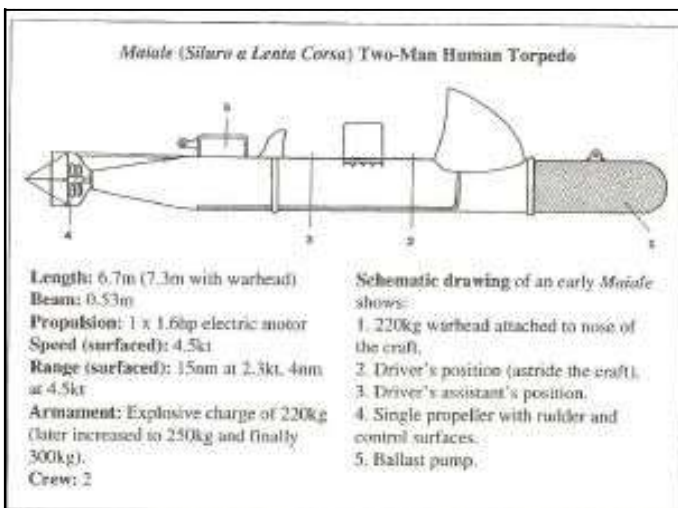
The PT Boats' drivers never had to wait. They ran their Alpha Romeo-powered mahogany boat flat out at 32 knots, aiming for targets' flanks, got to within 100 to 200 feet, pulled the "Eject" lever, and made a graceful, arched exit still seated on their wooden chair. Quite spectacular, but no specific records of success were located. Yet, under their bulging foredecks, they carried some 600 lbs. of Freddy Nobel's best.

The Gamma men were put to sea as close to target as practicable, by either surface craft or submarine. From there they swam out to the enemy ship, took the explosives from their rucksack or waistbelt, attached them to bilge keels with clamps or magnets (limpet mines) and went else where posthaste.

One trick device at the Gammas disposal was a difficult to detect (short of a diver's visual inspection) 10 lbs. bomb with a small two or three-bladed screw on its tip. It started to rotate real slow as soon as the mined vessel got way on. The screw set the detonator, and miles out of harbour the thing exploded. For a good while, masters and crew of thus damaged or sunk ships did much hair scratching I before they twigged on what sort of souvenir they'd been handed. Not a ship in sight... not torpedo wake observed... "What the .???"

But the MAIALE was Decima Mas's bread and butter-- workpig.

Simple yet sophisticated, often troublesome, those shy of 24' l.o.a. two-man subs raised absolute havoc with the British fleet. First, in December 1941, at Alexandria and, later, until September 1943 when the Fascists tossed in the towel, inside Gibraltar and out in its offing.



The bottom line: Decima Mas's efforts sank or seriously damaged four battleships and no less than 27 merchantmen. Just before Italy quit on the Axis side, an attack on New York Harbor had been mapped out, equipped and staffed.

Throughout its six or so years' existence, Decima Mas operated in the Mediterranean—east and west. A first outstanding success (on the third try) was achieved by just six men on their three MAIALES. The midgets had come in containers carried on the casing of a sub. They got into Alexandria's well-guarded port without cutting nets or booms. They bided their time till they could slip through

(Continued on page 5)



(Continued from page 4)

while RN ships came out. Then they went about their difficulties. First: detach the MAIALES warheads, clamp and/or cable them to the bilge keels of the Queen Elisabeth, the Valiant and a tanker. All three vessels were disabled for nearly two years. Churchill, apparently, got quite provoked.

The next Decima Mas hunting ground was Gibraltar—its harbour and its expansive anchorage.

With a blind eye turned by Spain's Franco regime which despite its neutrality owed Italy a debt of gratitude, Decima Mas operated from two Italian ships that had been interned in Spanish waters upon Mussolini's declaration of war. On the quiet, both the Fulgor and Olterra were adapted to use by Decima Mas as support, supply and logistics bases--under water hangar doors, workshops, storage racks ... The whole nine yards. The MAIALES and Gamma boys never had it so good. Just a hop skip and a jump from Gibraltar?Wow.

