

IDLE THINKING

New ideas are making diesel trucks run cheaper, cleaner.

SHARON BANKS '89, PICKING AT A SALAD on a searing August afternoon, wears a dark suit and stylish shoes. In her digital camera are photographs taken with Oregon governor Ted Kulongoski. In her brain bounce so many numbers trailed by “millions” and “megatons” that the figures blur like the waves of heat and exhaust rising above acres of asphalt outside.

At first glance, Banks isn't much like the denim-and-sneakers crowd at the Truck-N-Travel's diner in Coburg. Maybe the truckers around her might assume someone dressed like Banks and talking about transforming the trucking industry could only mean bad news for them.

As if sky-high diesel prices, increasing regulations, clotting congestion, and slender margins weren't squeezing them enough, right? Well, that's what Banks thinks, too, so the granddaughter of a trucker and step-mother of another is doing something.

Banks is a rare breed: heart of a trucker, soul of an environmentalist, mind of an accountant, handshake of a politician, résumé of a career bureaucrat—and now, business card of a CEO as founder of Cascade Sierra Solutions. The new Coburg-based nonprofit company is devoted to trimming dangerous diesel pollution while helping truckers earn their livings.

Banks crafted a way to bring the newest fuel-saving technologies to truckers with simpler delivery of government low-interest loans, tax credits, and grants.

By early next decade, Banks expects to outfit a third of the 100,000 trucks already plying Interstate 5 with auxiliary power units. These units allow truckers to run their heaters, air conditioners, and appliances while stopped, ending the need to idle thirsty main engines. Her program also makes it easy for truckers to adopt other diesel-saving devices and practices advocated in the federal SmartWay program.

The improvements, she estimates, will cut fuel consumption 25 percent per truck, saving 150 million gallons a year. Fuel savings could filter \$450 million through truckers' bank accounts and into



Jack Liu

Will Sharon Banks save West Coast truckers half a billion dollars in annual fuel costs?

local economies while reducing emissions implicated in cancer, asthma, global warming, and smog.

A typical trucker might slam the brakes at a \$16,000 tab for a complete upgrade. But with a loan through Cascade Sierra Solutions, that trucker would easily cover monthly loan payments of \$350 with \$1,250 in fuel savings.

Starting in 2007, Banks will bring her message to the first of eight planned showrooms near truck stops in the three West Coast states. The sites will include Portland, Coburg, and Medford.

Bob Russell, president of Oregon Trucking Associations, calls Banks a “bridge” between his industry and government regulators. “We think what Sharon is doing is absolutely wonderful.”

“The way that Sharon is packaging it and marketing it is a way that truckers respond to,” says Kevin Downing of the Oregon Department of Environmental Quality's Clean Diesel Program. “We're expecting great things from that effort.”

Those great things began in 2004, when Banks created the Everybody Wins program at Lane Regional Air Protection Agency (LRAPA), where she refined her strategy while lowering fuel use for 350 trucks.

Diesel is a better power source but worse polluter than other fossil fuels, although new technology and regulations are bridging the gap. Exposure to diesel toxins costs

Oregonians more than \$2 billion a year in health care and lost work, according to Downing.

Yet truck drivers help carry 90 percent of goods to market, which is why Banks calls them “the wheels that make our economy go.”

“That's why the truckers love her, because she makes them part of the solution rather than the cause of the problem,” said Jon Gustafson of Coast Transit Refrigeration.

Long-haul driver Jay Rohrer, who saves about \$1,000 a month after upgrading his truck, says, “Sharon and her program have been a godsend to us.”

Banks graduated from high school without a career plan, but a job at a housing agency sparked an interest in public finance. Later, armed with an accounting degree from the University, Banks mastered intricacies of government financing, strategies of writing grants, and finer points of air quality in seventeen years at LRAPA.

Banks is a major in the Oregon National Guard and has been a transportation officer since 1992, when she completed the U.S. Army's Transportation School in Virginia. In the late 1990s, she was in charge of a transportation and supply unit, including many soldiers who were truckers in civilian life. She now commands soldiers and support staff at the Guard's Joint Forces Headquarters in Salem.

