

# EDINA MODEL YACHT CLUB

## SAIL & SCALE NEWSLETTER

APRIL 2014

VOLUME 23, NUMBER 4

### USCG Sentinel Class FRC



Sentinel class cutter Bernard C. Webber WPS-1101

#### By Bill Hamelink

The U.S. Coast Guard has introduced a new class of fast response cutter (FRC) to their fleet. This is of the class Sentinel, and the cutters are named after Coast Guard enlisted heroes, the first cutter being named the Bernard C Webber and the number for the 154' long ship was WPC-1101. She was launched in April of 2011. The road to her launching was not a smooth path. The Coast Guard is showing its age in most of its fleet and in the late 1990's they proposed a program to mod-

ernize or replace their deepwater fleet (a deepwater vessel is capable of operating in waters over 50 miles from shore). This program was pretty much a disaster, fraught with major failures and over-spending and it soon fell apart. One of the deepwater plans was to modify the 110' Island class (cutters named after islands) (Continued on Page 4)

### SCHEDULE OF EVENTS:

April 15, Tuesday .....7:00 p.m- 9:00 p.m. ....Membership Meeting  
May 20, Tuesday .....7:00 p.m- 9:00 p.m. ....Membership Meeting  
June 8, Sunday .....11:00 am- 4:00 p.m. ....Membership Meeting

## COMMODORE'S CORNER



**By John Bertelsen**

Were you at the March meeting? If so, you were treated to an excellent presentation of a variety of weathering techniques by John Ehresmann. If you weren't there, or if you were but did not pick up a copy of the hand out prepared by John, I will have extra copies for you. The hand out was 8 ½ x 11 on both sides and contains where to get materials, web sites and more for your attempt at weathering your boat. This is a great reference even if you don't plan on trying weathering in the near future. John's next stop with his railroad was in Eagan, and John Bishop was there to take pictures, which John E. will be submitting to Model Railroad magazine. Will let you know if John's railroad is accepted for publication.

Not too early to think about a new location for the summer picnic. One excellent suggestion is to have it at the same beach in Long Lake that is used for Summerfest. Another, if you do not feel the need to sail a boat, is to have it at the St. Croix Railroad in Hudson Wisconsin. This is a scale model railroad of electric and steam powered engines, four scales up to 1/8th scale you can ride on

They have 9 acres, and typically host the public every other weekend. John Bishop knows these folks and could get VIP passes to one of the club weekends for a behind the scenes look at this fascinating hobby. We can discuss at the next meeting. In April's meeting we will be served up with a presentation of Olson surprise. Paul will let us in on some aspect of model building, doesn't matter what it is, there is no one better. - *John Bertelsen, EMYC Commodore*

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	*Little Canada* 82 Minnesota Ave. Little Canada, Mn 55117 (Hwy 36 & Rice St.)



**Location: 5260 Independence St. - Maple Plain, Minn**



## MARCH NAUTICAL KNOW-IT-ALL By A. Rollin-Boyle

**F**or much of the 20th Century, Steam Power Ships dominated the United States Merchant Marine. The improvements in efficiency of Diesel Engines have rendered Merchant Steamers all but extinct. Take this quiz to see how you would fair on a Merchant Steamer.

1. You are a Third Engineer aboard a Merchant Steamer in the 1960s. You go down to the Engine Room and the First tells you to go with the Second and take on bunkers. What will you be doing with the Second?

- A. Taking on provisions for the ship.**
- B. Taking on fuel for the ship.**
- C. Loading the ship with cargo.**
- D. Greasing the Relative Bearing.**

2. You are having a nice and easy 8-12 Watch and you receive a call from the Third Mate that you are running black. What do you do?

- A. Turn on the Deck Lights for the ship.**
- B. Take a shower.**
- C. Put a little more air to the furnace of the boiler.**
- D. Stop pumping bilges.**

3. Your Oiler comes back from his round and tells you that the Thrust Bearing is leaking oil and you should take a peek. Where would you go to check it out?