It could be held that, relative to organization, equipment and manpower involved, a total of four battleships and some three dozen freighters bagged, Decima Mas— while way more effective than its German or Japanese counterparts, was ineffective. Yes, early in the war, a pair of U-boats could have done as much or more damage. Yes. But not to be overlooked is how the needed 7/24 vigi-

lance tied up British, Australian sailors and equipment. At Gibraltar, for example, patrol craft never stopped patrolling. Never stopped dropping off caseloads of antipersonnel scuttle mines. The Tirpitz in its Norwegian base did the same thing: tying up escort vessels for the Murmanskbound convoys.

What is very clear is that, despite all adverse propaganda and rude jokes, not all Italianos can be wiped with the same dishrag. Decima Mas, at least, had solid ranks of brave, competent and patriotic management and staff.

Next month, a look at the "Royal Navy's midget warfare willput "paid" to this midget submarines series. Romanus Unicum

Romanus Unicum



MAY DOOR PRIZE!

Photo by Bill Andrews



Rob Ross's DE at Harrison
(star of the Sail Past)



Old Wood & Rusty Iron

by MIKE CREASY

We look forward to having more history articles from Mike in the very near future. Ed.

Victoria Model Shipbuilding Society

Celebrates

CANADIAN NAVY 100 Years of Service



**We invite you & your Club to join us
in celebrating the Canadian Navy's
Centennial.**

**Please bring along a naval vessel
& be part of the fun.**

**Harrison Model Yacht Pond
Dallas Road at Government, Victoria**

**10 am to 4 pm
Sunday June 13th**



Information: Robb 250-592-6866 mgiles@islandnet.com

Sailing Update

VMSS Club Handicap Sailing Championship Series (CHSCS)

On Sunday, March 7th VMSS hosted its first of a 6-event club handicap sailing championship series of what will hopefully be an annual tradition held one Sunday a month for 6 months throughout the year...March, April, May, September, October and November.

Each skipper and their boat were grouped into one of three groups based on their past performance. Blue would start either 30 or 60 seconds before the start signal depending on how light the winds were; red 15 or 30 seconds before and yellow at the start signal.

This system will allow any type of radio-controlled boat to race together. The staggered starts allow those who don't normally lead from the start an opportunity to lead in cleaner air and stay ahead. It also puts more pressure on the faster skipper to have to catch up and sail through or around the other boats' 'dirty' air.

For the first event we had 11 participating skippers with **Ken Lockley** getting the top spot followed by **Barry Fox** and **Ron Ingalls**, one of VMSS' new members. Speaking of new members, I'd like to welcome **Adrian Harrison** who showed off his beautifully built Star and **Robert Ames** who sails a Victoria Class boat.

The next Club Handicap Sailing Championship event is on Sunday, April 18, arrive down to the lake between 12 and 1230 to help set up and practice before the scored racing starting at 130. The series entry fee has been lowered from \$30 for the year to \$10 so bring whatever you might still owe.

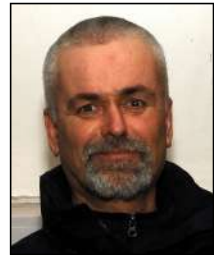
The month of March was a busy month for VMSS sailors with at least 5 sailors going sailing every Sunday each weekend throughout the month. VMSS had a great turnout of sailors at the 2nd event of the All Islands Spring Series hosted by the Saltspring Island Sailing Club. The winds were light and shifty and our performance wasn't too stellar but I had fun despite my tribulations.

My wheelchair died three-quarters of the way through the event and it took 5 people to push me up a very steep gangway. Thanks to Jan for being my chauffeur and Barry for lugging my boat to this and most other events.

I hope to see more of you out sailing that have sailing boats. You're missing a great time!

Cheers

David Cook



Victoria Model Ship-building Society (VMSS) Club Annual Handicap Sailing Championship Series Event 1 - Beaver Lake, Victoria, BC, Sunday, March 7, 2010										
Skipper's Name	Starting Group	Sail No.	Race 1	2	3	4	5	Total	Final Place	
Ken Lockley	blue	215	3	4	1	4	4	16	1	
Barry Fox	yellow	62	6	3	3	1	5	18	2	
Ron Ingalls	red	212	5	5	4	2	2	18	3	
Eric Paul	yellow	36	1	6	5	6	3	21	4	
David Cook	yellow	50	4	1	8	7	9	29	5	
Jenny Taylor	blue	105	7	2	6	5	7	27	6	
Peter Crowe	blue	03	2	8	9	8	1	28	7	
Ernie Reid	blue	19	8	9	2	3	8	30	8	
Dave Taylor	red	30	10	10	10	9	6	45	9	
Dave Denton	blue	54	9	11	7	10	9	46	10	
Dave Seager	yellow	2	11	7	10	11	9	48	11	