NEWS IN BRIEF

HONORS BESTOWED

Each year the UO presents a number of awards to outstanding individuals. The 2006 recipients are:

Presidential Medal (for long-standing and extraordinary support to higher education): Jordan Schnitzer '73 and Mary '46 and Richard Solari. **Alumni Association Award** (for extraordinary distinction in professional or personal endeavors): John "Roger" Engemann '64 and Dana Wade '93. **Distinguished Service Award** (for contributions to the cultural development of Oregon and society as a whole): Phyllis D. Barkhurst, John Brombaugh, and Jack McGowan. **Wayne T. Westling Award for University Leadership and Service** (for outstanding and long-term leadership and service by a faculty or staff member): Professor of Art History and Classics Jeffrey M. Hurwit.

BOWLING WITH THE ALUMNI ASSOCIATION

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Dues-paying UOAA members receive many benefits including career and mentoring opportunities, an annual twenty percent discount at the UO Bookstore (can be used online), and a guarantee to receive all four *Oregon Quarterly* issues for the year. A membership also supports scholarships and programming for current students. Eighty percent of your membership dues are tax deductible. So as the year wraps up, don't hesitate to log on to uolumni.com, get your membership—and a tax DeDUCKtion.

ALUMNI EVENTS

2007 has some great alumni events in store. There's the President's Reception in D.C. in April, Ducks on the Beach in Hawaii in February, the Class of 1957 50th Reunion in May, and the annual Holiday Music Fest in Portland in December. Check out the details at uolumni.com.

Gustafson says Banks has a trucker's tenacity. "She will not be stopped by people who are doubters, who do not understand."

"If there's anyone who can make it work, it's Sharon," says Diane Turchetta of the Federal Highway Administration.

For Banks, the right thing is improving today's trucks while pushing toward a future fleet powered by hybrid engines and biodiesel, their emissions as clean as the air, and their electrical appliances whirring beneath truck-top solar panels.

"It is great fun," she says. "It is what I was born to do."

—ERIC APALATEGUI '89

ROCK OF AGES

Joan Wozniak unearths an Easter Island mystery.

LIKE THE POLYNESIANS WHO ORIGINALLY settled Easter Island in 500 A.D., native islander Alfonso Rapu and archaeologist Joan Wozniak, M.A. '70, M.A. '95, Ph.D. '03, move rock and earth to plant manioc and taro. Like the clans who carved the island's famous statues, they build walled gardens to grow yams. And while they toil under a blazing sun, Wozniak records the indigenous names of every plant that Alfonso can remember. But the elder, now sixty-three, wishes their collaboration had started thirty years ago. He admits that much of what his father and grandfather taught him has slipped away.

Rapa Nui, the island's indigenous name, is in the middle of nowhere. It lies 2,500 miles west of Chile, its governing country. About four thousand people currently inhabit the island.

When Jacob Roggeveen happened upon Rapa Nui on Easter Sunday in 1722, he called it Easter Island and dispatched his men to find food. They returned with tales of "erected stone images . . . which were fully thirty feet high and thick in proportion." James Cook was also struck by the *moai* when he replenished his food supply there in 1774, as was the Comte de La Perouse, who explored the island's northwest coast a few years later.

Rapa Nui's modern-day explorers surmise that the 1,000 *moai* scattered around the island were crafted between 1000 and 1500 A.D. to honor ancestral spirits. The island's unsolved mystery has been how the islanders carved, transported, and erected the twenty-ton basalt statues while sustaining an agrarian society on just sixty-six square miles of windy grasslands peppered



Richard Taylor

Joan Wozniak on Easter Island

with volcanic rock, without trees, rivers, or streams.

"From the ships' supply logs, we know the islanders gave European explorers taro, sweet potatoes, yams, sugar cane, and bananas," says Wozniak. "When I began my research, I saw no obvious evidence of agricultural fields, only rocks."

Wozniak began studying Rapa Nui agriculture in 1993. As a Spanish-speaking graduate student with an M.A. in biology and a decade of research under her belt, she worked for four months with Earthwatch volunteers and local archaeologists to identify prehistoric agricultural sites along the island's northwest coast. "Ancient gardeners planted in collapsed lava tubes, which collected soil and rainwater," she says. "They also constructed circular rock gardens, called *manavai*, to retain moisture and protect plants from the winds." But she knew these structures were too small to sustain large communities. She needed more time to find evidence of prehistoric farms.

After earning her M.A. in anthropology, Wozniak enrolled in the UO's Ph.D. program, applied for and received a Fulbright Scholarship, and returned to Rapa Nui for a year. She hiked back and forth over rocky fields adjacent to prehistoric homes and *manavai* hunting for signs of