

## *Marine Maintenance Course 2005.*

The Marine Maintenance class commenced January 12<sup>th</sup> 2005. I decided to proceed in a different direction than the previous courses offered.

After reading the course material from the instructor's and student note books, I felt that they were missing a key ingredient.

*How to affect a mechanical repair while on the water.*

Coast Guards "*only responsibility*" is to tow you to safety. "This may be an anchorage".



*How prepared are you as a boater should your engine go into cardiac arrest on the water? It happens; it is a reality of boating.*

If you do not maintain your boat, it will fail probably at the most inopportune time. In rough weather, or during a passage through a narrows or a restricted channel. How prepared are you as a boater to get yourself up and running again? Do you carry enough tools and spare parts, should

you break down while cruising?

*Something to consider.*

You will not have your

mechanic with you when you go cruising, "*You are your mechanic*".

If you know how to properly maintain your boat and maintain it on a regular basis you have just removed about **90%** of your mechanical problems.

Having the confidence to repair your engine, will give you confidence to solve mechanical problems that you thought were beyond your capabilities.

After some arm twisting by our [Training Officer Ron Harris](#), I agreed to instruct this course. I had no idea what I was getting myself into. The course notes were out dated and although adequate for a basic maintenance course, they fall short of what can be achieved.

I stayed within the CPS course guidelines with regards to the material, but from there, that is where the course ended and Applied Mechanics began.

To teach a course in Marine Maintenance one has to understand the principals of [Applied Mechanics](#).

In gasoline powered pleasure crafts, most failures occur within the ignition system. In diesel engines, failure occurs in the fuel system.

In each chapter of the workbook I added hands on teaching in this class. We assembled an engine from the inside out. Each and every part was covered.

On the first night of instruction, Boating Course Instructor [Ted Meadley](#) helped me break the ice. From then on, I was on my own.

With the assistance of [Superintendent Engineer George Horel](#), Canadian Coast Guard Pacific Ship Support. Our class toured the Ship Repair Maintenance Shops of the Canadian Coast Guard. George had a copy of the student work book and used it to tailor the tour through his shops.

The Maintenance Students had an outstanding tour, finishing with a tour through the Cape Class Search and Rescue Coast Guard Cutter, [Cape Sutyl](#).

A very good friend and stern drive expert, [Kevin Campbell](#) gave an outstanding lesson, culminating with a hands on Disassembly and Reassembly of an outboard engine lower drive unit.

About half way through the course, each and every student had something mechanical torn apart on their boats.

This was evidenced by the night calls that I received from some students asking for some type of assistance at their respective Marinas.

I enjoyed this immensely; these were students that at the beginning of the course would have never attempted what they were now attempting to do.

One student did a Re & Re of his injector on his on his diesel engine and made it run by himself. Our very own [Ralph Hodd](#), our Beacon Editor.

Was I “impressed”? You bet I was.

As the course drew to a close I asked [Ron Harris](#) to do the presentations on sailboats.

By eliciting the help of [Ted Meadley](#), [George Horel](#), [Kevin Campbell](#), and [Ron Harris](#), I felt that Saanich Peninsula Squadron put on an outstanding Course on Marine Maintenance that was way beyond the scope of what is presently offered.

I was more than impressed by our one and only [lady student](#) in our class, [Lauri Barker](#).

She is presently considering the purchase of a power boat. Dawna and I went out with her one night to mechanically inspect the boat. When we left the dock, she correctly diagnosed all the noises that were coming from the stern drive and other miscellaneous hydraulic steering problems.

[Well done Lauri.](#)

Each and every student in my opinion passed their entry level into applied mechanics. It will reflect the next time, when they save the **\$\$\$\$\$\$\$\$** that they would have handed over to “Their Mechanic”.

Our review night was not supposed to be a hands on lesson. I was not going to get off that easy.

[Bob Stewart](#), with the assistance of [Bill Miller](#) managed to haul in half of Bob’s engine into the class room, with the use of a hand truck.

After the review I touched on a few subjects that only a student of this class will know of.

Anaerobic Bacteria. "Wear your rubber gloves and bag it and tag it". You will have to use your imagination on this one.

We had many firsts in this class.  
In class hands on instruction and Power Point Presentation.  
In Class engine repair.  
In class outboard repair.  
Out of the class room hands on engine timing and valve adjustment.  
A tour of CCG Ship Support.  
A Class photo, and a well earned night to celebrate at [The Blue Peter](#).

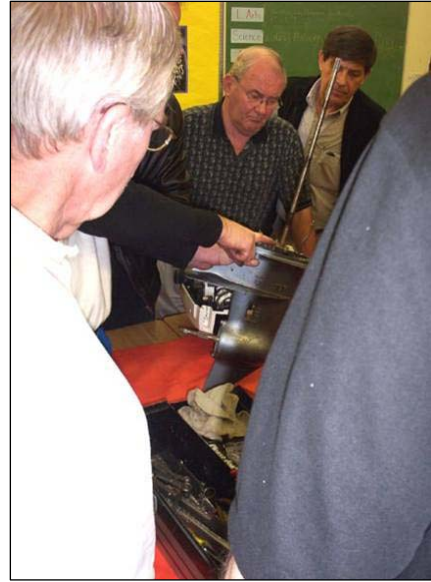
To all the Marine Maintenance Students, a course well done.

Each and every one of you impressed me. With your newly acquired knowledge, you are now 12 more safety conscious boaters that know how to Maintain and Repair your boats while on the water.  
This class was not only fun to teach, all of the students were a pleasure to work with.



I would also like to thank [Glen Ek](#) of Tsehum Stern Drive for supplying me with various engine parts for teaching purposes.







**Len Burton.**

**Marine Maintenance Class Instructor.**