



John Ross studying his plans to power NASA by sea water

DP/Jeanine Golf

## *Power from the sea*

# Student may help fuel NASA

By LISA GREENE

John Ross wants to power the NASA space center with seawater.

Ambition? Just a bit.

The first-year student in the Graduate School of Fine Arts was reading two books in the summer of 1976. One was about space colonization and the other discussed supporting the earth's population by clean energy to create an undreamed-of standard of living for all.

"I got a flash," he said this week. The idea was to combine space endeavors and non-polluting energy.

"Of the place where both projects could be achieved. . . Cape Kennedy launch site was the perfect location," Ross added.

Ross's idea blossomed into several years of intensive study and research, bringing him to the Graduate School of Fine Arts program where he is now working on the project. His undertaking is "to design a solar collector big enough to produce liquid hydrogen and oxygen from seawater to power a space shuttle, and the whole Cape Kennedy complex."

The solar collector would produce naturally recycling fuel, thereby making the complex self-sufficient, Ross explained. After hydrogen fuel was extracted from seawater, water vapor would be released into the air ready to return again to earth as rainfall.

Having done experiments using hydrogen to power vehicles, the National Aeronautics and Space Administration found it is as safe, or safer, than gas Ross said.

"If gas leaks and goes into the air its fumes cling to the ground because it is heavier than air," Ross said, adding that since hydrogen is lighter than air, fumes rise making it less noxious than gas.

"At one time, I saw this project as the key to initiate what has been called a hydrogen economy, a concept that all of the world's fuel needs can be fulfilled by this renewable fuel," Ross said.

Ross said that his project could support a large-scale space industrial program allowing the space shuttle to be launched once a week. Now it is launched once

(Continued on page 2)

## Student designs NASA energy source

(Continued from page 1)

"I had designed this project to make the space program economically independent but not with military implications," Ross said. "The concept of making space work for people is what I'm interested in. . . as a solar project it would lend credibility to solar energy interests in the world."

Ross's present endeavor, which he calls the "Solargen Project," are to create a nonprofit organization for scientific research — a think tank to develop technology for NASA and the rest of the world.

Working with the business legal clinic at the Law School, he is trying to create a business structure with a tax exempt status to obtain research grants from industry and private donations.

Ross exudes enthusiasm about the project, citing the numerous merits of using hydrogen as energy.

"Carbon dioxide from burning oil or gas is creating climate changes," Ross said. "If these fuels are replaced

by hydrogen, the carbon dioxide going into the air could be eliminated."

"Another aspect of burning hydrogen instead of fossil fuel is health care costs," Ross said, adding that people who have trouble breathing pollution-congested air will be healthier, and health care costs will be lower.

"Fossil fuel reserves are decreasing every minute. There isn't much time to wait," Ross said. "We can eliminate further contamination of the atmosphere and stabilize the economy, have water, have fuel."

Ross also spoke of the eventual benefits the NASA program could have for the general public.

"Spinoffs from NASA programs, like what has happened in the computer industry, will eventually be miniaturized for the general public," he said. "As NASA does research and development, industry can begin where NASA left off and mass produce advances in technology for the general public."

Stephen Feldman, who directs the

University Energy Center under which Ross is now working, said yesterday that he is intrigued by Ross's idea, but does not know whether it is realistic.

"Obviously a cheap source of hydrogen is in everybody's interest," said Feldman, an Associate Professor of Public Policy.

"[Ross] came with that project to the program," said Feldman, who has just received Ross's proposal on the project. "I don't know yet if it's technically or economically feasible."

### CORRECTION

Monday's *Daily Pennsylvanian* story "Banquet inaugurates 100th board," incorrectly identified the recipients of two awards. College senior Debbie Golding was *DP's* Business Staff Member of the Year, while College junior Kathy Jacobson was named Sales Representative of the Year. In addition, College senior Wendy Simonds was named *DP* Columnist of the Year. *The Daily Pennsylvanian* congratulates these students and regrets the error.