- A. Shaft Alley**
- B. Steering Gear Room**
- C. Starboard Bilge Area**
- D. Fan Tail**

4. You've just been promoted to Second Engineer on your Steamer. That means that you now have charge of the boilers. What would not be one of your primary responsibilities?

- A. Standing Watch**
- B. Blowing Soot**
- C. Cleaning the Lube Oil Purifier**
- D. Testing Boiler Water**

5. Which of the following would definitely not be part of the Black Gang?

- A. AB**
- B. First Assistant Engineer**
- C. Wiper**
- D. Oiler**

6. How do you know that the Mate on Watch wants you to make a change in Engine Speed?

- A. He rings you on the Phone**
- B. He does nothing - You're the Engineer and you control the speed**
- C. He sends down an AB with an order sheet.**
- D. He rings you on the Engine Order**

### Telegraph

7. You are on Watch and the Boiler has more fuel in it that it can handle. You watch the drum pressure rise to 110% of Normal Working Pressure. You are trying to get fuel out quickly, but can't do it fast enough. What should happen?

- A. You will hear a loud popping noise when you lift a safety.**
- B. You will shut off the water supply to the boiler, since you can't get the fuel out.**
- C. Nothing - Overpressurizing a Boiler is no big deal.**
- D. You better run because there is going to be a big explosion.**

10. Your tour is up and you are pulling into the port where your relief will get take over and get you off the ship for some well deserved leave time. You are maneuvering in and the Deck Officer of the Watch wants a Slow Astern Bell. What valve must be open or closed to answer the bell?

- A. Astern Guarding Valve must be open.**
- B. Skin Valve must be open.**
- C. Boiler Bottom Blowdown Valve must be open.**
- D. LP Exhaust to the Condenser must be closed.**

**Thank You** to David S. Holman's law office for free newsletter printing.. David specializes in Estate planning, Business, Real Estate & Creditor Representation, located in Burnsville, Minnesota.

**Special Thanks...**To members that contributed their time & talents to this issue: Bill Hamelink, John Bishop, John Bertelsen, Larry Wheeler, & Dale Johnson

## USCG Sentinel Class FRC (cont.)

patrol boats to increase their capabilities. The hulls of these cutters also showed major rusting. A trial group of eight of them were modified by adding 13' to the stern for a high speed launching ramp for small boats. They also replaced the superstructure to add room for mixed gender crews. These modifications added 15 tons to the vehicle. On sea trials; these boats developed major cracks in the hull and on the deck and the program was eventually terminated.

The new plan was now to replace the Island class of patrol boat with a whole new design. The mission of this cutter type is to protect our coastline against all threats and to participate in search and rescue operations. This was also to include marine safety, fishery patrols, drug and illegal migrant interdiction, and national defense operations. This new plan was to adopt a patrol boat design that already had some successful service life on it and adapt it to current Coast Guard needs. The proven design selected was the Damen Stan Patrol 4708, a vessel often used by other countries for law enforcement and other national maritime forces.

The Damen Group shipbuilders are based in the Netherlands and have managed the building of Damen Stan patrol vessels for South Africa and the United States. These vessels are designed for high speed coastal patrols and they can be readily adapted to fit many roles. Her hull is steel and her superstructure is aluminum. The 4708 has a length of 153' 7", a beam of 26' 7", and a draught (waterline to keel) of 13' 1". She has a listed speed of 17 mph. One of the interesting features of this ship is an extended bow that gives it more fore and aft stability in the rougher



**Island class cutter**



**Damon Stan 4708 patrol vessel**

waters of the high seas.

The Coast Guard took this boat design as a baseline and modified it to meet their specific needs; primarily the stern launching capability, watertight bulkheads, fixed pitch propellers (two), and increased speed. The stern launching capability was for a short range prosecutor (SRP) rigid hull inflatable rescue and interception boat.

