## Aggies under the sea



Students in the Texas A&M Human Powered Submarine Project competed in the World Submarine Invitational, taking fifth place in the collegiate division and eighth place overall.

## A&M's human-powered submarine takes Aggies to new depths

By James Francis

he SunRayce took participants on a nine-day race from Indianapolis to Golden, Colo.

This time around, the World Submarine Invitational had students involved with the Texas A&M Human Powered Submarine project diving deep and reaching high for glory in San Diego, Calif.

As an extracurricular organization of ocean engineering majors, A&M's group of students competed against other teams such as the United States Naval Academy, Tennessee Tech and Texas A&M at Galveston.

The project for the group was to creatively design a sub-marine, "SubMaroon," and have it powered strictly by human means - one person would pilot the sub, and two divers would assist on scuba gear for safety reasons.

Ryan Piwetz, the project's hull construction, propulsion systems and underwater crew chief team leader and a senior ocean engineering major, said the group formerly participated in two offshore water competitions in Florida, but the wave tank in San Diego minimizes risk — one of the obstacles in the competition.

"We spent time doing test runs at the OTRC (Offshore Technical Research Center)," he said. "A lot of time was spent in the construction phase, along with getting sponsors and paying for all the materials."

Located in Research Park, the OTRC's wave tank gave

the team a place to try out different divers and crews and to work out various scenarios.

In the end, the hard work paid off as the team came in fifth place in the collegiate division and eighth place overall,

with about 28 entries total. The SubMaroon reached 4.464 knots, and with a world record set at 6.7 knots, the team only hopes to attain fur-

The project's adviser, Dr. Robert Randall, who is a full-time ocean engineering professor with 21 years of teaching at A&M under his belt, saw the objectives of the team bro-

ken down into four main goals. Number one was to design and construct a human-pow ered submarine to compete in national races," he said.

"It was a great success in the fact that we accomplished all the goals we set out to do."

> - DR. ROBERT RANDALL adviser for the SubMaroon project

Something unexpected always happened in past competitions, such as unplanned surfacing and a hatch popping off, which is grounds for disqualification in the ocean races, so this time around, Randall wanted to compete and get a good time and speed for the vessel.

The third and fourth goals of the project were to involve more students in the submarine — in this competition, there were two crews — and to test submarine configurations, as the team had the chance to try two propellers.

It was a great success in the fact that we accomplished all the goals we set out to do," Randall said.

Now, plans for next year's competitions become the thoughts of team members.

Tracey Tumey, a sophomore ocean engineering major who participated in the competition, said she is looking forward to next year for different reasons.

"I see new people getting involved because a lot of our fifth-year seniors will be leaving," she said.

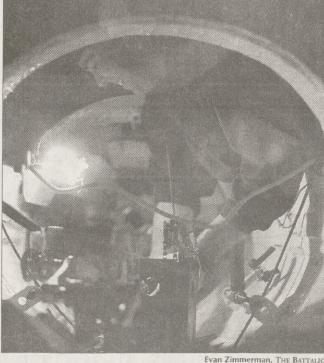
With next year's invitational taking place in Washington, D.C., in June, the team will begin construction on a new submarine as soon as possible, Tumey said.

Plans for the new, more innovated submarine include a new hull and drive system with smaller, thinner dive planes.

The group also wants to create a new prop design, possibly of variable pitch for better control.

"We want to retire the old submarine," Tumey said.

Moving on to another invitational, the Texas A&M Humber of the control of the con man Powered Submarine crew will be looking toward more competition and more hard work.



Ryan Piwetz, a senior ocean engineering major, changes the sprocket on the drive system on the Sub Maroon.

## A&M student aims to promote college music with local music album

**By Amy Protas** THE BATTALION

There is an invention called college radio, and it does exist at A&M. This is the message Kristen Palme, a junior biochemistry, genetics and psychology major, wants to get across to

Palme, an employee at KANM, is making an album featuring local bands benefiting the radio station. Palme said not enough people know about the student-run station.

"I'm making it for KANM," Palme said. "We're doing it for a promotional for the radio station and the local bands of College Station and Bryan. I just want to promote music because we want more people to know about KANM. Not a lot of people know about it, even though we've been here for 25 years."

KANM currently broadcasts over cable radio. The money raised from the album will go toward the station buying an FM license which would

to have an alternative station. Some people are very helpful, and others would rather put the money toward football.

"It's sad that A&M is one of the top 10 schools in size, but schools with only 10,000 people have FM stations with larger transmitting power. All we're asking for is 100 watts.'

"It's based on having a good time. The music's not that important."

> — KEITH ZAHRADNICK member, Barry Manifold and The Transmissions

Palme also has personal reasons for making the album. She said she hopes to one day be involved in the recording industry.

"I came up with the idea because I'd like to have my own record label one day," Palme said. "I've heard these bands, and I like them a lot. I've always wanted to have them on a CD. It's pretty expose the station to a lot more people.

"We've been having a lot of problems getting an FM license," Palme said. "A&M doesn't want easy to put out a CD, and it's pretty easy to get the money back. Other people don't agree, but at a school with 40,000 people, there's got to be enough

people who would want to buy a CD that has A&M people on it.'

A&M has two radio stations - KANM and KAMU. Only one, however, is student-run — KANM. Brett Tohlen, guitarist for the band Lewis, which is on the album, and a junior biochemistry major, said it is a shame more people are not inter-

ested in college radio.

"I think there's a market for it here," Tohlen said. "But those who are in a position to help aren't supporting it. College radio is good because it features something that's new and that not a lot of people have heard.

"People need to give certain music a chance and see if they like it. These artists care more about the music versus the money. That's why the music is good, because they'll stay independent and do what they want to do.

one genre was a difficult task.

"It's going to be an alternative album with a wide variety," Palme said. "It will have heavier punk and lighter music like Lewis. It's hard to make an album with local bands of one genre. A

lot of the bands in town are cover bands, but I'm not putting any cover bands on the album. They have to write their own music, and they have to

The album is going to feature all kinds of music falling under the vast umbrella called alternative. Everything from punk to mellow to dangerous rock will be represented.

Keith Zahradnick, aka Rikky Stix, a member of the band Barry Manifold and The Transmissions and a junior industrial distribution major, explains what dangerous rock 'n' roll is.

"It's based on having a good time," Zahradnik said. "The music's not that important. It's dangerous music, wake-the-dead. Ît's like you can't go to a show expecting Stone Temple Pilots or Pearl Jam.

hat they want to do."

"You have to come in expecting to party and drink a lot of beer. It's not really rockabilly or punk or punkabilly. It's dangerous rock 'n' roll.

The album is being produced in town at Guinea Pig Studios. Palme said she hopes for the album to be released at the end of this semester or the beginning of the summer.

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- KEVIN CAFFE

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