

Hidden power

IN BOLIVIA, THIS BARREN TERRAIN MAY CONCEAL A BOUNTY OF LITHIUM

VAN
COUR
VER

SPORTS

Golden whirlwind for Vt.'s Kearney

G Evidence for abstinence education

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\$1.00
\$1.20 outside of
Metro Boston

The Boston Globe

MONDAY, FEBRUARY 15, 2010

GRAYED INFLATION

TODAY: Sun, clouds, snow at night, high 37-42.
TOMORROW: Snow mixing with or changing to rain, high 33-38.
WEEK END: 12 p.m.
NEWS: 6-11; **SPORTS:** 5-5:30
FULL REPORT: PAGE B11

In the news

The United States sought to bolster support for more sanctions against Iran, which remains defiant about its nuclear activities. A3.

The body of Britney Gengel of Rutland was recovered from



the ruins of the Haiti hotel where she and classmates had been staying when the earthquake struck. The report ended

a month of uncertainty for her parents, who at one point had been assured she was safe. B1.

Vice President Joe Biden and predecessor Dick Cheney sparred via the Sunday talk shows, swapping accusations over their administrations'

Ala. suspect was questioned in bomb case

Officials thought woman may have had motive to target Newton doctor in 1993

By Shelley Murphy, Donovan Slack, and Meghan Irons

GLOBE STAFF

A biology professor accused of killing three colleagues and wounding three more in a shooting rampage at the University of Alabama in Huntsville on Friday was a suspect in the attempted mail bombing of a Harvard Medical School professor in 1993, a law enforcement official said

yesterday.

Amy Bishop and her husband were questioned after a package containing two pipe bombs was sent to the Newton home of Dr. Paul Rosenberg, a Harvard Medical School professor and physician at Children's Hospital Boston. At the time, Bishop was working as a postdoctoral fellow in the hospital's human biochemistry lab.

It was the second stunning revelation

in two days about Bishop's past. On Saturday, authorities said Bishop fatally shot her brother in Braintree in 1986 and was not charged after state prosecutors concluded that it was accidental.

In an interview last night at her home in Huntsville, Ala., Bishop's husband, James E. Anderson, acknowledged that he and his wife were questioned by authorities about the 1993 mail bomb case, but

said neither of them was a suspect. Rather, they were "subjects" of the attempted bombing investigation, he said.

It was "just a matter of questioning, being bothered, harassed. You know, the usual techniques, that's all," Anderson said. He told The New York Times, "In my files I have a letter from the ATF [Bureau of Alcohol, Tobacco, and Firearms] saying,

BISHOP, Page A7

'Long Beach has [Cambodia Town]. We need our East Coast version of it.'

VANNY NGOR, owner of the Red Rose restaurant



Strike kills 10

THE GREEN BLOG

Excerpts from the Globe's environmental blog.

Plastic that monitors pollutants

How do you know if banned chemicals are still being used? Look in the sea, a University of Rhode Island researcher says. Rainer Lohmann, associate professor at the Graduate School of Oceanography, and a Canadian colleague say a global monitoring network is needed to verify that banned chemicals, such as PCBs and others that can accumulate in the food web, are actually disappearing from the environment.

Lohmann says the United Nations Stockholm Convention, which analyzes chemical compounds and has banned the production and use of some, is vital, "but it is very difficult to verify whether or not it is working."

Atmospheric testing is done in some parts of the world, but Lohmann says aquatic monitoring is critical, because people and wildlife can ingest banned chemicals by eating fish, shellfish, and other marine organisms.

Inexpensive plastic painters' drop cloths can help, he said. The thin polyethylene material absorbs dissolved chemical compounds, and a lab can then identify and measure levels of those

chemicals. Sections of the sheets, usually a foot long by a half-foot wide, are anchored in the water for several weeks.

Lohmann did not invent the polyethylene samplers, but he helped test them in Boston Harbor in 2007 and subsequently won a \$300,000 National Oceanic and Atmospheric Administration grant to study them further.

What's more, he says, they are so easy to use that volunteers could help test the waters, decreasing the costs.

Grads will wear plastic gowns

It may seem a bit early to talk about commencements, but this requires a mention: Babson College graduates will be wearing caps and gowns made from recycled plastic bottles when they receive their degrees in May.

Yes, they will be made from a fabric — but it's spun from molten plastic pellets. Babson officials say each gown takes an average of 23 bottles to make, which means the graduates will be wearing the equivalent of 20,700 bottles.

The school is also printing its diplomas on locally produced cotton parchment.

BETH DALEY

MORE GREEN BLOG
at boston.com/greenblog

ASK DR. KNOWLEDGE

What is activated charcoal? I've seen it in aquarium filters and in the health food store. How does it differ from regular charcoal?

