

Wild atmosphere for big game

NEW ORLEANS – Ah, The Big Easy, where the mayor is pleading for sportsmanship on a big football weekend – Saints vs. Lions today, Alabama vs. LSU on Monday – and the police superintendent is reminding fans not to use the New Orleans streets as urinals.

“Everybody is interesting,” Alabama safety Mark Barron said. “Down on Bourbon Street they have all types of things. They’ve got guys wearing women’s clothing and there’s people dancing, having a good time. But it seems like it’s a good place to be.”

Said Trent Richardson, “Being in that environment, it’s crazy because you see stuff that you’ve never seen



Mark McCarter
Columnist

before.”

On Friday, the crazy environment was media day at the Superdome. It’s starting to approach the epic proportions of a Super Bowl media day, though happily the BCS keeps out some of the riff-raff that turns the latter into a circus.

Players were asked what

kind of animal they’d be. (An homage, I guess, to the Honey Badger, LSU defensive back Tyrann Mathieu.) They were asked about their names, like the mellifluously sounding Barkevious Mingo. (Should have heard that name botched at high school track meets, he said.)

And, yes, they were asked about guys wearing women’s clothing.

Some, like Alabama’s Brandon Gibson, snatched a TV microphone and meandered through the crowd, mock-interviewing teammates. I even saw an LSU player interviewing *Sports Illustrated’s* Austin Murphy, instead of vice-versa.

See McCARTER on A6



Alabama players gather around defensive back Christian Jones (22), top center, as he holds court Friday during news media day for the BCS championship game at the Superdome in New Orleans. (AP Photo/Dave Martin)

Coming Sunday: A 14-page special section previewing Monday’s BCS championship game. More in Sports, C1.

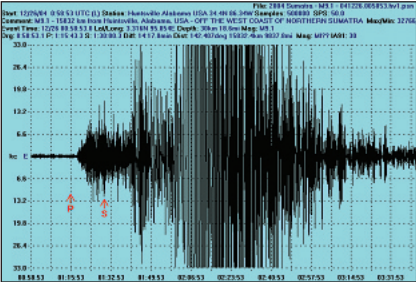
The Huntsville Times

We break news online

Saturday, January 7, 2012

With a seismometer in the sub-basement of his Huntsville home Steve Jones keeps an eye on ...

QUAKES



A graph of the 9.1 to 9.3 magnitude 2004 Indian Ocean earthquake recorded on Steve Jones’ seismometer is shown. It is displayed on his website alabamaquake.com along with graphs of other earthquakes that he has recorded. (alabamaquake.com)

By Lee Roop
lee.roop@htimes.com

Down in the basement of Steve Jones’ southeast Huntsville home, just past the electrical workshop, is a door into an unfinished sub-basement.

Here, on a concrete base on a rock outcropping, sits Jones’ latest homemade seismometer inside its sealed plastic pressure case.

Technically, Jones has built a broadband, vertical-sensing seismometer, the same kind used by institutional monitoring stations around the world.

Practically, the toaster-sized instrument is the latest fruit of an interest that has brought this NASA electrical engineer from curious hobbyist in 1994 to “advanced amateur” status.

