

He Put Up His Own Building

"It took me 10 days to do a job that the company says a 4-man crew can do in one day. But I did it all myself," says 69-year-old Lester Rose about the 30 by 40-ft. building he recently erected on his farm.

Rose has been a "do-it-yourselfer" most of his life. FARM SHOW featured his mobile workshop a couple years ago (Vol. 28 No. 6). He and wife Audrea spent 14 years on the road doing volunteer construction work.

Now, they're "settling down" on their mountainside 4-acre place near Yellville, Arkansas.

Rose put up the building to use as a shop but after learning how long it would take to build a new house on the property, he decided to use the back 16 ft. as an apartment for both of them.

The \$4,900 building kit (including shipping) from U.S. Building came packed on a 4,700-lb. pallet and included 4,100 bolts.

Rose says the hardest part of putting up the building was lifting each of the twenty 2 by 30 ft. overlapping metal spans. "They're like wet noodles. When you start up with them, they go this way, that way, and every which way," he says. To handle them, Rose used his little Bolens 17 hp 4-WD diesel tractor and put a 4 by 4 on the front of the grill

guard with a battery-powered winch on the back of it. A cable runs through a pulley at the top that hooks to the span and lifts it up. He built A-frames out of 2 by 4's and put a come-along on each corner to get each corner to come up at the same time. "Then, I had to continually climb on the tractor, off the tractor, and on the tractor again. That's the part that took most of the 10 days to do," he says.

Rose didn't think the company's directions for securing the structure to the ground were adequate so he did it differently. He laid a 40-ft. piece of angle iron the length of the building and drilled holes every 2 ft. on the bottom so he could pound a 40-in. length of rebar through the angle iron into the ground and weld it flush with the angle iron. He also drilled holes every 2 ft. on the side of the angle iron so he could bolt the spans and angle iron together. Rose later paid a contractor \$700 to lay a 5-in. cement floor on top of the angle iron.

Contact: FARM SHOW Followup, Lester Rose, 2136 MC 8050, Yellville, Arkansas. 72687 (ph 870 449-2125; lester_rose@hotmail.com) or U.S. Building Direct (ph 800 463-6062; www.usbuildingsdirect.com).



Rose put up this 30 by 40-ft. building which consists of overlapping metal spans.



He intended to use the building only as a shop, but after learning how long it would take to build a new house on the property, he decided to live in the back 16 ft.

Low-Cost Farmer-Designed GPS System

Most farmers who've tried GPS guidance systems in their tractors don't know how they get along without them. What they could get along without is the tens of thousands of dollars that the complex systems cost to install. Simple light bar systems are available, but they don't do much more than tell you to turn left or right as you go back and forth across a field. Now a low cost alternative called "FarmerGPS" does that and much more for a lot less money.

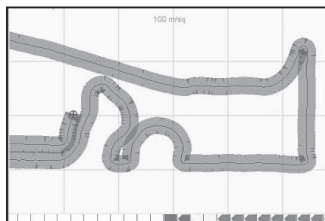
"I was looking at some of the GPS systems, and they cost \$20,000 or more," recalls Johannes Heupel, a farmer who's also a trained computer programmer. "I figured all they were was a GPS receiver giving advice on going left or right."

Heupel began playing around with a laptop computer and a GPS device he had purchased for hunting. He also began writing software that would guide him as he went back and forth, show him where he was in the field relative to water holes and other problem areas, and record field activities. What he wanted was a bird's eye view of fields and field operations. FarmerGPS is the result of three years of work on the system he developed. Heupel has used it for more precisely applying pesticides and seeding grain on his 3,000-acre farm. He has had other farmers use it, too.

"All you need is a GPS receiver, the more accurate the better," says Heupel. "For \$1,000 you're at 1-ft. accuracy 90 percent of the time. You could use a much less expensive one, even a handheld type. It just needs to be able to communicate with a laptop using NMEA, a standard protocol for GPS receivers."

Any laptop computer with Windows 2000 or Windows XP will work. Heupel says the computer doesn't have to be fast or have extensive storage, which also reduces costs.

