

USCGC Mackinaw (WLBB-30)

By Dan Lewandowski

t seems we could have used some help clearing the ice on the pond earlier this year. The newest Coast Guard cutter *Mackinaw* could have helped - not the prototype, but maybe a good-sized RC model. The following excellent article from Wikipedia gives the Mackinaw story:

USCGC Mackinaw (WLBB-30) is a 240-foot (73 m) vessel built as a heavy icebreaker for operations on the North American Great Lakes for the United States Coast Guard. She should not be confused with a namesake ship, the USCGC Mackinaw (WAGB-83), which was de-commis-

sioned on June 10, 2006.

(Continued on Page 4)



SCHEDULE OF EVENTS:

April 16, Tuesday7:00 p.m- 9:00 p.r	n
May 21, Tuesday7:00 p.m9:00 p.	mMembership Meeting
April / May sometimeTo be determined by op	en waterThree Pond Race

EDINA MODEL YACHT CLUB

Commodore's Corner



By Wayne Snyder Thanks to Tony

Johnson, March's program was very interesting and informative. I knew nothing

about ice boating but now have at least a basic understanding of this sport. It was very interesting how the sail settings vary between the sports. The speed is amazing. It was good to have Dan with us again. He answered some questions that I was going to email him about in regards to controlling a ipod device to have sounds on my tug boat. Pinstripes and Control Freaks Hobby will be sponsors for the Parade-of-Boats this year. Just what their involvement will be is yet to be determined.

Someone should build an icebreaker model with steel hull so we can get on the pond sooner, after all the Great Lakes steamers are running already!! For me programs are the main trial of being the Commodore so all suggestions are always welcome.

Only a couple of previous suggestions have not panned out so let me know if you have any ideas

Thanks to Paul the finishing touches on the sail boat for the blind are getting done. Sail and mast rigging and tiller were beyond me. -*Wayne Snyder EMYC Commodore*





EMYC DUES NOTICE: If you have not paid for your 2013 EMYC Membership Dues, we can no longer send you this publication. Please pay by April 16th or send to Centennial Lakes Hughes Pavilion 7499 France Ave. S. Edina, Minn. 55435

APRIL NAUTICAL KNOW-IT-ALL QUESTIONS

By Sil T. Sands

Watching the ice and snow gradually dissolve into water inspired some questions on the impact of water on the landforms found in and around rivers and streams. Basically some technical terms from fluvial geomorphology. Test your knowledge before it erodes away from your memory.

1. A temporary body of water formed in a meander cut-off is what type of lake? A Hoodoo B. Overwash C. Yazoo D. Oxbow E. Pothole 2. This type of stream flows parallel to another, unable to join due to the natural levees caused by the larger river. A. Mere C. Tidal D. Ogive F. Storm Sewer B Yazoo 3. The sequence of shallow-deep-shallow or wide-narrow-wide channel pattern associated with most streams is called what? A. Deep-Shallow Sequence B. Curve-Straight Sequence C. Bowl-Ripple Sequence **D.** Pool-Riffle Sequence 4. A wadi is an Arabic term for what? A. Floodplain B. Intermittent Stream C. Meander D. Waterfall E. Portion of chewin' tobacco 5. An anastomosing channel is another name for what type of river? C.Meandering A. Straight B. Braided D.Intermittent 6. Due to its shape, the Mississippi delta is known as what type of delta? A. Pluvial B.Tidal C. Birds Foot D. Estuarine E. Dental 7. During the last ice age there were great rivers flowing beneath the ice caps. As the ice melted, these landforms were left on the land surface where the rivers once flowed. A. Moulins **B.Fskers** C. Kaolins D. Dykes 8. Over time, a meandering channel migrates, both downstream and from side-to-side. This process is known as what? C. Lateral Accretion A. Meander Refraction B. Pneumatolysis D. Stretching 9. When a river floods, it deposits fine sediments on the floodplain. These sediments are called what? A. Lateral Accretions B. Sinters C. Turbidity Layers D. Overbank deposits 10. One of the choices below is a structure used to monitor the flow of a river or stream. A. Hydrograph B.Dam C. Weir D. Tor

USCGC Mackinaw (WLBB-30) (cont.)

The *Mackinaw* was delivered to the Coast Guard on November 18, 2005 and commissioned on June 10, 2006. In addition to her ice-breaking duties, the Mackinaw will also serve as an Aids to Navigation ship, able to perform the same duties as the Seagoing Buoy Tenders of the Coast Guard fleet.

One of the *Mackinaw's* unique features in the US Coast Guard fleet is the use of two Azipods, a brand name of electric azimuth thrusters, for her main propulsion. These azipods, coupled with a 550 hp bow thruster, make the ship



Electric Azimuth Thruster - Azipod

exceptionally maneuverable. Azipods also remove the need for a traditional rudder, as the thrusters can turn 360 degrees around their vertical axis to



550 hp bow thruster

direct their thrust in any direction. Because the Azipods can be controlled individually, the Mackinaw also lacks a traditional ship's steering wheel.

