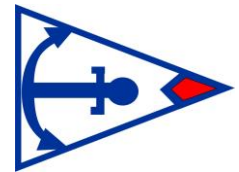




# The Bitter End

Editor: Bill Reynolds JN



November 2016

**Newmarket Power & Sail Squadron**  
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## From the Bridge...

The boats are on the hard and (hopefully) ready for winter's blast. We have had snow already here in Barrie but a warmer than usual fall has made boat work easy. The high winds at the end of October played havoc with some tarps but the 60 plus sailboats in my club seem to be ready to deal with a snowy winter.

I hope everyone has been getting updates from CPS National regarding member benefits. Recently, Fugawi increased the discount the offer CPS members to 20% until October 31. This is just one company that recognizes CPS members. Cowan Insurance Group offers discounts on boat, car, and home insurance. ICOM offers rebates on selected radio equipment. C-Tow offers discounts on Marine Towing packages. Salus offers discounts on marine wear. Check out the benefits on the CPS-ECP.CA website under member Membership/Member Benefits to learn more.

I know a lot of boaters spend the winter months planning for next summer. The Toronto Boat Show is a great opportunity to forget about the cold and look at the latest offerings of marine manufacturers. Whether you are dreaming of a new (and bigger) boat or are in the market to replace worn or outdated equipment, this is a great opportunity to see a lot equipment in one place. Most of the retailers also offer good discounts during the show. I know I need to replace a few expired flares and this is where I will do my shopping.

If you do come to the Boat Show be sure to look up the CPS booth and say hello to the volunteers who promote our activities to the boating public. If you want to volunteer as a CPS representative at the Boat Show, you can sign up on line at [www.cpssignup.com](http://www.cpssignup.com). Remember it is a way to volunteer for CPS-ECP and also to get into the show for free.

In this edition of the Bitter End you will find an outline of the courses we are offering beginning in January 2017. An article outlining a new procedure being implemented by the US Coast Guard will be of interest to anyone planning to travel in the US Atlantic costal waters.

Enjoy the holiday season and be safe.

On behalf of the Bridge,

Bill Reynolds, JN  
Squadron Commander

## The Newmarket Power & Sail Squadron Bridge 2016-17

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### NPS Course Offerings

Our courses run at Dr. John Dennison SS, 135 Bristol Rd, Newmarket on Tuesday evenings from 7:30 to 9:30pm in rooms 154, 157, and 159. To register go to our website: [www.cps-ecp.ca/Newmarket/](http://www.cps-ecp.ca/Newmarket/)

**Boating 1:** All operators of motorized pleasure craft are required to show proof of operator competency. All you need to know for the Transport Canada test is presented in an easy to read format that is both informative and entertaining. You can be confident that this study guide meets all the standards established by Transport Canada's Office of Boating Safety. This program runs for 5 weeks beginning February 7, 2017.

**Boating 2:** The PCOC makes sure you have immediate navigation and safety skills but it's just the beginning of what you should know when you get on a boat. In the second of our Boating Series, you are introduced to the art of navigation, anchoring, ropes, lines and knots – not to mention what to expect when the boat is moving under power. This program runs for 6 weeks beginning February 7, 2017.

**Boating 3:** The third course in our series explores navigation further as you learn how to plot and label on paper charts as well as what the skipper should be doing before setting out and when under way, handling a boat under sail as well as your environmental responsibilities and electrical hazards. This program runs for 6 weeks beginning March 28, 2017.

**Seamanship:** Do you know what to do if a boat on fire calls you for help? Can you deal with emergencies on your own boat? Build your confidence on the water, and make your boating a safe and fun experience, by taking the CPS Seamanship Course. You will learn how to cope with these situations, as well as many other aspects of boating, such as relative bearings, knots and splicing, medical emergencies, coping with adverse weather, and much more. This course lasts 13 weeks beginning February 7, 2017.

**Maritime Radio (VHF/DSC):** The Maritime Radio course teaches emergency radio procedures and everyday operating techniques. All mariners, including recreational boaters, will want to take advantage of the many features and capabilities of this innovative "automatic" radio. Secure your lifeline. Be sure that you and your family take the Maritime Radio course.

This complete package with CD, and the new Digital Selective Calling, will prepare you for the Restricted Operator Certificate (Maritime) with DSC Endorsement exam. To operate a maritime radio, you need the certificate. It's the law!

This course is being offered twice this year: The winter program runs for three weeks beginning January 17, 2017. The spring offering runs 3 weeks beginning May 16, 2017.

## User Activated Fog Horns

For a century or more, mariners navigating the rugged Maine coast have depended on sound signals installed at often remote lighthouses to help them avoid dangers in poor visibility. The mournful call of the fog horn is as much a part of the down east soundscape as the cry of the seagull. Soon it will be up to the mariners themselves to turn on most of those sound signals.