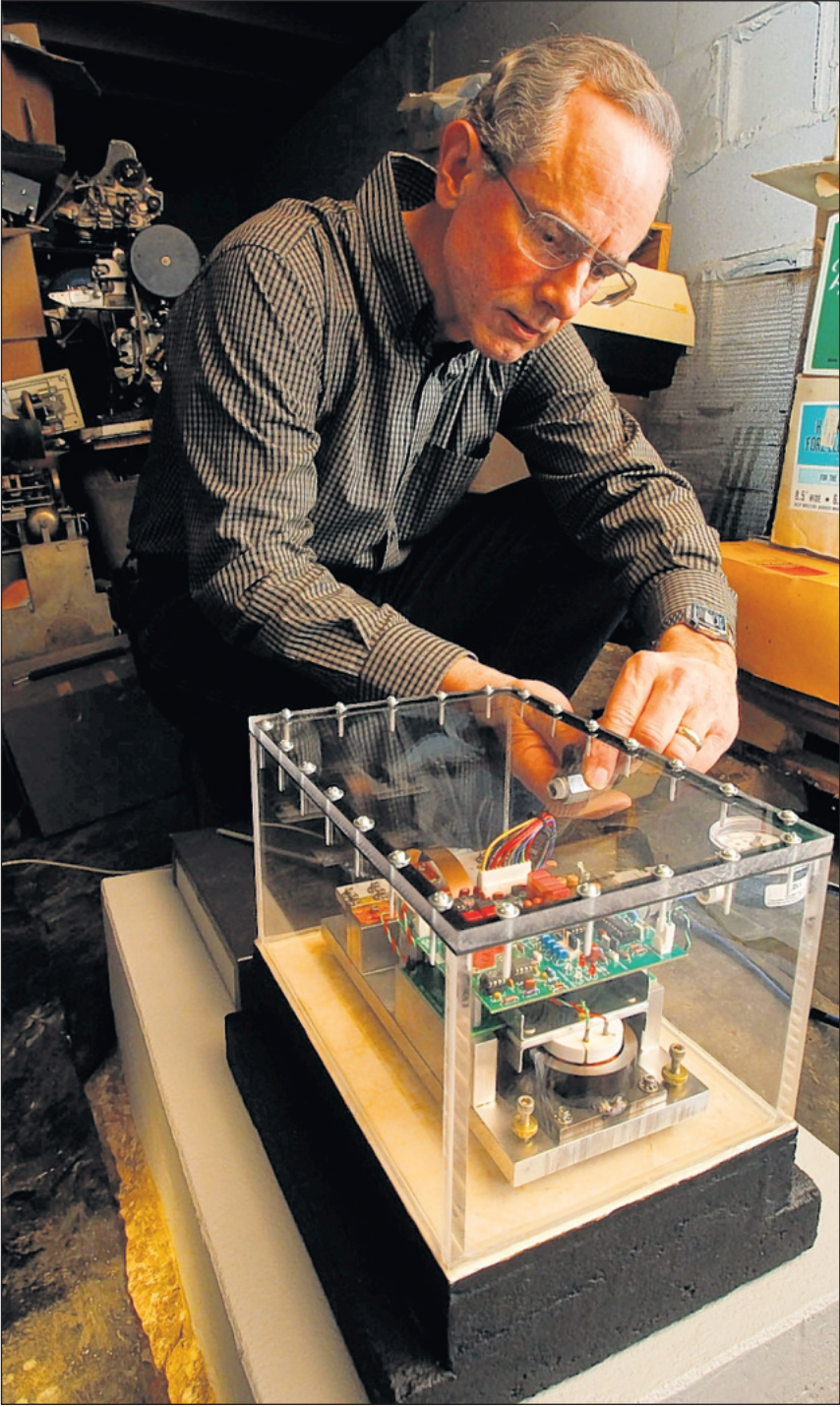
From Huntsville, Jones has monitored earthquakes ranging from the 9.1 to 9.3 magnitude 2004 Indian Ocean tremor, one of the most powerful ever recorded, to the magnitude 2.9 quake in Walker County on Thursday.

“We have 2s and 3s all the time,” Jones said of North Alabama. “Everybody does.”

The idea of solid ground is a story we tell ourselves, Jones said. Truthfully, the Earth’s surface is a web of giant plates in constant motion, seeming stable only to humans who can’t feel them move except in the most extreme cases.

“The earth is always moving,” he said.

See QUAKES on A6



Steve Jones makes an adjustment to his homemade broadband, vertical-sensing seismometer, the same kind used by institutional monitoring stations around the world. (The Huntsville Times/Glenn Baeske)

New UAH president paid more

Robert Altenkirch receives 5.8% more than his predecessor, but less than other presidents in UA System

By Paul Gattis
paul.gattis@htimes.com

Robert Altenkirch, hired Oct. 31 as president of the University of Alabama in Huntsville, got a bump in salary over the school’s previous president.

Altenkirch is receiving an annual salary of \$437,000, according to a review by *The Times* of the UAH public payroll disclosures. UA System spokeswoman Kellee Reinhart confirmed the salary.

Altenkirch’s salary is 5.8 percent higher than compensation received by David Williams, who resigned as UAH president in March 2011 to become engineering dean at Ohio State University. Williams was making \$413,000 when he stepped down.

As president of the UA System’s smallest campus, Altenkirch’s salary is less than the presidents of the system’s two other campuses. Both



Robert Altenkirch: \$437,000
David Williams: \$413,000



Carol Garrison: \$512,000
Robert Witt: \$512,000

See UAH on A6

Jobless rate declines to 3-year low of 8.5%

By Paul Wiseman and Christopher S. Rugaber
Associated Press

WASHINGTON – Four painful years after the Great Recession struck and wiped out 8.7 million jobs, the United States may finally be in an elusive pattern known as a virtuous cycle – an escalating loop of hiring and spending.

