

THINK • ACT • BE SAFE

SAFE WINTER OPERATIONS FOR PROFESSIONAL SNOWFIGHTERS

As a professional snowfighter, safety should be your #1 priority. You need to constantly think safe and act safe so that you will be safe. It's the winning combination for safe winter operations.

If you think about it, most safety practices are just **good common sense**. But you need one other item along with good common sense – **the right attitude**. These two items together, good common sense and the right attitude, will lead you down the road to safety. With these two items, you realize the importance of safety and the importance of knowing your job. You know that safety has to be constantly emphasized, so that it remains in focus at all times.

And as a professional snowfighter, your safety becomes ultra-important. You are out in that winter storm because the roads are unsafe for driving. You are the one that is making the roads safe, safe for all the motorists who need to get to work or carry out essential emergency operations or just need to continue on their life's journey.

Realizing the importance of safety, let's review the many safety issues encountered in your job of snowfighting. We will first look at safety items that can be addressed prior to winter and then deal with safety during actual winter operations. Then, from all of this, we can develop a check list for your "on the job" safety.

SAFETY PREPARATION FOR WINTER OPERATIONS

Are you prepared for the winter job ahead of you? Knowing your job is essential. So your safety starts with **training**. A well-trained snowfighter will be a safe snowfighter. Training is essential in preparing you for your snowfighting duties, for proper handling of materials, for proper maintenance of equipment, and for proper operation of the equipment.

Knowing your route is also essential. "Dry runs" can be a valuable safety practice. Dry runs mean running your routes just prior to winter. Take notice of what has changed since last winter. New developments with new

roads or streets and new driveways could have been constructed. New drainage facilities or new utilities with poles or manholes might be present. Take notice of what's overhead – low hanging wires or tree limbs. New curbs or medians or new guiderail may appear. Take notice of all these new obstacles, and **make notes** of locations and which obstacles could be marked or delineated to allow you to recognize them when covered with all that white stuff.

Actually dry runs should be called "wet runs", because a good time to run your routes is during a rain. This will tell you where those drainage problems are; where the ponding occurs resulting in callouts for icy conditions.

From the above dry runs, several items lending to safety become evident. **Marking all obstacles** that can be marked for location visibility during the storm. All obstacles within or beside the road that can become a hazard for plowing and which may become invisible due to being snow covered should be marked or delineated for visibility during the storm.

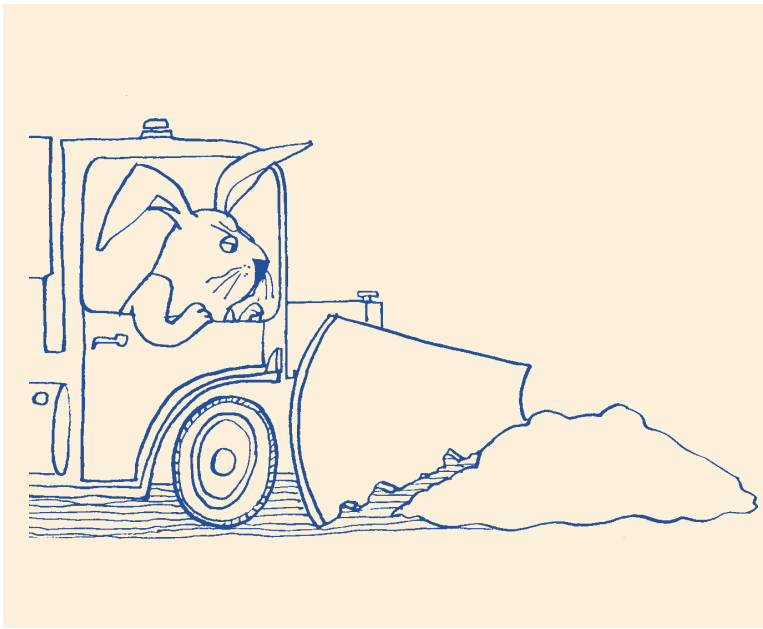
Roadside trees have had all year to grow and spread their limbs. Scheduling a **tree-trimming** task prior to winter will insure that all those low hanging limbs have been cut off. When setting a minimum height, remember that heavy wet snow will make limbs bow lower yet.

SAFETY DURING WINTER OPERATIONS

Having accomplished the above items, we can now turn our attention to safety during the winter, breaking this into additional areas: crew safety, material safety, vehicles and equipment safety, facility safety and operations safety.

