



R. Bruce McDannald's jet-powered Cub Cadet is a real attention-getter at parades. The 5-in. dia. exhaust system on front of tractor shakes tree limbs 16 ft. overhead.



Tractor's 60 hp jet turbine engine came off a military generator. Making it fit was tricky, says McDannald.

By Dee Goerge, Contributing Editor

Jet-Powered Cadet Is No Ordinary Cub

The noise!

R. Bruce McDannald says that's the coolest thing about his "jet"-powered Cub Cadet. He originally bought the 125 Cub Cadet in 1966 to mow his lawn.

When Popular Science magazine heard about his Jet Cadet they made it the Do-It-Yourself Project of the Month for September 2010.

It's definitely an attention-getter when McDannald takes it to parades and local events. The crowd hears – and sees – him coming. The 1,200-degree blast out of the 5-in. exhaust system shakes tree limbs 16 ft. overhead.

Inside McDannald's 72-year-old body is the spirit of the 12-year-old who built a go-cart out of combine parts on his Ohio farm.

Later, he made his own mini bike.

Three years ago, the urge to make something different stirred again when he heard a jet engine at the Antique Gas & Steam Engine Museum in Vista, Calif.

"Seeing the display gave me the idea that this same engine could possibly be transplanted into the Cub," McDannald recalls. "I had no idea of all the challenges it would take to make the transplant."

The Escondido, Calif., pump system company owner has restored many tractors over the years, including a Wheel Horse D-200. But modifying a Cub with a jet engine is his most unusual project to date.

He bought a military generator for \$4,000 for its 60 hp jet turbine engine. Making it fit was tricky. To make room he added a

3-in. spacer to extend the frame and bought another hood to graft onto the original. The engine requires a 24-volt DC battery to run the starter, and the one that came with the generator was so large that McDannald had to lengthen the hitch and build a battery box.

The turbine engine turns at 52,000 rpm's, so McDannald shortened parts and added a serpentine belt to reduce the speed to 3,600 rpm's for the hydrostat shaft.

"Now I have 60 hp instead of 12," McDannald says.

Within a couple of years he had most everything done, including a first-rate paint job, but McDannald couldn't run it.

"I didn't dare run the engine in public with the exhaust coming straight out at 1,200 degrees Fahrenheit," he explains. "It

took a year to find someone with the parts and knowhow to fabricate the 5-in. exhaust system. At last I found Detroit Flex, which made the 90 degree elbow and mating flange with the V clamp."

That sent the heat straight up.

The engine uses jet fuel and burns 8 gal. per hour. With just a 2-gal. tank that means McDannald's Cadet has to be towed to the parade line, so he has enough fuel for a 15-minute ride.

It's worth it, he says.

"I get an adrenalin rush every time the engine spools up to 100 percent," he says.

Contact: FARM SHOW Followup, R. Bruce McDannald, 2851 S. Center City Parkway, Escondido, Calif. 92025 (ph 760 741-5555).

Ladder Anchors Make Roof Work Safer

Anyone who hates getting up on a roof will like this new quick-tach anchor that attaches to any ladder with bungee cords and hooks over the ridgeline on most any rooftop.

Berle Blehm, 79, and his wife, Kay, run Level Rite Ladder Safety Tools, which manufactures a variety of portable roof anchor systems.

It's all about geometry, the Oroville, Calif., inventor explains. His patented anchor attaches to the second or third rung of a ladder, and a dial is turned to the roof pitch and pinned in place. It sets the correct angle for the locking extension arm to reach over the ridge to the other side of the roof to hold the ladder in place.

"It's only 24 in. long and small enough to put in your car," Blehm says of his Quick Release Ladder Anchor.

It sells for \$270 and the primary market is roofers and contractors. It easily detaches to move from ladder to ladder and folds into the ladder for easy transport.

Blehm also sells a system with elevated legs that raises the ladder over the ridge cap of a metal roof. Another has wheels to roll the ladder up on the roof, and then flips over to anchor it.

His patented Portable Tether/Ladder Roof Anchor (\$330) serves as a fall protection tool for roofs with 12/12 pitches or steeper to use with a safety lanyard, soft stop and harness.

Level Rite products are made with industrial-strength 6061 T6 (aircraft) aluminum and have met guidelines published by OSHA, ANSI and NFPA where required.

"They are ultra strong. I've tried to figure everything that would happen to roofers for



Quick-tach anchor attaches to ladder with bungee cords.



Locking extension arm reaches over ridge to other side of roof to hold ladder securely in place.

their needs. Our motto is: Safety at your feet," Blehm says.

Contact: FARM SHOW Followup, Level Rite Ladder Safety Tools, 3120 Foothill Blvd., Oroville, Calif. 95966 (ph 530 534-6000; www.levelrite.net).



"Bucket basket" straps into front-end loader bucket to provide a safe work platform. It can hold 1 or 2 people.

"Bucket Basket" Mounts On Front Or Back Of Tractor

Richard Pulliam recently sent FARM SHOW photos of his new "bucket basket lift" that's designed to mount on the bucket of any front-end loader or attach to the tractor's 3-pt. hitch. It can hold 1 or 2 people.

"It provides a safe and secure work platform for doing any work that would otherwise require a ladder or lift. It takes less than 5 min. to mount with no tools," says Pulliam.

The unit consists of a square tube frame with an expanded metal floor. It measures 30 in. deep, 5 ft. wide, and 42 in. high. It comes with a door on one side and a 28-in. high safety rack on back. The operator drives forward until the bucket slides into a V-wedge at the bottom of the basket, then raises and tilts the bucket until the basket slides into place. A pair of 6,000-lb. rated ratchet straps are then wrapped around the bucket and hooked to 2 metal cups on each side of the basket.

The basket can also be 3-pt. mounted and is equipped with a tailgate that can be used as a work bench, a large rear access door, loading ramp or as an extended platform to carry large equipment.

A dual receiver hitch can be used on either the front or rear of the basket for moving or towing a trailer.

"Works great for cleaning out gutters, sawing tree limbs, and so forth. The front side of the basket is fitted with 1/2-in. steel rod tool hooks, allowing you to carry ropes, chains, pole saws, chain saws and other tools. The expanded metal floor is slip proof."

The Bucket Basket sells for a special introductory price of \$1,995.

Contact: FARM SHOW Followup, Richard Pulliam, P-3 Mfg., 4101 Woodnoll Road, Oklahoma City, Okla. 73121 (ph 405 203-3051 or 405 708-1047; bucketbasket2@cox.net; www.bucketbasket.com – coming soon).