



USAG-AK WINTER DRIVING SAFETY PAMPHLET 385-1



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USAG-AK Winter Driving Safety Pamphlet

Summary: This pamphlet is designed to provide tips to drivers that will encourage safe winter driving in Alaska. This pamphlet is not considered to be all inclusive, and is not intended to replace common sense.

Applicability: This pamphlet applies to all employees (civilian and military) driving on Army installations in Alaska.

Impact on the New Manning System: This pamphlet does not contain information that affects the New Manning System.

Suggested Improvements: The Fort Richardson Garrison Safety Office is the proponent agency for this pamphlet. Users are invited to send comments and suggested changes to APVR-RGC-RZ.

Interim Changes: Interim changes to this pamphlet are not official unless they are authenticated by the Director of Information Management. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

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Winter-Wise Your Alaskan Driving

What's so different about winter driving in Alaska? Almost everything:

Suddenly, your car is different. It won't start the same way, steer the same way, or stop the same way.

The roads often become treacherous when covered with snow. Slush is often as slippery as ice and both threaten stops and steering. Winter also affects visibility. Daylight hours are short, and snow glare can blind you. In addition, windshields can become icy or fogged.

But the biggest problems with winter driving are the drivers themselves. Too often drivers are in a hurry, and either they don't worry about road conditions, or they become tense and nervous.

This booklet provides tips on how to prepare for winter and how to react to dangerous driving conditions.

Safety

Personnel involved in motor vehicle accidents frequently say that road and/or weather conditions are the cause of the accident. They are not causes of accidents-they are only contributing factors. The cause is the operators' failure to adjust their driving to the dangerous conditions in Alaska during winter months or the occasional failure or malfunctioning of equipment.

Winter driving in Alaska is hazardous, but with proper vehicle preparation, driver information and driving skills the chances of making a trip safely are greatly increased. Remember a courteous driver is a safer driver.

Alcohol related injuries are epidemic in Alaska. Motor vehicle fatalities are heavily impacted by alcohol use. Alcohol is a factor in more than half of all deaths caused by motor vehicle crashes.

In 2000, the Alaska Legislature set the Blood Alcohol Content (BAC) level for drivers at .08, and in 1994 they set the limit for drivers under 21 to .00 BAC percent.

Planning and Preparation

Since all winter driving problems cannot be anticipated, the best rule is to plan and be prepared. Don't wait until the cold weather arrives to do so. Prepare for winter beforehand by having your car tuned so it will run efficiently. This will reduce the chances of roadside breakdowns.

The following vehicle systems should be checked regularly by yourself or your mechanic:

The Battery: Cold weather makes vehicles harder to start. Always keep the battery and terminals clean to insure good connections, and keep the battery fully charged. Recharge or replace the battery when necessary. Be sure to check the battery's fluid level. The voltage regulator should also be checked.



The Ignition System: Check the condition of ignition wires, and check the distributor cap for cracks. Fault wires, or a cracked cap can result in engine brownout when snow or when slush is thrown onto the car and into the engine compartment. It is also a good idea to have a tune-up done before cold weather sets in. A tune-up should reveal ignition problems, if they exist.

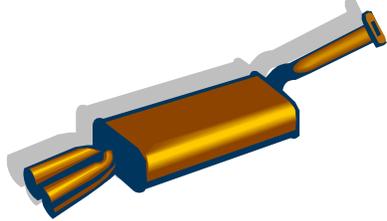


The Heating and Cooling System: Have the antifreeze in the radiator checked. If there is a leak in the radiator or hoses, have them repaired or replaced before you add antifreeze. Test the

