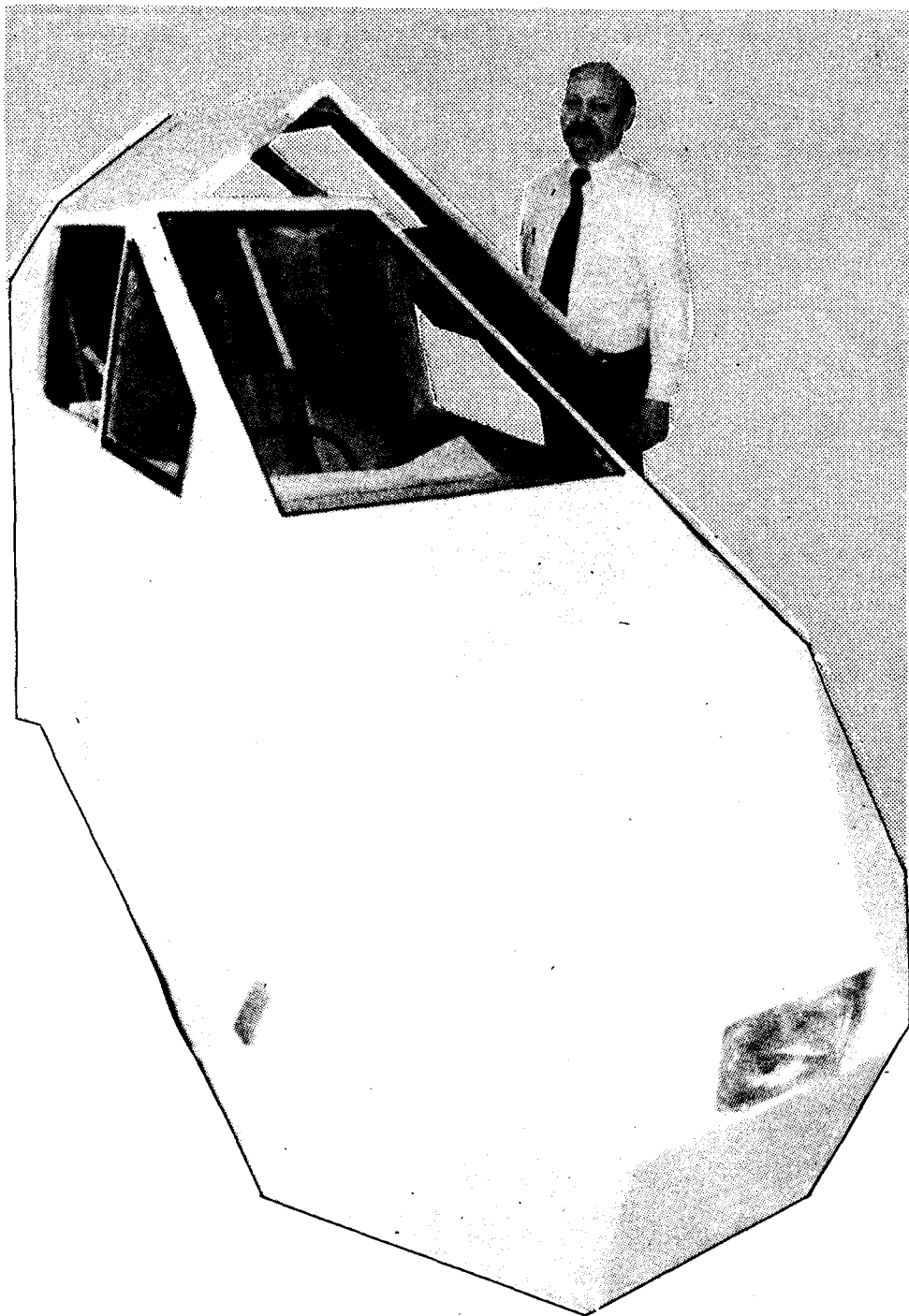


Features

Capitol engineers build and test fuel-



Dr. Miller (above) demonstrates the functioning of the gull-wing door.
Sleek lines of TWV are evidenced below.

By James E. Fitzroy

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A head-on confrontation with the one-eyed, angular contraption is like staring down a benign version of Bruce, the mechanical star of **Jaws**.

