## ASCENE VIS

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## Alabama-Huntsville Students Again Crowned as Concrete Canoe Champs

Last year, when they didn't make it to the finals, was apparently just a blip on the radar screen of the concrete-canoe racers from the University of Alabama in Huntsville. For this June, in Madison, Wis., the civil engineering students from that southern school's ASCE student chapter came roaring back to reclaim the crown they've held now for three of the past four years. Showing their know-how in making concrete that actually floats, the Huntsville students handily won the top prize of \$5,000 in scholarship money donated by Master Builders, Inc., Cleveland, which has sponsored the national ASCE competition for the last nine years.

The Huntsville team bested 25 other college teams—all of them winners of regional contests held earlier in the spring—to become the currently reigning masters of this annual "think or sink" duel of engineering talents. Other student teams among the overall 1996 winners were the following: Michigan State University, second place, \$2,500 scholarship; University of California, Berkeley, third place, \$1,500 scholarship; South Dakota School of Mines, fourth place, commemorative plaque; and Clemson University, fifth place, also a commemorative plaque. (The South Dakota Miners became the 1995 champions at a finals contest held in Wash-

ington, D.C., and the Berkeley students have also won the crown on numerous occasions over the years since 1988.)

To make it to the national championship, hosted in mid-June by the ASCE Student Chapter at the University of Wisconsin–Madison, the teams first had to win regional races in April and May. Sixty percent of the teams' scores were determined by written and oral presentations detailing the canoe's design, construction and materials. The canoes also had to pass critical "swamp tests," in which submerged vessels must pop up and float. The remainder of the scores were garnered by the teams displaying their paddling prowess in sprint and distant races on Madison's scenic Lake Mendota.

Long considered the America's Cup of college civil engineering contests, the annual event gives students not only fun but hands-on experience with concrete, one of the leading materials they'll be using in their professional careers. Most teams take up to a year to design, build and test their canoes. "Making concrete float is an unusual challenge that offers civil engineering students valuable lessons (that are) crucial to maintaining America's infrastructure. The continued on page 6



**Above: Racers get cheers from the crowd** at the start of the 1996 national concrete-canoe finals this June. **Right: Canoe racers line up for a sprint** on Lake Mendota on the campus of host University of Wisconsin at Madison.



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fact that these canoes actually float demonstrates that our infrastructure is in very good hands for some years to come" says ASCE President Charles A. Parthum.

Other teams that participated in the 1996 finals were from the following schools: University of Wisconsin–Madison; California State University, Sacramento; The Cooper Union; Michigan State University; Louisiana State University; University of Rhode Island; University of Minnesota; University of Hawaii; University of Virginia; Université Laval; Washington State University; Western Kentucky University; University of Texas at El Paso; University of Maryland; Michigan Tech; U.S. Military Academy; University of New Orleans; University of Kansas; University of California, Los Angeles; Bucknell University; and University of Illinois.



Winners Take All. Posing with their Spirit of America, which earned them the top berth at this year's national concrete-canoe finals in Madison, Wis. are team members from the University of Alabama in Huntsville, seen here with representatives from Parsons Brinckerhoff, the ASCE student chapter's sponsor for the event. Although traditional materials were used to construct the canoe, the team employed a radical new design approach. Rather than keeping to the classical use of a rigid thin shell design, the students based their design on development of a lightweight, highly flexible concrete that fills a multilayer reinforcement system. Parsons, an international engineering, planning and construction management organization, has sponsored the Huntsville civil engineering students for the past two years. Says senior engineer Ed Palmer: "This type of challenge gives the students the tools they need for competing and winning in the engineering market of tomorrow and deserves the support of accomplished professionals in the engineering business."