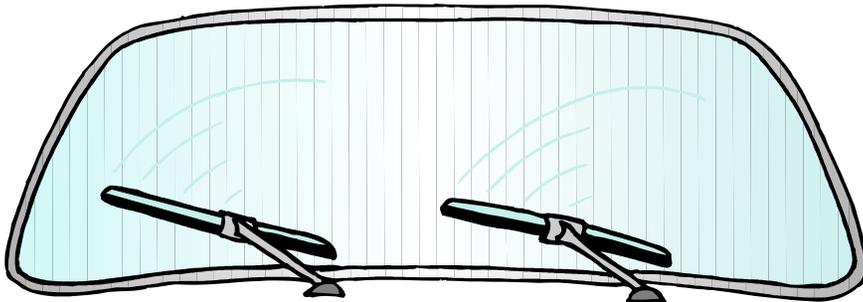
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heater and defroster to make sure they are functioning properly. If they are not putting out enough heat, have the thermostat and heater checked. Also, check the intake vents for any debris or other matter that can cause blockage.

The Exhaust System: Be sure to have the entire exhaust system checked for leaks. Replace components as necessary. Carbon monoxide is a killer and even a small leak in the system could pave the way to disaster. Never warm up your car in a closed garage. Even if the exhaust system is in good order, it is a good idea to drive with at least one window partially open.



The windshield Wipers and Washers: Check the functioning of wipers and blades. Replace blades that streak the windshield. Keep the windshield washer reservoir filled with washer antifreeze.



The Tires: Regular tires should have a good tread for the bite needed when traveling on snow and ice. To improve braking and handling abilities of your car, use snow tires, studded snow tires, or chains. If you use snow tires, put them on with the first snowfall warning. You get the best traction with studded snow tires, but

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these tires may only be used from September 15 through May 1. The chart below shows the traction advantage of each compared to regular tires.

Traction Chart (from the National Safety Council)	
On Glare Ice at 25 Degrees	Percent Improvement
Snow Tires	28
Studded Snow Tires	218
Reinforced Tire Chains	630

The Tire Chains: If you prefer to use chains, inspect your chains to make sure they are serviceable. Check the condition of the cross chains. Replace broken links or links that are almost worn through.



The Brakes and Suspension: There is nothing quite like stopping when you want to. Have your brakes checked and adjusted at least every fall. Suspension problems can also cause handling and braking problems, so have the suspension checked too.

The Seat Belts: Seat belts can reduce your chances of dying in an automobile accident by as much as 50 percent. Make sure they are in working order and make sure everyone in the vehicle is wearing one when the vehicle is in operation.



The Lights: Make sure your head lights, tail lights, brake lights, and all warning lights are operational.

Necessary Equipment:

Don't wait until it freezes or snows to load your car with the equipment necessary to combat the elements. Put the following supplies from the checklist below in your glove box or trunk today:

- Flashlight (inside car-not in trunk)
- Broom or snow brush
- Tire chains
- Extra window washer fluid
- Work Gloves
- Small Snow Shovel
- Sand bag or Cat Litter
- Blanket or Sleeping bag
- Cold Weather Clothes
- Booster Cables
- Non-perishable food for emergencies
- Tow Strap
- Ice Scraper
- Highway warning kit or Flares
- First Aid kit
- Candle and matches

Get Set...Then Go

During the winter months it takes a little extra time to prepare your car for safe driving.

Totally clear all the windows, the hood, the trunk and the roof of the car of snow and ice before driving. Many people fail to totally clear off the roof area. Just the movement of the car and stops can cause snow slides onto the windshield or rear window, limiting driver vision.

Be sure your headlights, turn signals and tail lights are all clear of snow. See and be seen. Turn on your lights while driving.

Keep your engine warm at night. Plug your car engine block or tank heater in at night to keep your engine warm. Cars start easier, with less wear and tear when they are warm. They also produce fewer pollutants such as carbon monoxide. Give your engine a short warm up period when you first start it, and drive slowly until the engine temperature comes up to normal operating temperature, but do not warm up the engine while the car is in the garage.

Driving on Snow and Ice

Drive on snow and ice covered streets only when necessary. If you must drive be familiar with special techniques necessary to minimize the dangers involved.