The *Mackinaw* got off to a rocky start before being commissioned. While en route to her new home port of Cheboygan, Michigan, the *Mackinaw* struck a seawall in Grand Haven, Michigan on December 12, 2005. The accident caused a 10-foot dent in the bow on her starboard side. Shortly after the accident, Captain Donald Triner, the commanding officer of the *Mackinaw*, was temporarily relieved of duty pending an investigation into the accident. The accident did not delay the ship's scheduled arrival in her new home port; she arrived on December 17, 2005.



The Mackinaw, at the starting line of the 101st Chicago Yacht Club Race to Mackinac Island on Saturday, July 18, 2009. The Mackinaw shepherds the racers the length of Lake Michigan.

Mackinaw can cut through up to 10 feet of ice. A unique feature is the ability to pump air from the bow under the ice to raise and crack the ice sheet. Other features include two 50 caliber machine guns, oil spill recovery equipment and full buoy tending capability.

The *Mackinaw* can be seen and toured at Grand Haven's Coast Guard Festival every summer. The ship was also featured on the television series Modern Marvels."

USCGC Mackinaw (WLBB-30) (cont.)



Mackinaw in St. Mary's River approaching the Soo Locks



1 of 2 utility boats aboard the Mackinaw



New and old Mackinaws at the Millard D. Olds Memorial Mooring on Lake Huron in Cheboygan, Michigan



An excellent Coast Guard website on the new *Mackinaw* includes a virtual tour and lots of info:

http://www.uscg.mil/d9/cgcMackinaw/

The new *Mackinaw* is an excellent subject for an RC model, but no large size hull is currently available (hint, hint, Paul).

The prototype is 240 feet long, so a 1/48 scale model would be exactly 5 feet long and would really be capable of bashing through some thin ice. A more reasonable 1/72 scale model would be 40 inches long.

The azipods would actually be easy to build, simply enclosing an electric motor in a housing and using shaft seals used on model submarines. Design of a simple mechanism to rotate and control the azipods is covered in various RCGroups..com build threads.

The superstructure is straightforward angular design, pretty easily built with sheet styrene.

The greatest difficulty in the build would be making deck, rail and mechanical equipment detail, though a similar crane model of the right size might be available. - Dan Lewandowski

EDINA MODEL YACHT CLUB

AT THE MARCH MEETING....

Tony Johnson was our speaker at the March meeting. A very informative presentation was given on Ice boat and land yacht racing. Discussion focused on the differences between water sailing, ice sailing and land sailing. Boat building projects were presented as seen in the photos on this page. Thanks for your great presentation Tony! - *Todd Moen*



Tony Johnson and his ice boat



Tugboat being scratch built by Dick Dahlquist



EMYC member Dwight Gronlund's newest creation

ANSWER TO MARCH'S NAUTICAL KNOW-IT-ALL QUESTION

Captain Silvan Mariachi commissioned the Aerocoché Company to build a 4-seater sailboat-convertible seaplane. He wanted to go sailing in the Tablazo bay and along the Venezuelan coastline.

In Plane mode, the wings are horizontally positioned and are rising when they transform in sails. The sails mounted on joints can be set at various lean angles to adapt to the wind. The two propellers are directly fitted in the plane's tail, and the engine's air intake is located above the cockpit.

The sliding canopy allows the cockpit to be completely open. Two lateral panels can also horizontally tip over and become two small pontoons.

The leeway of the plane serves as a rudder blade in Boat mode.



ecals really add the finishing touch to a model. Bedlam Creations, a decal company in Charlevoix, a beautiful small town I visited on the northern shore of Michigan, makes great custom decals. The prices are very reasonable compared to other decal makers I've looked at, and they have no minimum quantity requirement, although a minimum order is \$20.

The decals – waterslide, vinyl or rub-on – can be made from your own computer-made design or from a picture or even rough sketch. The owner, Josh, will work with you to finalize the design.

The waterslide decals are printed with an Alps printer that has very high resolution. It also is able to print white and metallic finishes, something that can't be done on regular inkiet or laser printers.

The picture shows a metallic gold text decal with a black hairline surround. The metallic gold doesn't show in print, but the decal is beautiful. Overall size is about three inches wide, and the black hairline is extremely crisp. You can see the actual decal on Paul Olson's newest schooner.

Delivery is very fast, and the cost for a 6x8" waterslide sheet with full color and including metallics is \$29. Non-metallic and



EMYC member Tim Smalley's new boat - Spectrum Radio controller sold separately



Edina Model Yacht Club:

CUSTOM DFCALS

by Dan Lewandowski



Custom Label by Bedlam Creations

black-and-white is less. All sizes are available, from decals for small models to decals for bikes, motorcycles, cars and trucks.See the website for more info: http://www.bedlamcreations.com/index2.htm

Special Thanks...To members that contributed their time & talents to this issue: Dan Lewandowski, John Bertlesen, Dale Johnson & Wayne Snyder. - Todd Moen

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. - Todd Moen



Centennial Lakes Hughes Pavilion 7499 France Avenue South Edina, Minnesota 55435 www.emyc.org

APRIL MEETING

TUESDAY, APRIL 16, 2013 7:00 P.M. CENTENNIAL LAKES GARAGE BAND ROOM

AGENDA:

-Topic to be determined. Show and Tell - Bring your winter building projects!

Special Interest Contacts:

Scale Boating: To Be Determined (Anybody Interested?) Sail Boating:



2013 Board Members

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Deadline for articles to be considered for the May publication will be Tuesday April 30, 2013