



Spring 2012 MTU Concrete Canoe News

This year saw many changes in Michigan Tech's Concrete Canoe Team, but one very important thing remained the same; for the third year in a row, the first place trophy from the North Central Conference Competition has returned to Houghton. This year's canoe, Genoa, performed admirably in all aspects of the competition, and the team holds high expectations for the national competition in Reno, NV this June.

Genoa was named for a large foresail, designed to increase the speed of a sailboat. Although Houghton most frequently provokes thoughts of cold, harsh winters, many of the members of Michigan Tech's team have taken pleasure in sailing during the Upper Peninsula's beautiful summers. Combining passions, sailing was chosen as the theme for this year's concrete canoe.

Befitting of its name, Genoa was specifically designed with speed in mind. This was the most significant of the many changes in this year's competition. For the previous three years, a standardized hull has been required of all competing concrete canoe teams; this year however, teams were given the flexibility to design their own hull. Michigan Tech took this opportunity and ran with it, researching designs of racing canoes and creating a hull sure to be unlike any other seen in this year's or any previous concrete canoe competitions. Credit for this design goes to Michael Zukoff. This is the second hull he has designed for Michigan Tech and he will be missed by next year's design team.

Two additional big changes to this year's final product are with respect to the canoe's reinforcement. Once again, the team chose to forego the two continuous reinforcement layers typical of previous year's canoes and the canoes of other teams. However, learning from last year's crack, Genoa was designed with one continuous layer of reinforcement. Additional reinforcement, including the first gunwale cap on a Michigan Tech canoe in many years, was placed where stress was highest. In addition to changing the reinforcement scheme, the actual reinforcing material used in Genoa has never been used in any Michigan Tech canoe. This new material is less rigid than that used in recent years, and doesn't require an anchoring system to place. This shortened the work time significantly on casting day. Sophomore Michael Larson developed this year's reinforcing scheme and found the new material.

In addition to having the most unique final product at the NCC Competition, the team also managed to produce another intricate and aesthetically appealing canoe thanks to artist Lindsey Licht. The focal point of the outside of Genoa is a brightly colored sail, making the canoe easy to spot in the water. Additionally, sophomore Sarah Reed created the team's most impressive table top display to date. These aspects combined resulted in a first place finish in the Final Product category for Michigan Tech.

The team also achieved a first place finish in the design paper, largely in thanks to junior Meghan Schiber. This is the second year Meghan has written the design paper, and her second first place finish. The team expects the paper to



perform strongly against the competition at the national level as well.

The technical presentation is the only category in which Michigan Tech did not take top honors at this year's competition. Keeping with the pattern of innovation and change, the team stepped away from PowerPoint and experimented with new presentation software. The presenters showed poise and a keen understanding of the technical aspects of the competition, during both the presentation and the question period which followed. Unfortunately, the team took a big deduction as the presentation ran slightly over the allowable five minutes. The presenters will be working hard in the weeks to come to prepare for the national competition.

Paddlers will also be training hard up until the end of the semester, as they will need to push their limits in order to be successful against the fierce national competition. ASCE made significant changes this year with respect to the races; the slalom portion of the endurance race was cut and the co-ed sprint now consists of two laps of the course rather than just one. Michigan Tech took these changes in stride and the team took top honors in all races at the regional level. The women's teams were particularly successful, with the women's

endurance team finishing nearly two minutes ahead of the second place finishers. Likewise, the women's sprint team posted a time faster than both the men's and women's teams from every other school, and only four seconds shy of the time posted by Michigan Tech's men's sprint team.

The last significant change made this year was not related to the actual canoe or even the competition, but instead to the team's working facilities. There is no running water where all construction work is performed; the team relies on a gravity-fed system which requires regular replacement of the feed tank. In order to reduce the necessary frequency of changing the tank, and to reuse water, Michigan Tech designed and built a water filtration system. The system is currently used for washing dishes and other equipment, and research is being done in order to improve water quality for other uses.

The team could not have achieved so much this year without the support from all of our sponsors. We appreciate the honor of representing you at competition and hope we have made you proud. If you would like to become a supporter of the Michigan Tech Concrete Canoe Team, please contact Brad Johnson at bradleyj@mtu.edu.

Connect with the team via:

MTU Concrete Canoe Website: <http://www.cce.mtu.edu/asce/canoe/index.htm>

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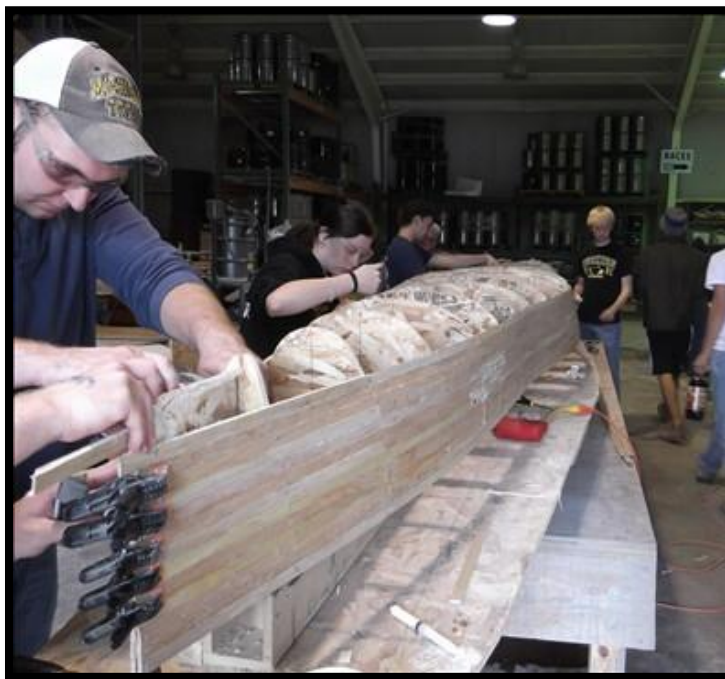
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Michigan Tech was ecstatic to once again be able to design its own hull design. Genoa was the result of six design goals that were derived from all of the knowledge that the team had acquired over the last decade of racing canoes.



Before approving Genoa's hull design the team built a prototype canoe, Laker, to test the new design. Laker proved that the design would satisfy its goals and set a new standard for the team's future prototype canoes after being built within a week out of luann plywood strips at a third the cost of a traditional cedar strip canoe.



Once again the team's aesthetic committee out did themselves. The committee spent long hours creating a beautiful mural of a sailboat's foresail on the outside of the canoe in addition to an intricate map on the inside of the canoe.



Michigan Tech went to the regional competition with the utmost confidence. From its tabletop and cross section displays to the stand's the canoe rested on the team's enormous effort was evident and duly rewarded.



Keeping to Tech's tradition of excellence, the 2012 paddling team once again brought home 1st place titles in all five of the races at the regional competition. The women's sprint team even gave their male counterparts a run for their money, finishing only four seconds behind. After the regional competition the paddling team has continued to train hard in order to represent Michigan Tech well at the national competition this coming June.



After successfully defending their regional title, Michigan Tech's 2012 concrete canoe team is excited to face its next challenge at the University of Nevada, Reno.