

Michigan Tech Concrete Canoe 2013-2014

This past year was an exceptional season for Michigan Technological University's Concrete Canoe Team. Michigan Tech defended its title at the regional level and proudly earned a seventh place finish at the National Competition in Champaign, Illinois. Placing in the top ten for yet another year was an exciting accomplishment for the team.

The team focused on the origins of engineering and therefore chose Ancient Egypt as a theme. The pyramids in Egypt were some of the first engineering marvels in history. The Ancient Pyramids of Giza were highlighted in this year's display. The stands were modeled after a traditional Egyptian temple and a Crook and Flail.

Mesektet, the name of boat that Ra, the Sun God, took into the underworld, was chosen as the canoes name. Mesektet's hull design was a hybrid version of Genoa's modified Jensen V1 hull and the concave shape of a slalom ski. This hybrid hull design produced lower friction drags and quicker turning than Genoa, the 2011 entry created by alumnus Mike Zukoff. Zukoff's design was already a superior hull design, so the team worked to develop it even more. Credit for Mesektet's design goes to Michael Larson, this year's senior captain.

2013 Michigan Tech Concrete Canoe at a Glance	
Name	Mesektet
Weight	220 lbs.
Width	32"
Length	20'
Depth	12.2"

2013 National Competition

In June, Michigan Tech traveled to the national competition in Champaign, Illinois. Before the competition, Michigan Tech was externally ranked as a potential top 10 contender, but the team knew that this was a huge understatement of our team's hard work and product. All of the team's research, training, and dedication proved to pay off in Champaign. While all the paddling

components, besides the endurance races, were cancelled this year due to weather conditions, the team made their mark with the most unique hull design, amazing aesthetics, a paper with no deductions, and an incredible presentation that left the judges in awe.

The effort made by our presenters this past year was unprecedented, conducting daily meetings to practice formal presentation skills and prepare for a question and answer session. The previous presentation layout was improved upon to enhance the visual appeal and a non-scripted format was used to engage the audience. By thoroughly studying an array of topics relevant to the competition, the presenters were prepared for every question that was asked.

In addition to the presentation, the team also made great strides in the Technical Paper category. Meghan Schiber, a graduating senior on the team, compiled an award winning paper that took 5th place at the national competition. Improvements were also made on staining techniques which were implemented to produce a visually dynamic canoe. Several hours of fine detail work went into the construction and finish of the tabletop and cross-section. This dedication and hard work was noticed by the judges at Nationals, and the team was awarded seventh.

National Competition Breakdown	
Presentation	8 th
Final Product	11 th
Technical Paper	5 th
Races Overall	5 th
Women's Endurance	7 th
Men's Endurance	6 th
Women's Sprint	NA
Men's Sprint	NA
Coed Sprint	NA
Final Results	7 th

2013-2014

For this upcoming year, the team plans to build upon the success of Mesektet. Research and development is being continued to make even greater strides than last year. The hull design team is innovating another new ground breaking canoe design that will be tested with a prototype. Currently, the prototype is under construction. This year the hull design will comprise of a v-bottom, modified Jensen V1 hull with a seven inch rocker in the bow, three inch rocker in the stern with a skeg component. Credit to this year's innovative hull design goes to Sean Kutcha, a junior mechanical engineering student. New materials are being tested to improve upon the structural performance of the concrete.

2014 Team Leadership

Returning for a second year as a co-captain at Michigan Tech is Michael Larson. Michael is a mechanical engineering student who has been a part of the team since his freshman year. In the past, Michael served as the team's hull design and reinforcement committee head along with being a male paddler at the 2013 competition. Michael has proven to be a valuable leader.

Stepping into a leadership position as the other co-captain this year is junior, Karl Schlicker. Karl is a mechanical engineering student who has been a part of the team since his freshman year. Last year, Karl served as the engineer's notebook committee head, assisted with hull design and reinforcement, and paddled and presented at the 2013 competition.

2014 Regional Competition

Michigan Technological University will be attending the regional competition in Detroit, Michigan this year on April 6th-8th. Michigan Tech is very excited to bring innovative and advanced ideas to the competition.

2014 National Competition

The national competition will be held at the University of Pittsburgh at Johnstown. Michigan

Tech is working hard to earn the honor of representing the North Central Conference at the national level and place among the top finishers again.

Finally we would like to thank all our sponsors that made this past year possible!

3M
AGSCO Corporation
Atlas EPS
BASF Corporation
Betz Industries
Butterfield Color
ChemMasters
Cornell Forge Company
Huron Technologies, Inc.
Lafarge North America Inc.
Moyle
Nycon Corporation
R.C. Hendrick and Son Inc.
Superior Block Co.
Superior Graphics
Vitro Minerals
Xypex Chemical Corporation
Baxandall Family
Bonanno Family
Josh Cotter
Leder Family
Maes Family
McDonnell Family
Professor Bill Leder
Shaw Family
Zalud Family
Zukoff Family
Michigan Tech Civil and Environmental
Engineering Department
Michigan Tech Mechanical
Engineering Department

