

Editor's Notebook



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Editor & Publisher



This Deere 8760 has been retrofitted with AutoDrive which includes a laser positioning system, sonar perimeter sensing, and cameras to gauge distance, velocity, and direction.

Driverless Tractors Ready For Market

You can give your tractor a driverless option with Auto-Drive from Autonomous Tractor Corporation (ATC). It is the latest version of ATC's

"driverless tractor" concept we first featured 3 years ago in Vol. 36, No. 5. Named the Spirit, it was going to be a lower cost, driverless alternative to conventional tractors. However, feedback from farmers started the company down a different road, says Terry Anderson, vice president, System Design, ATC.



Development of the driverless Spirit tractor by Terry Anderson (shown here in 2012) led to development of retrofit packages for existing tractors.

"Farmers told us they wanted a way to make their own tractor driverless with the option of driving it when they wanted," says Anderson. "They also wanted a way to retrofit older tractors with new engines and drives, as well as better implement control."

ATC has addressed these requests with 3 separate products. Auto-Drive is designed to retrofit existing tractors so operators can change to driverless (not just auto-steer) with the flick of a switch. It uses a combination laser and radio positioning system to provide accurate location data. Its FieldSmart artificial intelligence software provides tractor system management. The operator quickly trains the tractor to plant, till, haul grain and conduct other operations without a driver. A failsafe system will shut down and notify the operator if it senses a problem.

E-Drive is ATC's high horsepower tractor retrofit. Designed for 200 to 600 hp tractors, the E-Drive package replaces the conventional engine, transmission, differential and axles. It includes 1 or 2 diesel generators, 2 or 4 electric, variable speed, wheel motors as well as a joystick control and a system display. The joystick provides direction, speed and implement control.

"We estimate the E-Drive system is 10 to 20 percent more fuel efficient than a mechanized drive system and has a longer service life than the OEM system," says Anderson.

IMS is ATC's answer to the need for implement control. It is a monitoring, control and management system that allows an implement to be used with ATC's Auto-Drive system and its FieldSmart AI software. It can be adapted to almost any implement, with the software used to detect problems.

Auto-Drive is the initial product to be introduced. It is being sold directly to farmers in beta packages for approximately \$30,000.

"We will be hosting a field day this summer to launch the final product and to introduce farmers to E-Drive and IMS," says Anderson. "We are in discussions with a major equipment retailer for distribution and installation."

Contact: FARM SHOW Followup, Autonomous Tractor Corporation, 4302 13th Ave. S., Fargo, N. Dak. 58103 (ph 701 429-3964; spirit@autonomoustractor.com).

Simple Idea Spread Worldwide In 5 Years

My wife's cousin is an entrepreneurial sort of guy who enjoys helping others. In 2009 he built a mailbox-sized wood structure, decorated it to look like a miniature library, and placed it on a post in front of his Hudson, Wis. home. Inside were a few books that people could borrow and return at their leisure. It was Todd Bol's special tribute to his Mom, who'd been a teacher. The next spring, when Bol and his family held a garage sale, people who came to rummage through stuff for sale were intrigued by his "Little Free Library" (LFL), especially the idea of borrowing a book and returning it later.



Bol was as surprised as everybody else that his tiny library idea caught on so fast.

Bol says he had no visions of worldwide acceptance when he placed that first LFL in front of his house. It just seemed to him like a good idea to honor his mother and bring neighbors, adults and kids together into something meaningful. He soon teamed with Rick Brooks of the University of Wisconsin-Madison with a goal to build, number and place 2,500 LFLs. In 2012 the LFL organization was officially registered as a non-profit and its reach spread like wildfire. By 2015 the organization had registered 25,000 Little Free Libraries in 50 states and 70 countries.

The idea has become a worldwide phenomenon, and Bol says in 2014 alone about 36 million books were exchanged in LFLs. The organization is supported by the sale of 22 different LFL kits priced from \$175 to \$350. They're made locally by LFL staff, local woodworkers and can also be built by anyone who builds an LFL. A 14-person staff runs the operation, still in Hudson, Wis.

Bol says he's especially pleased that an idea so small, with such good intentions, has gained so much notoriety. LFL.org registers every LFL built and maintains a registry on its website.

Contact: FARM SHOW Followup, Little Free Library, Ltd., 573 Co. Rd. A, Suite 106, Hudson, Wis. 54016 (ph 715 690-2488; www.littlefreelibrary.org).