Charcoal is essentially pure carbon, and the terms "activated carbon" and "activated charcoal" are used interchangeably.

While coal comes from plant matter that loses its noncarbon components over a long time because of pressure and heat deep in the earth, charcoal is made quickly, by heating wood in

absence of oxygen. As the charcoal crumbles under the heat, more and more surface area is exposed — just as the two halves of a cut apple have more surface area than a whole apple.

Many noxious substances (but not water) will stick to carbon, and the huge surface area afforded by even a bit of activated charcoal makes it useful for filters — in aquariums, where it takes unpleasant smelling chemicals out of the water, for example, and to improve the taste of whiskeys and vodkas. Activated

PROTOTYPE

Taunton-based Kopin eyes a lighter headset

MARK BAARD

USER FRIENDLY

In a wonderful moment in the upcoming sequel to director Oliver Stone's "Wall Street," the disgraced trader, Gordon Gekko, as he's discharged from prison, receives his personal effects.

Among them is Gekko's iconic mobile phone from the 1980s — and it's the size of a brick.

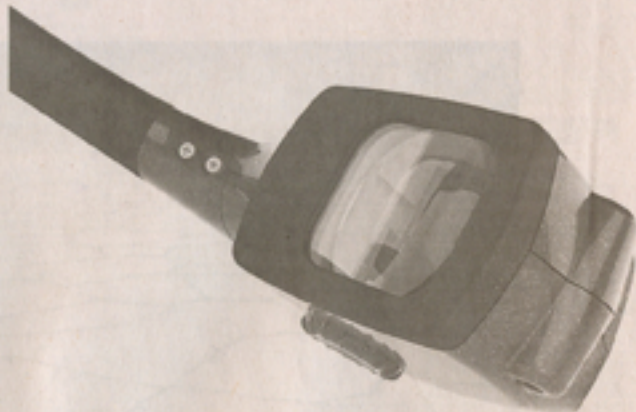
That's how I see the Golden-I, a potentially powerful, voice-controlled headset from Taunton-based Kopin Corp. (www.kopin.com). The device can control a desktop or a hand-held PC (running Windows 7), a smartphone, or, perhaps, even a supercomputer, via WiFi, Bluetooth, or (if connected to a mobile phone) a cellular data network.

But the Golden-I (www.kopin.com/golden-i) is a chunky monkey (Kopin says its models weigh 3 to 6 ounces): The headset has a computer screen held below one eye by a thick arm. The device, which also has a mini-USB port and a mini-SD card slot, is held in place by a strap behind the head.

Kopin hopes to reshape the Golden-I in coming years into a thin, foldable multi-media device, which consumers would use to manage their digital correspondence and virtual world avatars.

You can control up to seven devices simultaneously from the Golden-I, according to Kopin.

The Golden-I is voice-controlled and recognizes a half-dozen languages. It uses speech-recognition software from Burling-



ton-based Nuance Communications Inc. (www.nuance.com).

Peering into Golden-I's monocular display is equivalent to looking at a 15-inch computer screen from about 8 inches away, according to Kopin.

For now, Kopin envisions medical workers using the Golden-I without turning their heads to check vital signs, and manufacturers tapping their office PCs from the shop floor.

A utility worker wearing the Golden-I

could test lines and consult the laptop in his truck without having to lower his cherry picker to the ground.

Kopin has announced the availability of a \$5,000 development kit, which Kopin worked with in the creation of the device. The kit includes the Golden-I headset and Motorola's MC75 hand-held computer. Motorola has sold a few of the kits already.

Much of the interest in the Golden-I has been coming from university and medical researchers.

CANINE CARE

A cognitive aid for busy dog owners

I used to worry about my standard poodle, Lotte Leroy, taking off on me.

In her youth, she was as fast as a leopard, and she loved chasing deer and squirrels. And I was all about gadgets that could help me acquire Lotte's coordinates, whether she was racing up Blue Hills Parkway toward Mattapan Square or had vanished into the woods near my friend's Westwood home.

But at 11 years old, and with arthritis and a weakened heart, Lotte isn't much of a flight risk. Rather than a GPS tracking de-

vice or an RFID implant, she might benefit more from something like Dog-e-Minder, a \$20 cognitive aid for forgetful dog owners and for families in which everyone contributes to the pooch's care.

The device (www.dogeminder.com) has a backlit screen that displays the last time your dog was walked, fed, and medicated.

You record each of these tasks by pushing the appropriate button on the Dog-e-Minder. The gadget is waterproof, and it's available in a handful of colors.