Until relatively recently, most lighthouses in the United States were manned either by civilian keepers (often with their families) or by Coast Guard personnel. When Maine's frequent fog reduced visibility, the lighthouse crew would activate the station's fog horn as well as ensure that its light was in operation.

In the early 1960s, the Coast Guard replaced virtually all the diaphones with modern diaphragm horns that required smaller, less complex air compressors or could be powered electrically. At about the same time, the Coast Guard began automating lighthouses and eliminating the position of lighthouse keeper, who formerly switched on the fog signals. They were replaced by electronic fog detectors.

The automated detectors project a laser or photo beam out to sea. If fog is present, the beam reflects back to the source off the water droplets in the air and a sensor sends a signal to activate the foghorn.

This winter, the Coast Guard will start replacing existing fog detectors with a new Mariner Radio Activated Sound Signal (MRASS) system that will switch on a fog horn when it is triggered by a VHF radio signal on channel 83A.

According to Lt. David Bourbeau, of the Coast Guard's Northern New England Sector Waterways Management Division, the current technology used for triggering fog horns is at least 30 to 40 years old and requires "a lot of battery power." It also has a tendency to fail and, when it does, a fog signal will operate continuously until the problem is fixed. That can be a real annoyance for neighbors of shore-based fog horns, and a threat to mariners who rely on the distinctive signal different fog horns produce to help fix their location on the water.

"The MRASS devices will replace aging fog detectors," said Capt. Michael Baroody, commander of Coast Guard Sector Northern New England. "We believe giving the mariner more control is an effective way to enhance the coastal aids-to-navigation system."

The Coast Guard began switching over to the new system in 2009. Since then, MRASS devices have been installed at eight lighthouses in Maine and New Hampshire. Over the next few months, MRASS units will be installed at 17 lighthouses in Maine.

## Sacrificial Anodes

Metals have different electrochemical potentials when in contact with one another and form Galvanic cells like in batteries. The metal with a lower electrical potential in the Galvanic cell will be anodic and will corrode.

Any vessel moored and operating in fresh, salt or brackish water is at risk from corrosion and the effects can be costly.

Corrosion on steel & aluminum vessels can be identified as either areas of localized pitting to the hull plate, rudders, bilge keels etc. or less obviously in the form of general wastage of the hull plating often occurring below the paint coating. Pitting can lead to the complete penetration of the hull below the waterline. General wastage of the steel can be just as critical, weakening the hull and necessitating expensive re-plating.

On wood and GRP vessels the areas of concern are principally the stern gear i.e. The propellers, shafts, shaft brackets, stern tubes and rudders which are expensive to replace and vital to the vessel, the failure of a propeller or rudder could have disastrous consequences. The effects of corrosion can vary from pitting of propellers and

shafts to the decomposition of the alloy of propeller. The failure of something as small and inexpensive as a split pin can result in the loss of the propeller.

To reduce or eliminate this Galvanic action, sacrificial anodes are fitted or bonded to the metal to be protected which in turn as it has a greater electrical potential than the anode material becomes cathodic and causes the anode to waste instead of itself.

Three types of anodes are used to protect boats: Zinc, Aluminum and Magnesium. Until recently, the experts recommended Zinc and Aluminum anodes for salt and brackish water and Magnesium anodes for fresh water. Lately, a number of research papers have stated that Aluminum anodes are good for fresh water too. Magnesium anodes corrode too quickly in salt water, however and should only be used in fresh water.

Both Zinc and Aluminum anodes require annual maintenance. The powdery coating that covers the anode after a season in the water acts as an insulator reducing the effectiveness of the device. These anodes should be cleaned off before the boat is launched. Boaters should check the condition of the anodes each season since they are designed to deteriorate over time.

It seems that most boats in the Lake Simcoe/Georgian Bay area have Zinc anodes. I know that my boat was delivered with a zinc anode despite the fact that it has never been in salt water. Zinc will not protect your boat as well as Magnesium anodes will. Check with your boat maintenance provider or the local chandlery to see the advantages of switching to a more appropriate sacrificial anode.



To all our  
members and  
your families  
Have a safe and  
joyous holiday  
season

**For Sale:**

**Two CPS Dress Uniforms – 1 men's and 1 women's**

**NPS Signet Ring**

**Contact Charlotte Widdifield at 905 476 8530 or [widdifield@rogers.com](mailto:widdifield@rogers.com)**

**Dear reader: If you have comments or suggestions for The Bitter End we would love to hear from you. Share your comments by sending them to *The Bitter End* at [npsinfo@mailonly.ca](mailto:npsinfo@mailonly.ca).**