The nation added 200,000 jobs in December in a burst of hiring that drove the unemployment rate down two notches to 8.5 percent, its lowest in almost three years, and led

See JOBLESS on A6

STATE NEWS /// A3

Hot tickets for state officials

Legislators and other state officials were given a chance to buy tickets at face value to Monday’s BCS national championship game. The tickets were for end zone seats and ranged from \$300 to \$350. The cheapest ticket on StubHub on Friday was listed at more than \$1,249.

HOME & GARDEN /// B1

Best plants for tight spaces

Garden expert Harvey Cotten gives tips for the best plants to plant and maintain in small spaces. Don’t be fooled by the name dwarf, he writes. Some grow to be larger than desired.



STATE NEWS /// A5

‘Birther’ case not delayed

Jefferson County Circuit Judge Helen Shores Lee declined to delay Monday’s hearing on a request she dismiss a Birmingham man’s lawsuit seeking to block President Obama from ballots in the March 13 Alabama primary, court records show. The suit challenges Obama’s citizenship.



Huntsville man tracks world's earthquakes from his basement

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Lee Roop, The Huntsville Times
By

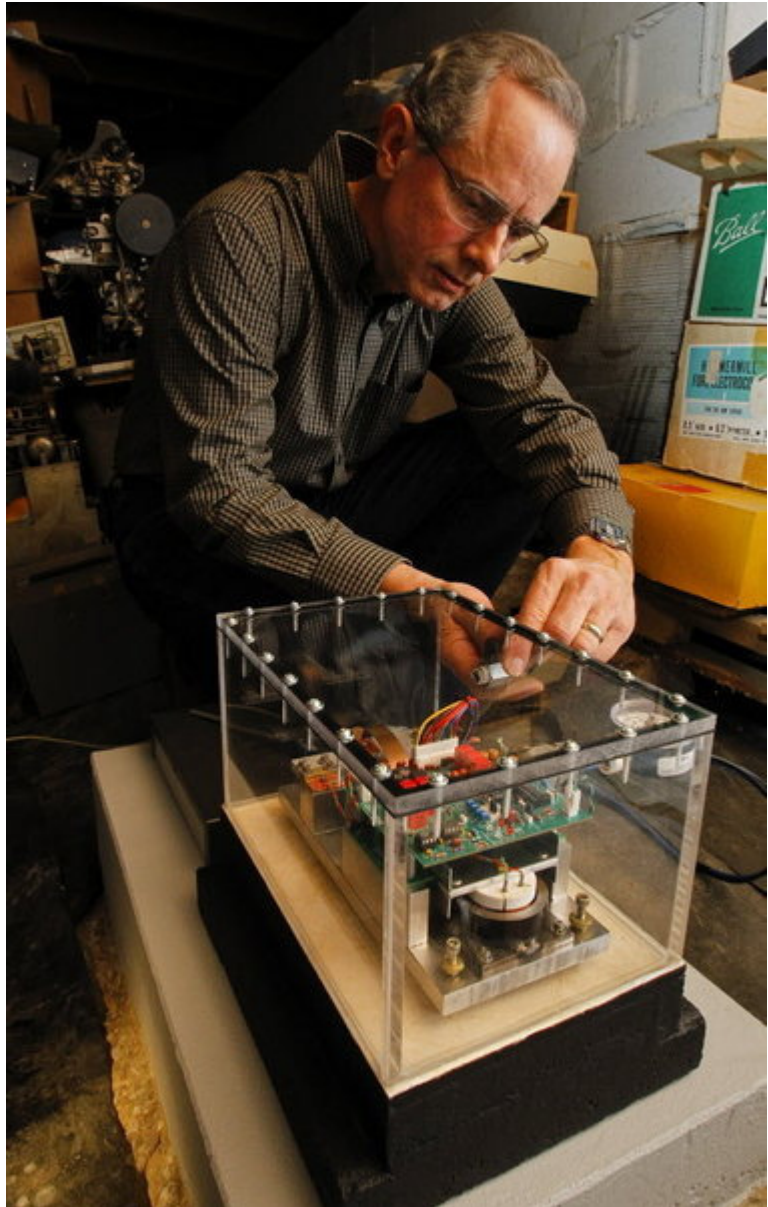
HUNTSVILLE, Alabama -- Down in the basement of Steve Jones' southeast Huntsville home, just past the electrical workshop, is a door into an unfinished sub-basement.

