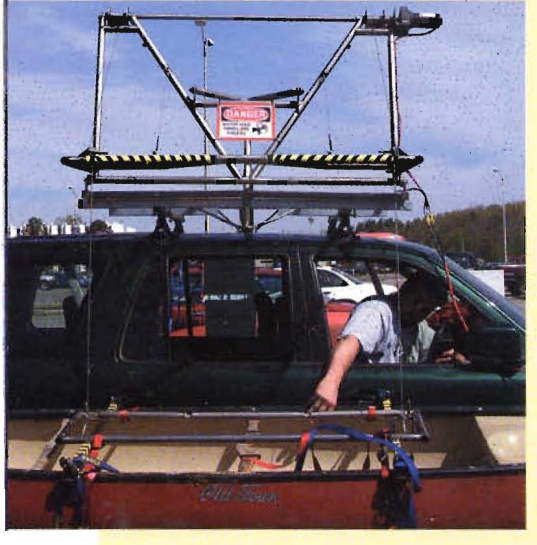
Students Design Canoe Loader For Those Who Use Wheelchairs

Students in the Mechanical Engineering Technology (MET) program at the University of Maine in Orono have designed machines that can lift and secure a canoe to the top of a car with little human intervention. Herbert Crosby teaches the MET course, and he challenged students last fall to design machines that would enable a person sitting in a wheelchair to accomplish the task.



In a competition on May 9, two teams tied for best overall design, including the team that designed the loader pictured here. That team, Christopher Bowen of Belfast, Charles Drillen of East Holden, Spencer Garrett of Bangor, Adam MacFawn of Rumford, and Brian Purdy of Raymond, created a very elegant motorized design operated from the driver's seat. It cost $826 in parts, and loading time was four minutes.

A design by Scott Bishop of Newburgh, Steven Byam of Dresden, Jared Davis of Kennebunk, and Charles Foster of Ellsworth took top honors for design and performance, with a device that uses mechanical winches. It had one of the lowest costs for materials, $311, and could load and secure a canoe in two minutes.

"The loaders are designed to pick up a canoe from the ground and secure it to the top of the vehicle. We did a patent search, and there is nothing like this on the market. It's a tough job," said Crosby.