

Chip Petrea stands next to the custom hydraulic lift that helped him continue farming.



 $R.J.\ Mobility\ Systems$  is now in production on the lift, adapting it to different disabilities and tractors.

## Lift Puts "Legless" Farmer In Driver's Seat

By Doug Sorenson

An Illinois farmer who lost both legs in a farm accident is back on his tractor and actively farming today, thanks to his specially designed tractor with special hand controls and a hydraulic lift.

Chip Petrea's accident happened in September, 1978 when his legs got caught in a hay baler and had to be amputated above the knee. A year after the accident on his farm near Luka, Ill., Chip was milking cows from his wheelchair and managing to do some driving of a small tractor. But, he realized that the big work had to be done with a big tractor — which he couldn't get in and out of with artificial legs and crutches.

Petrea had heard of R.J. Mobility Systems, a Maywood, Ill. firm that builds lifts, elevators, and mobile equipment for the handicapped. He asked the firm to modify a big tractor for him. Robert Jackson, head of the firm and a quadraplegic himself, evaluated Petrea's case, then went to work to modify a 1979 model 186 Hydro IH diesel tractor.

Modifications were needed to place all controls in a convenient location where they could be operated by hand. But the biggest challenge was to design a lift to get the legless operator from the ground into the cab.

The hydraulic lift was mounted on the left side to provide access without interfering with rear-mounted implement attachments. The forward mounting of the lift required that the door to the cab be reversed to open at the front. The lift, completely detachable so that the tractor can be worked on if needed, was attached without any new holes being drilled in the tractor frame. Controls for the lift are in weatherproof boxes. A short "catwalk" platform connects the cab with the floor of the lift.

Control modifications inside the cab included: Moving the clutch pedal to the dashboard for hand operation, converting foot brakes to handbrakes, moving the 3 pt. hitch switch from the floor to the dashboard, and installing a spinner knob on the steering wheel. Other aids to the operator are various grab bars on the lift, doorway, and in the cab, plus a special receptacle for Petrea's crutches. The cab is equipped with a 2-way, citizen's band radio.

Petrea has been farming with his modified tractor since last March. He's been able to plow, plant, and harvest the hay, corn, and soybean crops on his 460-acre family operated dairy farm.

Petrea's was the first farm tractor that Robert Jackson and his company have modified. He has since received dozens of requests to do similar tractor modifications for other handicapped farmers.

"In engineering, we must remember that most farmers have different equipment and different kinds of operations. We must be sure that all modifications can be removed for full servicing of the tractor," he points out.

"Medically, we must give a personal evaluation of each client so we know his or her limitations. A client may be able to drive the tractor, but we want it to be driven safely. Every client is an individual, so we must customize accordingly. There's no mass production."

Jackson notes that each state must approve tractor modifications through its own board of vocational rehabilitation: "Illinois has just approved a totally new concept in a special tractor for a disabled operator. The lift will be separate from the tractor, and the tractor will keep standard controls so anybody besides a disabled person can readily drive it," he told FARM SHOW.

For more information, contact: FARM SHOW Followup, R.J. Mobility Systems, 715 South Fifth Avenue, Maywood, Ill. 60153 (ph 312 344-2705).



## Donkeys Teach Stubborn Calves How To Lead

Here's a new twist to breaking calves to lead — buy or rent a donkey to do the job!

At least a couple of farm families, one in Indiana and the other in Minnesota, tie a donkey to a calf, about 2 ft. apart. Before long, the donkey's stubborness and strong neck win out.

We first learned about the idea from James Kirkendall, Tipton, Ind., who was featured in FARM SHOW two years ago (Vol. 3, No. 6, 1979). He buys or rents donkeys to annually teach a dozen or so club calves to lead. "If you want to break several calves, it might pay to own one," he advises. "Prices run from \$100 to \$150 if you want to buy a donkey."

Kirkendall uses a castrated jack or a jenny, with a breaking halter on the calf and neck strap on the donkey. A double swivel on the chain keeps it from getting twisted, and the animals should be hooked up at least 2 ft. apart, but no more than 3 ft. — "so the donkey can't kick the calf and hurt it".

At Alpha, Minn., Larry and Carole Harries have been breaking calves with donkeys for about 10 years. "It works great," says Carole. She and Larry break six or so a year, following about the same procedure as KirkenThe Harries also occasionally rent a donkey for the purpose. "And, we have lots of calls from people wanting to buy burros," says Carole. "People who rent them usually end up buying and owning the animal."

Neither Kirkendall nor the Harries feel the practice is inhumane for either the donkey or the calf. "We've never had an animal get hurt," notes Carole Harries. "Before tying a calf to a burro, we keep it tied to a fence post, or in the barn for a period of time, which does the preliminary breaking. Otherwise, it would be hard on the burro."

Kirkendall says it doesn't really hurt the animals, but that it is important to tie them the proper distance apart.

Both parties emphasize that the system doesn't work perfectly on every calf. Some calves never break to lead, and it usually is necessary to work with a calf further in person to get it adequately ready to show.

For more details, contact: FARM SHOW Followup, Larry and Carole Harries, Rt. 1, Alpha, Minn. 56111 (ph 507 847-4322); or James Kirkendall, Rt. 3, Tipton, Ind. 46072 (ph 317 963-2626).