Next event on Sunday, April 18, 2010, 12-1230 arrival time, 1-130 practice, 130 start of scored races
Overall series results will be based on your best 4 events (2 event discards)

[Editor's note: the above two sailing items were inadvertently omitted from last month's issue]



The BRAtt World Debut

Tuesday, May 4th, 2010

Robert Allan Ltd., Western Maritime Institute, and Corvus Energy Limited are very pleased to announce that a contract will be signed for the design and construction of the world's first "Green" Training Tugs at the International Tug & Salvage (ITS 2010) Conference, to be held in Vancouver in May 2010. Western Maritime Institute (WMI) is an accredited marine training institute located near Ladysmith on Vancouver Island, providing a wide range of operational and safety training courses for marine personnel at all levels. WMI is scheduled to take delivery of two BRAtt Class training vessels, one fully electric, and one hybrid-electric in 2011. This will coincide with the introduction of its DNV certificated, advanced tug and pilot ship-handling courses, offering to the tug operators of the world the first such commercially certified training program with an international focus. WMI will be the first such institute anywhere in the world with dedicated Z-drive training vessels.



The BRAtt training tugs are the brainchild of **Ron Burchett** and Robert Allan Ltd., the result of a collaboration that recognized the global need for cost-effective Z-drive training vessels for today's commercial and naval ship Masters. These vessels are designed exclusively by Robert Allan Ltd. Naval Architects of Vancouver, and will be built by Adrenalin Marine Ltd. of Delta, BC, which has been selected as the licensed builder for all BRAtt in North America. The very first BRAtt, a direct diesel-powered version, will be on display at ITS 2010, and will be available for demonstration to all ITS registrants. The 7.8 metre long, 450 horsepower BRAtt features most of the same technology and operating systems as its full-size sister Z-drive tugs, so that operators can be trained to safely handle the more expensive and larger tugs that have become common in the world's major ports, without putting those major assets at risk. Although primarily intended as a training vessel, the BRAtt is also designed to be an affordable alternative to full-sized tugs for harbour duties such as boom deployment, yarding, and line-handling, etc.

Energy designs and manufactures Lithium-ion battery systems for vessels from the size of a BRAtt to commercial ocean-going vessels. Corvus has developed the electrical propulsion power systems for both these vessels in close collaboration with Robert Allan Ltd. These design options offer the best of both worlds, one fully emission free, electric-powered vessel and one fuel-efficient, diesel-electric hybrid vessel. By incorporating Corvus' battery technology, WMI has made a strong statement that the future of the commercial marine industry is tied to a commitment to the environment and the reduction of pollution and harmful emissions. With Corvus batteries and systems, the reality of safer, more environmentally friendly vessels are here today.

WANTED

Want a Commander radio and receiver working or not or any radio that is similar.
Please call **Bill Andrews** @ 250 479 2761 or cell 250 886 2761.

VMSS AUCTIONS!

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DAVE'S CORNER

Well here it is Mothers' day dinner is done, the kids have left, Marion is taking home her aunt and a friend from church, and here am I reflecting on how much good boating we are having. The Battle of the Atlantic was a resounding success, thanks to **Rob Ross**, the weather cooperated in spades.

On Wednesday, I went down to Langford Lake and my boat wouldn't run; I took it down to Mark, and he said If I put the batteries in correctly it would help a lot. I didn't feel to bad as Ernest had two boats fail.

I was down at the pond today, the weather was spectacular, all the fellas had a good time, both Ernie's and my boats did well.

Next thing up is the sailboat regatta at Cameron Lake; I will carpool with **Barry Fox**. This is to show other clubs that both sides of model boating can get along and indeed augment each other, this is on May 16.

May 23 is the Maple Bay Boat Show. I presume there will be lots of restored boats to gawk at, but the main event is the Model tug boating events, and I feel that I will stand a reasonable chance of winning, hopefully.

June 13 is the Navy Celebration of 100 years. We will be participating, and get this, we will be given the Naden pool. We will have quite a few events all planned out by **Mark Giles**: Blind conning, Replenishment at sea, Depth charging, to name a few.