The key to the system is the software program Heupel developed. When loaded on a laptop connected to a GPS unit, a tractor operator can make a swing around the edge of a field, and from that point on, identify on the laptop where he is in the field relative to that first pass. With the width of the implement, drill or spray boom loaded into the pro-



Screen image shows a field operation in progress.

gram, the screen will show each swath back and forth or around the field as it is made.

If overlaps or skips occur, they are displayed on the field image on the computer screen. Arrows at the bottom of the screen remind the operator to move left or right to avoid a skip or overlap as it is occurring.

With the addition of interface hardware, the program automatically recognizes, indicates and records when the sprayer or implement is in use. This results in an "as applied" map. It can be used to help satisfy regulatory agency record keeping on chemical application.

Reducing overlaps or skips lowers fertilizer and chemical costs with application equipment. It also saves on fuel and wear and tear on the equipment. Because the computer records where the equipment has been in the field, you can verify what has been covered, and you can return another day and continue the operation.

Heupel estimates the cost of a GPS receiver, computer, mount, cables and other hardware at about \$2,500 (Can.). The FarmerGPS software costs another \$500 (Can.).

"We use the system for seeding grain in April and May and for spraying in June and July," says Heupel. "The rest of the time the laptop and GPS can be used for other things."

Contact: FARM SHOW Followup, Johannes Heupel, Box 2585, Stony Plain, Alberta, Canada T7Z 1X9 (ph 780 990-4052; www.farmergps.com; farmergps@hotmail.com).



Umbrella mounts on a 6-ft. long aluminum pole that fits into 2-in. receiver hitches.

Hitch-Mounted Umbrella Provides Quick Shade

Come next summer, you might be glad to have one of these new hitch-mounted umbrellas that just came on the market.

It's an 8-ft. square of polyester on a 6-ft. long aluminum pole that fits into 2-in. receiver hitches (other adapters available). It comes with two snap-together extensions that are 1 1/2 ft. long.

The main pole hinges on a 1 1/2-ft. long base.

When folded down, the umbrella is 70 in. long. "It'll fit in the back of a pickup bed without hanging over the tailgate," says Lee

Vaughn, director of marketing for MX Shade.

The shade is designed to handle 40 mph winds.

Comes in yellow, blue, red, green, grey and camouflage.

The MX Shade with hitch base and bag sells for \$149.95 plus S&H.

Contact: FARM SHOW Followup, MX Shade, Inc., 33049 Anasazi Dr., Temecula, Calif. 92592 (ph 800 913-5415 or 951 970-8205; fax 951 302-5208; www.mxshade.com).

Electric Grips For ATV's, Snowmobiles

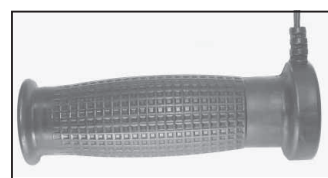
Cold weather means cold hands but you can stay warm with these new electrically-heated, replacement hand grips that have built-in heating elements.

Hot leads and ground wires from the grips wire into your vehicle's alternator or generator. They can be used on any vehicle equipped with a 12-volt power source capable of supplying 35 watts. The grips have a high-low temperature control switch.

You use a utility knife to cut off the original grips, then use epoxy glue to install "Hot Grips".

"They work on the same principle as an electric blanket and allow you to get by with a thinner, more comfortable glove and in some cases, no gloves at all," says Jim Hollander. "Some farmers use Hot Grips for non-conventional applications such as on the control levers on skid steers, forklifts, tractors, etc."

Hot Grips come in different lengths to fit



Electrically-heated, replacement hand grips have built-in heating elements.

7/8 and 1-in. dia. handlebars. They come in black, red, blue, green, and purple. List prices range from \$60 to \$110 per kit, which includes two grips.

Contact: FARM SHOW Followup, Hot Grips Mfg., P.O. Box 5241, Hamden, Ct. 06518 (ph 203 407-1744; fax 203 407-0696; customerservice@hg-direct.com; www.hotgrips.com).