

Cold weather calamity

An attempt to clear ice from foot controls leads to death of operator

The accident: On a cold January night in Michigan, the operator of a skid steer was getting ready to plow snow after a recent storm, when he noticed the foot controls weren't operating properly. In the days prior, snow and ice had gradually accumulated in the foot space of the skid steer and had begun to interfere with the operation of the foot pedals.

With the boom arms raised, the operator stood on the ground and began clearing the snow and ice around the foot pedals by hand. While doing so, he evidently engaged the toe of the left foot pedal, which lowered the boom arms.

Accident investigators found the deceased man pinned between the hydraulic tilt cylinder and the skid steer frame. The engine was not running, but the seat bar was in the down position, which unlocks the controls.

The skid steer was 10 years old, but had very few hours on it. Investigators found that the seat bar was functional, but that the loader did not have a lift arm support available to the operator. The deceased had some familiarity with the machine, and had cleared snow for the property owner before.

Since there were no witnesses to the accident, investigators came up with three likely scenarios:

1. The operator exited the cab with the bucket up and the engine off, but lowered the seat bar after exiting. With the seat bar in the down position, the pedal interlocks were not engaged. While cleaning, he exerted enough force



Illustration by Don Lomax

to activate the left pedal and lower the bucket.

2. The operator exited the cab with the bucket raised. But, because of the snow and ice accumulation around the foot pedals, the raised seat bar did not lock the foot pedals in neutral. The operator may have lowered the seat bar in a last-gasp attempt to restart the machine and raise the lift arms.

3. The operator started clearing the ice while standing on ground with the engine off and the bucket on the ground. But, because access was difficult, he reentered the skid steer, started it, and raised the bucket. Then, he turned the machine off, exited, and resumed cleaning when he accidentally engaged the left foot pedal.

How to prevent accidents like this:

- Employees should be aware that snow and ice can cause a variety of frustrating problems with

machinery and controls. During the winter, keep all moving parts and controls clean and ice-free. Be patient, and don't force the equipment to do something it shouldn't. Remember: Fix it. Don't force it.

- Operators, mechanics and field personnel should be reminded that prolonged exposure to cold temperatures can cause confusion and disorientation. Avoid working solo or taking unnecessary risks in these conditions.
- All service and maintenance work should be performed with the lift arms down and the bucket flat on the ground.
- A lift arm support should always be available to operators and mechanics. Train your employees on proper lift arm support use.
- Always ensure that the seat bar is in the raised position and that the lockouts are fully functional before exiting the cab.

CDC Investigation #01MI001. For more information and cold weather tips go to: <http://cdc.gov/niosh/face/stateface/mi/01mi001.html/>



Date of safety talk: _____ Leader: _____
Attending: _____