As you can see we have a lot of stuff going on, so cut that grass during the week, because the weekend is for playing boats.

Dave Denton



FYI: SOUTH OF THE BORDER

Thanks to **Mike Claxton**

- May 19/20 Anacortes Waterfront Festival, Cap sante Marina in Anacortes, WA
- June 5 or 6 (not sure which) NW R/C Shipmodelers Regatta at Downtown Park, Bellevue , WA (regatta/contest)
- August 13/14/15 Crawdad Festival, Tualitin, OR
- August 21, Foss Cup, Downtown Park, Bellevue, WA (regatta/contest)
- September 4/5, Fall event Bellingham International Maritime Museum, Bellingham, WA



But My Boat Doesn't Leak

Particularly among the sailing community, I hear that phrase quite a bit. My observation is that some leak less than others but they all take on a bit of water. Sometimes that is just a few drops but when they are inside a (almost) sealed environment those few drops turn into water vapour and that eventually causes trouble with a capital C (corrosion).

Lots of people think that if they only sail on fresh water that everything will evaporate and dry out after awhile and nothing will corrode. Another observation, not true!!!

We live in an area that is surrounded by salt water. Like all water in the world, when it gets warmer that water has a certain amount of evaporation and that evaporation (as in humidity) would tend to have some salty content. So you air your boat out in a natural environment that has some salt content and that air that is drying out your fresh water boat mixes with that salty air. And that is a good cause of corrosion.

Check all of your radio and servo connections. Usually the centre wire of the three is the positive lead. If the male

end of it (easier to see) isn't bright and shiny then it is likely showing a tinge of blue. That blue is the corrosion of course and it is already eating away at that pin. Left long enough, the pin just disappears.

If you treat all of the radio and servo connections (whether you think your boat leaks or not) to some corrosion spray every now and then and then coat (liberally) with something like dielectric grease (most any auto supply place – it is used to seal and lubricate sparkplug boots and other connections) you are saving yourself from a lot of grief that seems to only show up when your pride and joy is in the water among a bunch of other boats; and ruins your fun day on the water. A few pennies spent on something like the grease can save you many dollars or replacement wiring and servos, and making your day on the water a lot more enjoyable.

-Barry





**The Design of an RC Electronic Speed Controller (ESC)
from a Wish List
By Jim Briante**

The design for an ESC was sparked by many factors. These included the stories and complaints about existing ESC that have circulated among club members (quite a few by Ken Ensor) at Langford Lake, and the need for various types of speed controllers for a mine sweeper that I have under construction.

The first ESC was specifically designed and constructed to drive the main cable reel of the mine sweeper. The design had three basic requirements. First it needed to operate in RC mode. Second it had to operate in manual mode using a lever as a joy stick to increase/decrease the speed in both the forward and reverse direction. Third the ESC needed to be very small in order to approximate the scale size of the control panel used to operate the 32 foot cable reel of the full scale mine sweeper. The size requirement posed some interesting challenges; the number circuit elements needed to be minimized and the readily available easy to use ICs could not be used because of their large size. The final design was reduced to a micro controller, a tiny surface mounted motor driver soldered to a carrier board and a few support components. The block diagram and the specification of the cable reel speed controller are shown below.

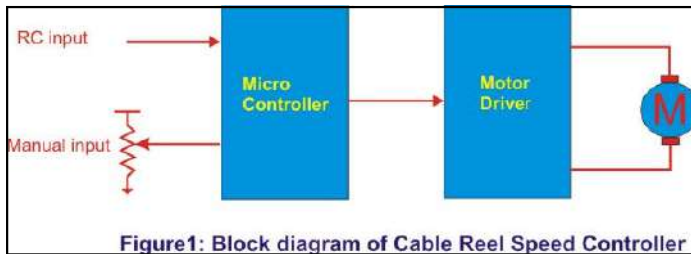


Figure 1: Block diagram of Cable Reel Speed Controller

Operating Voltage	3 to 7V
Motor Drive Current	Max 1 A
Total Circuit Current (Motor plus Electronics)	25 Ma
PWM frequency	23 KHZ
Step Resolution	127 steps Forward, 127 steps Reverse

Figure 2: Specification of Cable Reel Speed Controller

The cable reel speed controller can operate from 3-7 V and is powered by 5V directly from a three pin connector of an RC receiver. The motor driver IC used in the design is well suited for this type of application. It is inexpensive due to high volume use on many consumer applications (VCR, CD/DVD, AV- equipment, optical disk drives, PC peripherals, etc), it is very mall (.25" by .2") and available for supply voltages from 3-36V supporting currents up to 2 A.

