

[T E C H N O L O G Y]

Following Cajunbot, UL students reach for stars

Photo by Terri Fensel



STARRY EYED Hosein Hojati, Wade Falcon, Shawn Gennuso, and Hunter Hebert at their groundstation in Madison Hall.

Nick Pugh got his amateur radio license from the Federal Communications Commission at age 13. "I just like talking all over the world," he says. "Because of the Internet and other things, the hobby is not as popular as it used to be. [But] satellites are helping to revitalize it."

As satellites become more prevalent, ham radio enthusiasts like Pugh, now a 59-year-old UL Lafayette alum retired from his offshore oilrig telephone company, are turning a new generation on to the wonders of radio.

Pugh and the UL electrical engineering department hope to allow students to design and communicate with a low earth orbit satellite to be launched in October 2005. The project will soon become official when the partners sign a contract committing to the launch date with the Russian Dnepr program. The program converts disarmed Intercontinental Ballistic Missiles into commercial rockets, releasing satellites into space for private companies, amateur radio groups, and most recent-

ly, universities from around the world. UL's satellite would be the first from Louisiana.

Once launched, a handful of students holed up in a makeshift ground station in Fletcher Hall will attempt to take temperature readings and pictures from the solar-powered "pico satellite," about the size of a hockey puck. Because the students would only be able to talk to their satellite for about 15 minutes at a time, when it is within range, they will enlist the help of ham radio oper-

ators all over the world to help track their orbiting recorder.

The project, which involves soliciting the community for sponsors and donors, is reminiscent of the CajunBot endeavor, which helped bring fame to UL's long-established computer science program. The two graduate students spearheading the program, Wade Falcon and Shawn Gennuso, are both earning their master's in telecommunications. In 1992, UL became the first U.S. university to offer such a

graduate program through its engineering department.

"We're hoping this project does for the electrical engineering department what CajunBot did for the computer science and mechanical engineering departments," says Falcon. "This is ... a way to show that our department is strong and interested in taking on new technologies. Designing a satellite is a foot in the door."

Gennuso wrote his thesis on satellite communications. "It's completely student run," he says

of the project. "And we run it just like a business." This includes not only testing their device in high flying balloons, which the Lake Charles National Weather Service is providing, but also soliciting corporate sponsors and, now, doing public relations.

Gennuso says they still need about \$70,000 — the cost of securing a space on the rocket alone runs \$50,000. He says some companies may donate equipment, which can be used in making the satellite. Such companies could then advertise that their product's been tested in the harsh elements of space, the student pitches.

The scientific and educational benefits of projects like the satellite and CajunBot seem obvious. And the student leaders' gumption is evident by their goal to become the first such pico satellite to successfully take a picture of itself from space. "Almost everything's been done out there," says Gennuso, "so we just want to be able to do something a little different." — *Nathan Stubbs*