A great deal of press space has been devoted to the modernization of the navigation and surveillance gear, none of which I understand. I guess this means they can talk to everybody everywhere about anything anytime. In 2008 Bolinger Shipyards was awarded the contract to design and build a

## USCG Sentinel Class FRC (cont.)



**Sentinel Class Fast Response Cutter**

<b>Specifications:</b>	
Displacement	353 long tons
Length	154'
Beam	26' 6"
Depth	9' 6"
Power	2 x 5800 shp, 20 cylinder MTU eng.
Propulsion	2 fixed propellers
Bow thruster	101 shp
Speed	28 knots, 32 mph
Range	5 days, 2500 nm, 2900 miles
Armament	1-25 mm automatic gun 4 Browning 50 cal machine guns
Personnel	2 officers, 20 crew

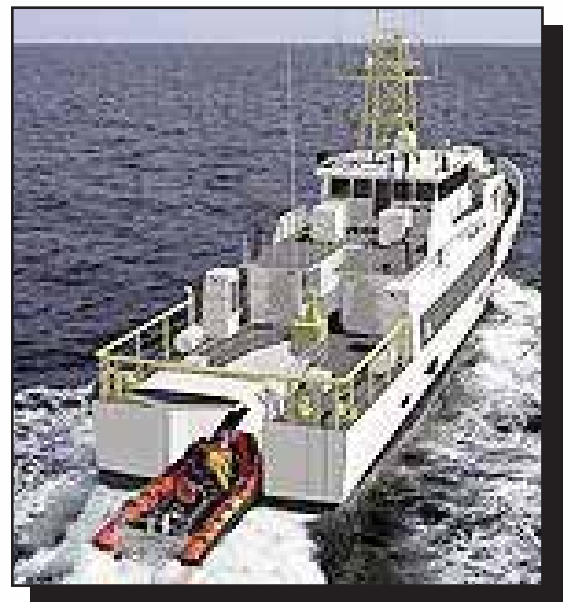


**SRP (Short Range Prosecutor)**

prototype of the Sentinel Class FRP. This led to contracts for many, if not all, of the planned 58 ships. They are being built in the Bolinger Lockport, LA facility.

The first sentinel was launched in 2011, assigned to Miami and more have followed.

Below, is a picture of an SRP (Short Range Prosecutor) loading onto a mother cutter. Below left is a better view of one. The SRP is a rigid hull inflatable that is water-jet powered and can achieve 30 knots. The SRP is intended for intercepting and boarding suspect vessels that are encountered.



**SRP loading at sea**

Few details of the Sentinel Class Fast Response cutter are available at this time.

(Continued on Page 6)

## USCG Sentinel Class FRC (cont.)

The most current data sheet (shown at left) on the building plans for the Sentinel Class WPC tells the following status of the 58 planned cutters.