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From Huntsville, Jones has monitored earthquakes ranging from the 9.1 to 9.3 magnitude 2004 Indian Ocean tremor, one of the most powerful ever recorded, to the magnitude 2.9 quake in Walker County on Thursday. "We have 2s and 3s all the time," Jones said of north Alabama. "Everybody does."

The idea of solid ground is a story we tell ourselves, Jones said. Truthfully, the Earth's surface is a web of giant plates in



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Steve Jones makes an adjustment to his homemade broadband, vertical-sensing closed-loop feedback type seismometer, named 'Inyo'. Local amateur Seismologist Steve Jones studies earthquakes around the world with homemade equipment. (Photo/The Huntsville Times/Glenn Baeske)

constant motion, seeming stable only to humans who can't feel them move except in the most extreme cases.

"The earth is always moving," he said. "The planet is like a bell. It's ringing all the time."

Friction sticks the floating plates together when they touch, and they stay stuck until, as Jones explains on his website, **alabamaquake.com**, "the stress buildup on the locked edges overcomes the friction."

What happens then?

"The sudden shift or breaking of the rock and the release of stored energy creates waves that travel concentrically outward through the earth's rocky crust."

That's what we call an earthquake, and seismic graphs of quakes near and far are on the website.

When a quake will happen can't be predicted, but where it will happen is better understood. Earthquakes are relatively rare in our region, except for the New Madrid Fault area near the border of Tennessee and Missouri, but they are more common where major geological features meet. That includes California, which sits on a plate between an ocean and mountain chain.

The energy from an earthquake moves through the body of the earth and along its surface in waves. "It's the surface waves that do the damage," Jones explained.

Body waves are called compressional or P waves. P means "primary." P waves compress and expand objects in the path they are traveling.

Shear waves are secondary waves called S waves. They shake the ground up and down.

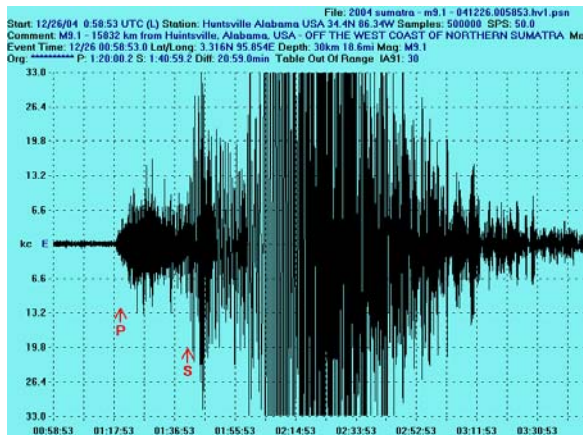
Following after both P and S waves are surface waves.

On a seismometer graph, the distance between the P and S waves tells a trained observer how far the earthquake was from the monitoring station.

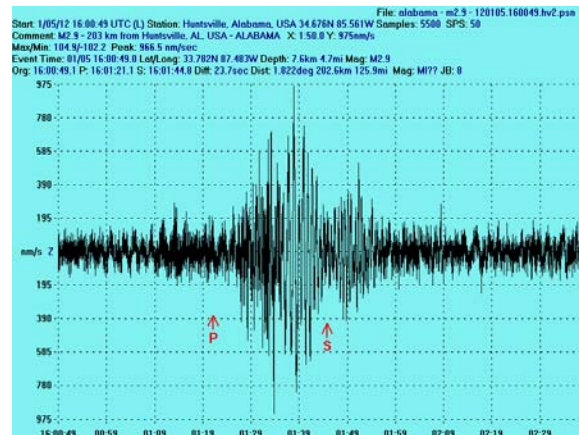
Jones was attracted to the study of earthquakes for two main reasons. It fascinated him that "something on the other side of the world would make the needle move" in Huntsville, and "the big surprise that I could build an instrument that would (capture) it."

His early seismometers were fairly simple, but the current one is so sensitive that it can capture, on a "quiet" day, up and down earth movement in the hundreds of nanometers. A nanometer is one-billionth of a meter. By comparison, a human hair is 60,000 nanometers thick, Jones said.

"The instrument ... is so sensitive that I normally operate it under a light-tight cover that also provides



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thermal insulation," Jones said in a follow-up email, "because even the beam of a flashlight shown on it from several feet away can significantly disturb its operation ."

"It's an interesting hobby," Jones said, and he's trying to pass it on. Jones has a presentation for middle school students that he calls Earthquake 101. It explains earthquakes and monitoring them in simple words and graphics.

"I want to educate the kids," Jones said. They can learn about electronics, mathematics and physics in an understandable way. "If I can help get a kid interested in science, that would be good."

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