The hand wired speed controller mounted on the cable reel is shown in Figure 3. The case size is 3 cm x 2.5cm x 2cm

which is slightly larger than the scale size of the control panel of the mine sweeper.

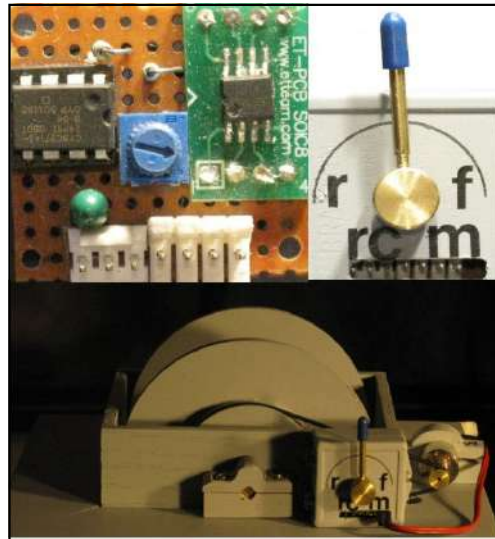


Figure 3: Cable Reel ESC

My next task was to design a speed controller capable of driving the twin screws of the mine sweeper. This process involved many iterations: programming, bread boarding, testing, and prototyping. With each iteration more features were added and what started as a simple design escalated to a full blown design of a general purpose speed controller incorporating many ideas of my initial "wish list". The block diagram of the speed controller, dubbed as ESC 2010, is shown in Figure 4. The assembled controller, which measures 4.5 cm by 6.3 cm, is shown in Figure 5 together with a partial list key feature.



Figure 4: ESC 2010

Key features:
Wide operating Wide voltage range: 12V to 55V
Drive current: 2A/4A - Peak 6A/12A

(Continued on page 11)

(Continued from page 10)



Figure 5: Block diagram of ESC 2010 Speed Controller

Pulse width modulation (PWM): 11,800 HZ
 Calibration Function (parameters stored in permanent memory): Once calibrated (neutral, forward, reverse) there is no need to adjust trims pots of transmitter
 Smooth acceleration/deceleration: 255 steps forward, 255 steps reverse
 Current sense: Motor current can be measured with volt meter on a two pin header
 Internal/External over current protection
 Transient protection: Motor H-bridge protected from voltage spikes on both ground and + side
 In circuit programming: Software can be upgraded.

What Is Next?

Cable Reel Speed Controller

The next step is to miniaturize the cable reel speed controller to “post stamp size on a printed circuit” with in-circuit programmability. With in-circuit programmability it is possible to program additional features without any circuit modifications. This could include the ability of the set the desired rotational

speed of a motor by a potentiometer with the off/on function controlled by an RC signal. This feature would be useful when rotating devices like antennas, guns, reels, etc at a rotational speed that is suitable to a particular device. The method commonly used to mimic this function is to modify an RC servo motor to make it free running, but with this modification the rotational speed is fixed and non controllable resulting in a rotational speed that may not be useful.

The ESC 2010

The basic operation and specifications of the ESC 2010 are almost complete. There may be minor changes in the component placement on the printed circuit board to accommodate a planned enclosure. I do not anticipate any major changes in software or modes of operation.

However, should new features be required I've left the door open to software update/modifications by incorporating in-circuit programmability.

In two to three week time my mine sweeper, the “Cordoba 58” (75% completed), powered by two Pittman 9414 series motors under the control of two ESC2010 should be ready to be launched at Langford Lake. If all goes to plan, the “Cordoba 58” will make its first sea worthy appearance at the Navy's 100th birthday celebration. Thanks Ron for your suggestion!

Comments or suggestions are appreciated.

Jim Briante

jbriante@gmail.com

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 **subject line: “PhotoContest Entry”**
3. Model ships and related topics only, please. **Limit of 3 (three) entries** per person.
4. **Deadline November 15th, 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

GOOD BOATING AND SHOOTING!!



BATTLE OF THE ATLANTIC SAIL PAST 2010