Crew Safety

Are we ready to fight the storm? The first item is **adequate sleep or rest** prior to starting work. Plowing and spreading can mean long hours, leaving you tired and exhausted. Proper sleep or rest prior to beginning this task will keep you awake and alert with safety remaining important.



The next item is warm clothes. **Multi-layers of warm clothing** give an additional advantage of being able to adjust to changing temperatures or conditions. Driving in the truck cab can be quite different than being out of the truck adjusting or repairing a part of the equipment.

Other personal protective equipment that is needed include **a hard hat with liner, a safety vest, safety shoes, boots, and gloves**. In addition, a well-stocked **first-aid kit** should be in the cab. And don't forget a **thermos** and **lunch box**, particularly for those long rural routes requiring several hours away from any convenient pit stop.

For your winter emergency survival kit, include a **flashlight** with **extra batteries, ice scraper/snow brush, jumper cables** and **basic tool kit, flares or reflectors, flags for traffic control, shovel** and **sand** or other material to aid in traction.

And every truck cab should be equipped with a **fire extinguisher**. Checking the pressure status of the extinguisher as a routine checklist item could prevent a unsafe situation.

The main objective is **“being prepared”!**

Material Safety

Handling abrasives, salt and other chemicals need not be hazardous, if you know what you are handling, and follow common sense requirements for personal protection. All chemical manufacturers are required to have a

Materials Safety Data Sheet (MSDS) for each of their products. These sheets are required by law to be available to the user, and the safe user will be familiar with all the information on these sheets and have a copy in the truck cab. Everything you need to know about the chemical is included in the MSDS. The manufacturer's name, address, and telephone number; identification numbers for the chemical, a list of the major components of the chemical, its characteristics and reactivity with other materials, requirements for personal protective clothing and equipment needed in handling the chemical, and **emergency procedures** in case of exposure or a spill.

Unless you're the loader operator, you should be **inside the truck cab when your truck is being loaded**. This action will prevent you from being in the path of any spilled materials during the loading operation.

Vehicles and Equipment Safety

Preventive maintenance is safety. Good preventive maintenance insures the vehicle will operate with optimum performance and less breakdowns resulting in safer operation. Of course, you, as operator, are a responsible part of the preventive maintenance program. The daily checks and **pre-trip inspection** you make on your truck are important at any time. Relative to winter operations, however, we'll deal only with some major points for safety. **Checking fluid levels, tire tread and inflation, brakes, windshield wipers and wiper blades, heater, defroster** are all safety checks. Yes, even the heater relates to safety. If the heater is not working properly and you are too cold or too hot, your total concentration will not be on fighting the storm, making you less safe in operations. Your pre-trip inspection should include **clean windows and mirrors**, again a safety necessity.

Check all lights! You will need all lights when plowing and spreading. You are out there because of unsafe conditions. Lights are not only for you to see, they are for you to be seen!

Back-up alarm, plow flags, and warning signs on the rear of the truck are good safety items for you and others in preventing accidents.

Radio communications are a necessity for efficient operations but are also a necessity

for safety. Every truck should be required to have a mobile radio for communications.

With a **full fuel tank**, and a final **walk around inspection**, your last safety practice when you climb into the cab before driving off is to buckle up. The use of your **safety belt** should become a habit, a natural action prior to turning the key in the ignition. When that plow hits that raised manhole, you will realize the value of the safety belt habit.

Facility Safety

Your maintenance facility or garage can become a safety hazard, if not maintained properly. **Good housekeeping** within and around the facility results in a safe working environment for everyone. Having a **well-lit facility** and keeping tools and equipment put away when not in use is essential to safety. Keeping the floors clean and free of grease, oil, and debris also lends to a safe facility.

Operations Safety

You already know how to drive a truck. But if you are a new snowfighter, practicing with a plow and a loaded spreader could be very beneficial. The extra weight and the different center of gravity gives a whole new feel to the 'monster' that you will be operating in adverse unsafe road conditions.

Know your truck and equipment. Know your **safe backing** rules. Do the **circle of safety**, back slowly, back straight, and use an outside guide if possible. Backing accidents number more than any other type of accident in our road maintenance operations. A **backup alarm** should be standard on all equipment.