Lorn Manthey, Contributing Editor

Liberty Quotes

"No man is entitled to the blessings of freedom unless he be vigilant in its preservation." *General Douglas MacArthur*

"Hold on, my friends, to the Constitution and to the Republic for which it stands. Miracles do not cluster and what has happened once in 6,000 years may not happen again. Hold on to the Constitution, for if the American Constitution should fail, there will be anarchy throughout the world." *Daniel Webster*

"Ultimately, the only power to which man should aspire is that which he exercises over himself." *Elie Wiesel*

"If you think you're too small to make a difference, you haven't been in bed with a mosquito." *Anita Roddick*

"The human race divides itself politically into those who want to be controlled, and those who have no such desire." *Robert Heinlein*

"It is the first responsibility of every citizen to question authority." *Benjamin Franklin*

"Laws control the lesser man. Right conduct controls the greater one." *Chinese Proverb*

"Every man is, no doubt, by nature, first and principally recommended to his own care; and, as he is fitter to take care of himself than of any other person, it is fit and right that it should be so." *Adam Smith*

He Was Arrested For Being A Farmer

If it can happen to Joshua Rockwood, it can happen to you. The Glenville, N.Y., farmer was arrested in March during a period of cold weather for having livestock in an unheated barn, a frozen waterer, and for allowing free-range pigs to forage outside on a winter day. He faces 13 counts of animal cruelty after police made two visits to his farm. Police say the sheep, cows, pigs and horses were in unheated shelters and did not have enough food. And the waterers were frozen

and feces were found in the ice atop the waterers.

More than 200 friends and supporters flooded the courtroom for Rockwood's initial appearance, most saying it could just as easily have been them. No one knows who instigated the investigation - accusers can remain anonymous - but they do know some of Rockwood's animals were taken to a local "rescue" farm which says it has now racked up charges of nearly \$8,000 boarding the animals - a fee they say Rockwood will have to pay to get his animals back.

Police say a veterinarian accompanied them to the farm but Rockwood and his supporters say two other vets inspected his animals and that they were well-fed and hydrated. Supporters have raised more than \$50,000 at a "GoFundMe" website and many others have gone out of their way to visit the Rockwood farm to buy his meats. Most say the accusations - untrimmed hooves on one animal and unheated shelters - are charges any rural livestock producer could face at one time or another.

To read more about the case, go to Google.com and search up "Joshua Rockwood animal cruelty charges".

Points To Ponder

"Ignorance more frequently begets confidence than does knowledge." *Charles Darwin*

"It is preoccupation with possessions, more than anything else, that prevents us from living freely and nobly." *Bertrand Russell*

"He that cannot forgive others breaks the bridge over which he himself must pass." *Lord Herbert*

"Faith is taking the first step even when you don't see the whole staircase." *Martin Luther King*

"Regardless of your lot in life, you can build something beautiful on it." *Zig Ziglar*

"Our words reveal our thoughts; our manners mirror our self-esteem; our actions reflect our character; our habits predict the future." *William Arthur Ward*

"Do what you can, with what you have, where you are." *Theodore Roosevelt*

Deere Says You Don't Own That Tractor You Bought

In July the U.S. Copyright Office will hand down a decision on whether individuals can "repair" the software and computer code that controls most new tractors, pickups, cars and other equipment. John Deere, General Motors and other manufacturers have submitted briefs to the government saying that farmers don't own their tractors but receive "an implied license for the life of the vehicle to operate the vehicle". In other words, it's Deere's tractor. It's just parked on your farm.

The practical implication of the ruling would be that only dealers or company-authorized personnel would be allowed to work on the computerized software systems that control everything from smartphones to combines. Individuals or shade-tree mechanics will not be able to buy electronic diagnostic equipment or even to hack into the software that runs their equipment. For instance, let's say you think you can get more power out of your new \$300,000 tractor by adjusting fuel supply to the engine and you - or your mechanic - are smart enough to figure out how to adjust the computerized code that controls the fuel system. Under the proposed rule, you could not do it because the manufacturers own the software in your machine.

The Electronic Frontier Foundation is fighting for open access to electronics in the machines we buy. You can read more at their website: www.eff.org.

After the christening of his baby sister in church, little Ole sobbed all the way home in the back seat of the car.

His father asked him 3 times what was wrong. Finally, little Ole replied, "Dat preacher said he wanted us brought up in a Christian home, but I vant tew stay vit yew guys!"

Lena was very depressed one day. She started telling her friend Hilda her problem.

"I jüst can't find da man who vill make me da perfect husband," Lena complained.

"Vell, Lena, maybe yew are asking tew much," mused Hilda.

"Vell, no, dat can't be. All I'm looking for is a man who is kind and understanding. Is dat tew much tew ask of a millionaire?" asked Lena.

Sven was going for his morning walk one day when he walked past Ole's house and saw a sign that said, "Boat For Sale".

This confused Sven because he knew that Ole didn't own a boat, so he decided to go in and ask Ole about it.

"Hey Ole," said Sven. "I noticed da sign in yur yard dat says 'Boat For Sale', but yew don't even have a boat. All yew have is your old John Deere tractor and combine."

Ole replied, "Yup, and dey're boat for sale."