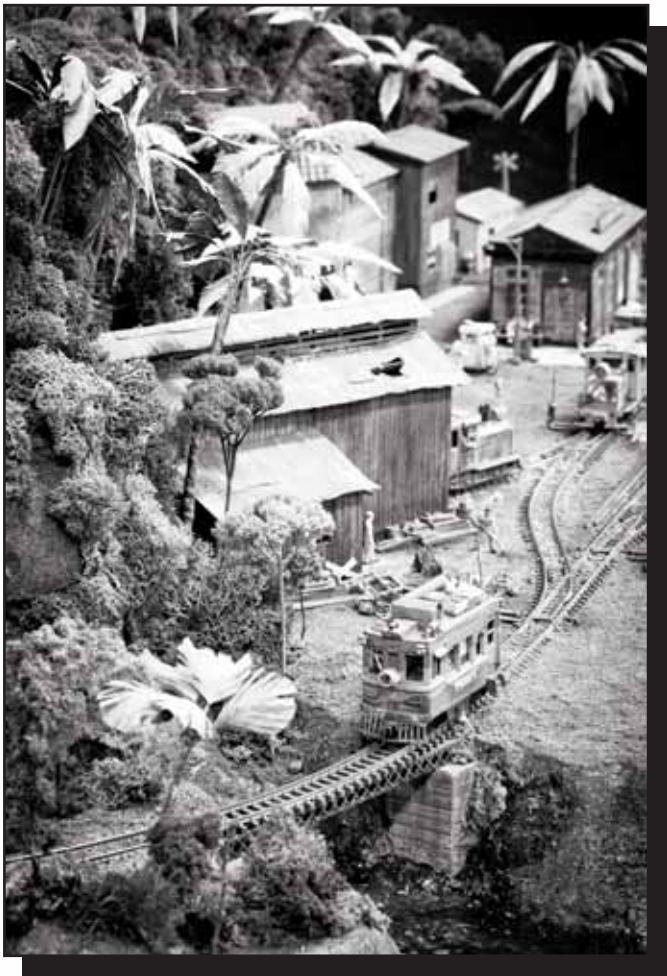
All the let builds are with Bollinger.

Model kits and plans for this ship are pretty scarce right now but I would expect them to become more plentiful before too long as there are some non-functioning display models on the net.

*- Bill Hamelink*

Current Status of the Sentinel Class WPC  
 8 ships launched and active status.  
     6 ported in Miami  
     2 ported in Key West  
 4 ships contracted for on Sep. 2011 and being built  
     4 to be ported in Key West  
 6 ships contracted for on Sep. 2012 and being built  
     2 to be ported in Puerto Rico  
 6 ships contracted for on Sep. 2013 and being built  
     2 ships listed as optional

## Train Show Photos at Eagan Civic Center Photos By John Bishop



**John Ehresmann's replica of a banana plantation on a small Caribbean island**

**AT THE MARCH MEETING**

**J**ohn Ehresmann presented a very interesting discussion on the different methods of showing a realistic weathered look for models. To display this he brought in his train display of a Banana Plantation on a small island in the Caribbean. He is truly a master of artistic ability. Here are photos of his various surfaces he has simulated a "weathered" look. - *Todd Moen*



**A Banana plantation on a small Caribbean island**



**Various techniques by John Ehresmann (from Choo-Choo Bob's Train Store ) were used to created a weathered look on these surfaces.  
All Photos by Todd Moen**



**A Reminder..** Club membership dues for 2014 are required to keep the newsletter coming to your mail. If you have not already paid, please do so now or this will be your last Sail & Scale issue.



**EDINA MODEL YACHT CLUB**

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www.emyc.org



## MARCH MEETING

TUESDAY, APRIL 15, 2014 7:00 P.M.  
CENTENNIAL LAKES GARAGE BAND ROOM

### AGENDA:

- Presentation by Paul Olsen
- Show and Tell of Boat Projects

### Special Interest Contacts:

#### Scale Boating:

To Be Determined (Anybody Interested?)

#### Sail Boating:

Tony Johnson [REDACTED]

#### Fast Electric:

Dan Proulx [REDACTED]

## 2014 Board Members

- Commodore:** John Bertelsen [REDACTED]
- Vice Commodore:** Paul Olsen [REDACTED]
- Vice Commodore:** Joe Steele [REDACTED]
- Vice Commodore:** Mike Ross [REDACTED]
- Vice Commodore:** Kevin Waldo [REDACTED]

**Secretary:** To Be Determined [REDACTED]

**Treasurer:** Larry Wheeler [REDACTED]

The Edina Model Yacht Club Sail & Scale Newsletter is published monthly except for December.

Newsletter Editor: Todd Moen [REDACTED]

Webmaster: Dale Johnson [REDACTED]

Please send articles by email to: [REDACTED]

Deadline for articles to be considered for the May publication will be Friday April 25, 2014