

Hope floats on a concrete canoe

Team of NMSU students puts engineering skills to a national test next week

By **TODD G. DICKSON**
The Las Cruces Bulletin

A team of New Mexico State University students will be at the University of Alabama June 11 to 13 to attempt winning the national Concrete Canoe contest, after winning the regional competition in April.

As his team of fellow engineering students recently worked on the canoes' final touches, Adrian Delgadillo, team captain, said he feels confident that this year's canoe has a good chance of taking the title.

First, it exceeds the minimum expectations that it be made from not more than 800 pounds of cement. The Aggie canoe has about 350 pounds of cement mixed with fly ash and silica fume – byproducts from landfills that also make the canoe “green” – as well as recycled glass bubbles and glass and ceramic spheres.

“This is real-world stuff,” Delgadillo said.

Second, it was molded in one piece using a taut cabling technique called post tensioning, making the 20-foot canoe extremely strong – stronger than competition specs require.

“I think we're the first school to use post tensioning in our construction,” Delgadillo said.

Third, it looks cool – bones and skulls were cut into the molds for a Day of the Dead motif. The canoes are also judged on creativity, along with all the technical aspects of planning, materials and construction.

Finally, it floats. Though made with cement, the other materials give the canoe as much buoyancy as if it were made out of ice, Delgadillo said. While the contest allows canoes added flotation support, he said NMSU takes pride in building concrete canoes that float on their own.

Bad weather kept the regional teams from putting their canoes on the water for actual races, so Delgadillo said his team is eager to row the canoe to victory.



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New Mexico State University students sand "bone" sections of their concrete canoe adding dimension to the art. The engineering students were making these final touches before taking a trip to the University of Alabama for the national Concrete Canoe championship. The bones and skulls design are meant to give the cement canoe a motif invoking the Day of the Dead.



From left, Bernadette Gendone, Isaac Beakes, Adela Tapia, engineering technology professor Kenny Stevens, Adrian Delgadillo, Sarah Williamson, Juan Solis, Michelle Martinez and Nancy Lozano