Look out, Detroit - Here comes the Silver Bulle

By John Hubbard Of the NEWS Staff

University of Maine seniors in the Mechanical Engineering Technology Department are still finding ways to perfect "Supercar." but the question of whether any of four projects will float will have to wait until Saturday morning for an answer.

It has become an annual tradition at the University of Maine at Orono to build proof that man can triumph over the challenges of land and sea travel, even over shortages of fuel, with man-powered vehicles. The resulting bicycle-boat-like contraptions might lead anyone to wonder if they were not the answer to why his Ford refused to start that morning—or maybe gave up the ghost in heavy commuter traffic at the end of the Chamberlain Bridge, to a chorus of angry horns behind.

After all, these UMO students will

After all, these UMO students will find jobs in Detroit and other places

where cars are made.

A Thursday morning visit to the machine tool shop began with an introduction to a bizarre aluminum frame with bicycle wheels and styrofoam padding strapped to it. Four university seniors fiddled intently with the drive sprockets, which would be powered by two very athletic soon-to-be graduates.

The design and engineering project is to the undergraduate seniors what a doctoral dissertation is to the graduate student, but a lot more fun. Design and building efforts will be judged Saturday morning by members of the engineering department and there will be an endurance race around the university mall, followed by the water race.

If the machine should fail in its attempt to traverse both land and the Stillwater River Saturday morning, the students' grades might reflect that shortcoming. As one



CAR OF THE FUTURE? Jeff Dutton, Jim St. Laurent, Rick Loisel and Jim Gould work on the Silver Bullet preparing for final trials and the Satur-

day morning test that will determine, in part grades they get in their Mechanical Engin Technology course, (NEWS Photo by Carrol

member of the crew observed, "The captain goes down with the ship." Meanwhile, last-minute work to fine-tune the "Silver Bullet" continued.

"Phew! That smells good!" Jeff Dutton sarcastically commented as he brushed away the residue from a heliarc weld on one drive sprocket. A pungent, indefinably sour odor filled the the tool shop entry. The chain and drive did not line up correctly and the four were trying to find ways

to keep the bicycle chain from slip-

ping off the sprocket.

In truth, it was the axle on which the bicycle wheel rode that didn't line up, explained Jim St. Laurent, a member of the team. Someone mentioned something about the Titanic just as Dutton had finished brushing the dust off the welding job. "Yeah." St. Laurent retorted. "But there's no icebergs here."

The idea behind the project involving about 20 seniors in the Mechanical Engineering Technology Department is to create an unusual design for land and water travel. It has got to be something that has not been thought of before. Each uses human power via bicycle chains, sprockets and wheels. And each, its builders hope, will float.

All have two things in common: They have bicycle wheels and aluminum frame members. All hold two drivers whose physical prowess will be responsible, to one degree or another, for the success of their team's project.

project.
The most complex machine, in appearance and weight, is the Silver Bullet. The others appear to be more compact, even the one that is built on a modified canoe hull.

All of the materials have been donated by local companies, such as the Old Town Canoe works where a test hull, damaged at the company, was given to the team for its project.

As Thursday's work refining and redesigning wore on, the crew of the Silver Bullet, St. Laurent's group, began to pilot their amphibian out of the shop onto the pavement for a test run across the campus.

St. Laurent's team had their machine upright just in time to hear the sheet aluminium holding the foam in place rattle in the ominous, thundering way that loose sheetmetal does when disturbed. The foam blocks in the back settled onto the cement floor and the four stood transfixed, arms rigidly at their sides, as they thought of ways to correct the design.

After the repair, the Silver Bullet was taken outside for a ride down the street. Jeff Dutton and Jim St. Laur.

the running gear, audible ov grumbling of aluminum sheet bled one of the designers.

Working with Dutton and St ent on the project were Rick Jim Gould, Pat Sherman and McEwen. Loisel stopped to exthe sprockets and chains and swere working on the steeriumn, too, where a universa had to be adjusted. The joi made with the drive from a wrench, which fit inside a ptubing leading to bhandlebars.

Then it was off to the Stil River, across the campus newly-designed challenge to I gravity and conservation of e

After considerable disc among the four members of th who were available, a lau place was chosen and Dutton; Laurent joined in the effort t the three-wheeled monster ov bank.

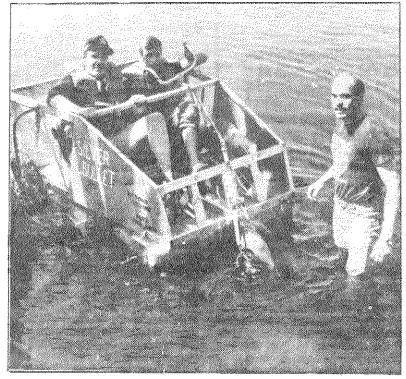
Dutton was last into the criter some discussion about weight. The craft immediately toward Dutton's side and it withat the life vests were p "You're taking your time? The term is not warm!" Loisel ren Dutton and St. Laurent. Accordives bottom. The foam block rear of the amphibian was a submerged and some of the fo doubts if the craft would float

The drivers tried their pa built into two aluminum whee ed to the rear of the craft and by a belt. The belt slipped a paddles wouldn't turn.

That was the Thursday m test run of the Silver Bullet. that, the crew took the machin to the shop where more refine would be attempted.

Professor Herb Crosby, of t gineering Technology Depar had been wandering around th checking on progress Thu morning, talking to the members and lending enco ment wherever possible.

Crosby smiled a lot The morning. So did the students



WILL IT FLOAT? was the question that four University of Maine at Orono seniors in the Mechanical Engineering Technology Department asked as they hauled the Silver Bullet into the Stillwater River Thursday. Jim St. Laurent, Rick Loisel, and Jim Gould were among six members of a team who designed and built the amphibious vehicle for a senior thesis. And, yes, the Silver Bullet did float. (NEWS Photo by Carroll Hall)