

Old wheels, new tech: 'smart bus' in plans

By Anthony Rimel
Corvallis Gazette-Times

CORVALLIS (AP) — Most people who asked Oregon State University students Alex Jacobson and Ryan Kalb about the bus in their driveway assumed they'd bought it as a party bus. Others asked if it was stolen.

"We were shocked by how many people were interested," he said.

A Facebook posting showing the pair parking the Corvallis city bus in their driveway generated more than 300 likes.

They both are electrical and computer engineering majors, and have a little something different in mind: they plan to convert the bus into a mobile electronics lab that would visit schools to teach students about the "Internet of Things." That is the idea that everything from appliances to sprinkler systems eventually will have embedded computer chips and sensors in them that are connected to the Internet, which will enable programming and remote control.

"We wanted a topic that involved software and hardware interacting," Kalb said. "(The Internet of Things) is very new, and not many people know about it; it seems like that's the next step forward."

Roommates Kalb and Jacobson, who live near Jackson Avenue and 21st Street, said their goal is to make every element of the bus programmable: the lights and doors could be remotely controlled. The bus' exterior electronic sign, which formerly displayed routes and stops, could display messages that were Tweeted to the bus (once the messages have been passed through a language filter, that is).

Jacobson, a second-year student at OSU who interned in research and development with drone maker 3D Robotics, said his ambition is to make the entire bus voice-controlled via an operating system that would be a little like the operating system for Iron Man's suit in the recent Marvel movie.

Kalb knows a little something about remote controls. He even works remotely — from Corvallis — for Palo Alto-based electric car manufacturer Tesla. He said he's interested in modifying the bus by adding warnings, such as one to alert the driver if the bus drifts out of its lane. Sensors also could

give the driver more information about vehicles, objects or people in the bus' large blind spots and assist the driver with parking.

"We actually want to make it a smart bus," he said.

The seats will be removed to make room for equipment and educational displays, he said, but some legacy parts, such as the bus' cash box, will be kept — and converted into a donation box.

Kalb said they got idea for converting the bus in mid-March, when they saw it for sale on Craigslist during finals week. They initially thought to make it a mobile headquarters for all their electronics gear, but they eventually decided to go for the larger conversion.

After a few weeks of discussion, they bought the bus for \$3,600, with contributions from family and friends. The Corvallis Transit System had sold it at auction to recycling company Magnet for Metal LLC, which resold it to Kalb and Jacobson.

"It's fun for us to do something crazy like this," Kalb said.

Both Jacobson and Kalb said they have experience in the do-it-yourself electronics field; Jacobson has built things like a "Guitar Hero" game controller that connected to a candelabra that shot flames in the air. Kalb also has built his own solar-powered car.

"We do have experience in big projects," said Jacobson.

Jacobson said they've not yet made any commitments for what to do with the bus.



PHOTO PROVIDED

Volunteers from Sisters Kiwanis, high school Key Club and A Home to Share take a photo-op break.

Kiwanis work at A Home to Share

Once a year, Kiwanis Clubs worldwide are asked to devote one day, known as Kiwanis One Day, to a single community project. On April 11, Sisters Kiwanians and high school Key Clubbers spent the day doing projects at A Home to Share.

On Saturday, 30 volunteers stained decks, installed pavers, built planter boxes, cleaned gutters, installed fixtures and completed many other projects.

A Home to Share is a co-op residence for adults with intellectual disabilities that opens its doors to residents this summer. A Home to Share invites everyone to

their grand opening on May 1, 4 to 7 p.m., in their home at 506 S. Spruce St.

Sisters Kiwanis serves our community all year long. The club operates the Sisters Food Bank, cooks the Buckaroo Breakfast on Rodeo Sunday and funds many local

organizations such as Sisters Park & Recreation District, Family Access Network and the Dental Van.

Sisters Kiwanis meets Thursdays, 7:30 a.m. at Aspen Lakes Golf Club. Visitors are welcome; call 541-588-6441 for more information.

"For some reason, comedians' marriages seem to last longer."

— Bob Newhart



Dr. Bonnie Malone, DC

Sisters Chiropractic Clinic • 16190 Hwy. 126, Sisters • 541-549-7141

Serving Sisters for 33 Years

NO JOB IS TOO BIG OR TOO SMALL



Personal.
Professional.
Plumbing.



Sweeney Plumbing

541-549-4349

260 N. Pine St., Sisters
Licensed • Bonded • Insured • CCB#87587



JOIN US TO MEET THE TEAM!

SAS Lifestyle EXPRESS

You're Invited to View Our

NEW Handcrafted Styles & Colors

Saturday, April 18 10am-6pm

Shoe Inn

WE FIT YOU FOR COMFORT
Cosco Forum Center
541-385-7405

\$15 off any regular priced pair of SAS shoes

SAS

San Antonio Shoemakers™

keep moving™ SASshoes.com