Not the least bit menacing, though, is this senior project design class research assignment. Donald Miller, Assistant Professor of Engineering, who initiated the project, has appropriately dubbed the results the "Three-Wheeled Vehicle", or TWV.

The lightweight, efficient commuter vehicle is not quite a car, yet it's not quite a motorcycle.

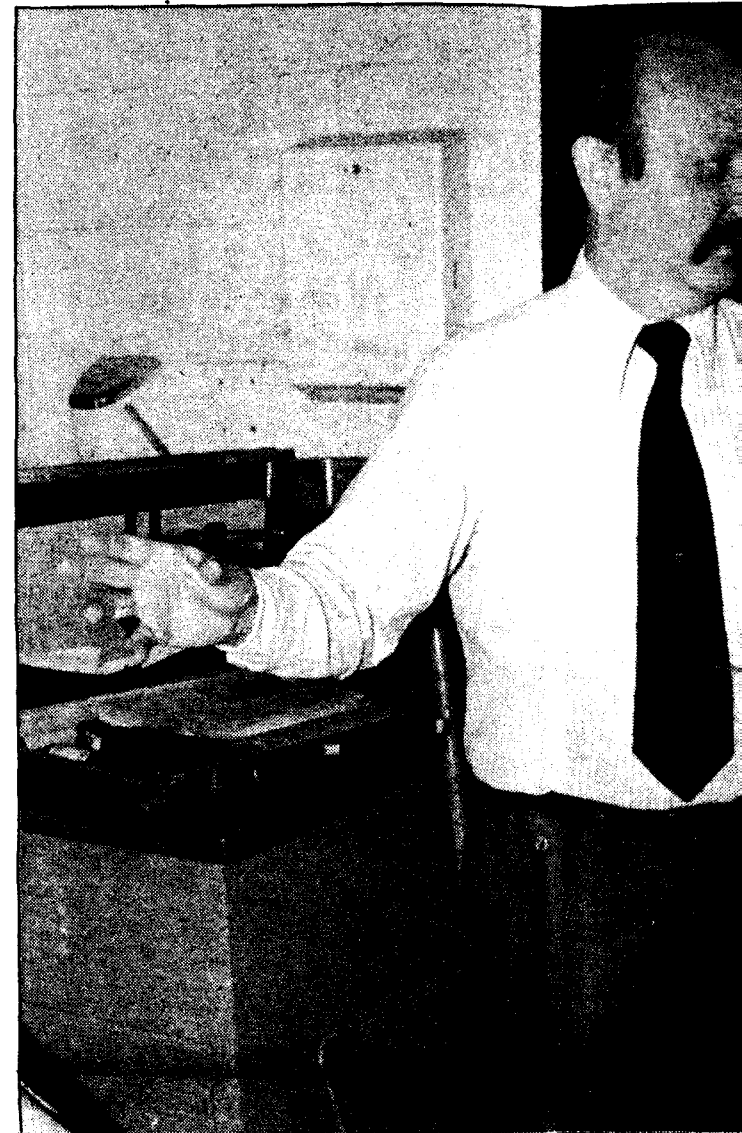
"It's a combination of the best of both," said Miller.

The TWV is the product of two years of labor by succeeding senior project design classes at Capitol Campus. A score of students have contributed to the almost-completed work, according to Miller.

"This type of hands-on project gives the students the opportunity to apply theory to something tangible," Miller said.

"They do their calculations, put the theory to work in practical terms and then work out the bugs.

"The whole thing was made by students and it's usually the first time they've tried anything like it,



Dr. Donald Miller, assistant professor of Engineering, explains the fuel-efficient commuter car.

so we do run into problems," he added.

The TWV is about the height and length of a Volkswagen Rabbit, according to Miller. It "is more blunt in front than I would have hoped," but wedge-shaped and built low to the ground.

"These features, plus the three-wheel construction, give a more aerodynamic, therefore more fuel-efficient, design," explained Miller.

"Besides, a fourth wheel would only add unnecessary weight."

Partially funded by the Research Council here, he said the TWV was "built for almost nothing, except for the cost of the steel and the fiberglass. We did what we could with our resources."

"The rear suspension we got from a Datsun 510, the steering gear is from a Volkswagen and the front wheel and spindle assembly is from a Honda, all taken from junked cars. We designed and built the frame to combine these elements," Miller beamed.

The chassis is made of structural steel tubing with integral front and rear bumpers and a rigid rear roll bar, according to a

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