We have already mentioned about staying in the truck cab when the truck is being loaded, so we will go right to spreading material. If you are spreading material and running with your truck bed up, **the bottom of the truck bed should not be higher than the top of the cab.** And watch for overhead wires and tree limbs. For safety sake, maybe a requirement to keep the truck bed down when moving is the better way to travel.

When **changing plow blades, raise the plow and block it securely** before proceeding to loosen bolts. Never place yourself under the blade or in an unsafe position.

When working on or unclogging a spreader, make sure your engine and all power to the spreader is turned off. In addition, **relieve all pressure in the hydraulics and then use a tool to unclog.** This bears emphasizing because of actual accidents that have occurred. Even though all power is off, the reserve pressure in the hydraulic lines can still turn the auger as it is freed. Using a tool to unclog prevents the habit of sticking your hands in hazardous places.

Defensive driving and obeying traffic laws are important, along with **wearing your safety belt** as mentioned before. **Do not speed.** Speed kills. And remember to keep enough distance in front of you for **adequate stopping distance.** The extra size and weight of your vehicle and the road conditions will necessitate a substantially greater stopping distance than you normally need..

Be aware of fatigue. Long hours of plowing and spreading can be exhausting. **Know your own limitations.** Twelve hour shifts are common, especially if crews are working 'round-the-clock' with twelve on and twelve off. Everyone needs a break – either a short coffee break or a rest/sleep break. And it can differ from one person to another. One individual may plow 12 hours without a break or with only a coffee break, while someone else can only go a few hours between breaks. It can also differ with the individual. Normally, someone who could plow 12 hours straight through, finds he was up all night with a sick child and now can only plow a



short period between breaks. Supervisors should recognize that all individuals are different and snowfighters should know their limitations. Cooperation between supervisors and snowfighters is essential in this area for safe operations.

One last factor – **keep cool, anger clouds judgement!** Even when your residents are out there waving their snow shovel and yelling at you, maintain your cool and stay safe.

SUMMARY

As a professional snowfighter, providing that vital service to maintain a safe transportation system, you need to constantly think safe and act safe to be safe. **Remember, this is your winning combination to winter operation safety.**

A safety checklist is included as a separate pull-out for you to carry with you as a constant reminder to think, act and be safe.



700 N. Fairfax Street, Ste. 600
Alexandria, VA 22314-2040
Phone: 703 • 549 • 4648
Fax: 703 548 • 2194
E-mail: info@saltinstitute.org
WWW: <http://www.saltinstitute.org>

WINTER OPERATIONS SAFETY CHECKLIST

Safety Preparation for Winter Operations

- Training for Crews
- Dry Runs (Wet Runs) – make notes
- Marking Obstacles
- Trimming Trees

Safety During Winter Operations

Crew Safety

- Adequate Sleep/Rest
- Personal Protective Equipment
- Multi-layered Warm Clothing
 - Hardhat with liner
 - Safety Vest
 - Safety Shoes
 - Boots
 - Gloves
- Emergency Survival Kit
 - First-Aid Kit
 - Flashlight with Extra Batteries
 - Ice Scraper / Snow Brush
 - Jumper Cables
 - Basic Tool Kit
 - Flares or Reflectors
 - Flags (traffic control)
 - Shovel and Traction Material (sand)
 - Fire Extinguisher – check pressure
 - Thermos and Lunchbox

Material Safety

- Material Safety Data Sheets (MSDS)
- Emergency Procedures

Vehicle and Equipment Safety

- Preventive Maintenance
 - Daily Checks
- Pre-Trip Inspection
 - Fluid levels
 - Tire Tread and Inflation
 - Brakes
 - Heater
 - Defroster
 - Windshield Wipers
 - Clean Windows and Mirrors
 - Lights
 - Backup Alarm
 - Plow Flags
 - Warning Signs on Rear of Truck
 - Radio Communications
 - Full Fuel Tank

Facility Safety

- Good Housekeeping
- Well Lit Facility

Operations Safety

- Safety Belt
- Defensive Driving
- Obey Traffic Laws
- Do Not Speed
- Safe Backing Circle-of-Safety
- Allow Sufficient Stopping Distance
- Dump Bed no higher than Cab Top when moving
- Block Plow before Changing Blade
- Disconnect Spreader before Unclogging
- Be Aware of Fatigue

REMEMBER: THINK SAFE! ACT SAFE! BE SAFE!