Start out slowly on snow and ice. Be careful not to spin your tires, as this will only cause ice to be formed under them. Use gentle acceleration and braking or the tires will lose traction and spin or slide causing a loss of control.

Test your brakes at slow speed to see how slippery the roads are, but be sure to check for cars behind you before you do a brake check. Be prepared for a skid.

Be aware of ice patches forming in shaded areas, curves, and bridges. Intersections are almost always icy, as people spin their tires, and ice forms from condensation under warm cars stopped at intersections. Slow down approaching intersections, because they offer numerous hazards such as pedestrians crossing, and other vehicles going too fast to stop.

Remember, snow banks often hide danger. Watch for stalled vehicles, hidden driveways, pedestrians, and animals, just to mention a few.

Travel at a safe following distance. Stay back at least two car lengths for every 10 MPH of speed. In the winter use the 4 second rule instead of the 2 second rule. When the car ahead of yours passes a fixed object begin counting (one-one thousand, two-one thousand...). If your car gets to the fixed object before you get to four, then you are too close.

Plan ahead. Look out for sudden slowing of traffic. Plan your own stops; slow down well in advance. Be prepared for pedestrians and wildlife entering the roadway.

Brake Carefully. Brake only when traveling in a straight line. When applying breaks, do so gently and release just before the brakes lock if you do not have anti lock brakes. Repeat as necessary to stop. With anti lock brakes, apply and hold the brake until you stop. Do not let up when the brakes start “chattering.” This is normal and is caused by the automatic pumping of the brakes to keep the vehicle from skidding.

Negotiate icy hills carefully. When driving up hills, do not slow down or you will lose momentum. When driving down hills, use low gear, not the brakes. If you lose control of your vehicle, head into a snow bank. Note: down shifting on a hill can cause a loss of control. Remember to down shift before going down the hill.

Basic Skid Rules

1. Make no rapid or sudden movements until you have complete control of the car. NEVER slam on the brakes.
2. a. **Rear Wheel Drive** vehicles only, remove your foot from the gas, do not apply the brakes, and gently turn the steering wheel in the direction of the skid.
b. **Front Wheel Drive** vehicles only, gently turn the steering wheel in the direction of the skid and slowly press down on the gas pedal.
3. Once recovered from the skid, resume normal driving patterns.
4. **PRACTICE** skids in a large, deserted, icy parking lot. Make your car skid and learn how to control it so that you can do it instinctively when needed.

When You Get Stuck-Don't Panic

There may be times when your car becomes stuck in deep snow or on ice. Below are some tips which should help you get going.

1. **Clear a path.** Shovel out the snow from both in front and behind each wheel as well as from under the car. Front wheels should point straight ahead.
2. **Gear to go.** Use a higher gear so the wheels spin less. Standard transmissions should be in second gear; automatics should be in drive.
3. **Rock n' roll.** With a standard shift only, roll forward a little, step on the clutch, and roll back. Keep doing this, a little farther each time, until the car is out.
4. **Once you've got your car out don't stop!**

Frozen Car Parts

Often cold weather will cause various parts of your car to freeze up. Here are a few hints to help you with some of the more common problems.

1. Frozen emergency brake: Try to rock it free using reverse. Next time leave the car in park, or in gear, if you have a

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standard transmission. Avoid using the emergency brake in the winter.

2. Frozen door lock: Try warming the key with a match, or use lock de-icer.
3. Frozen fuel line: Keep your gas tank at least half full. Condensation from temperature changes will let water accumulate in the bottom of your tank, and will end up in the fuel line. Keeping your tank full reduces the air volume in your tank, thus it reduces the amount of water that can condense out into your gas. Add gas line antifreeze such as Ban-Ice, Heet, or STP to your fuel tank twice each winter.
4. Frozen windshield wipers: Carefully free them of ice and snow. Make sure you turn them off when you park to protect the wiper motor on startup.
5. Frozen tires: Tires become very hard in extremely cold weather, and can lose their seal, especially if you spin the tires or take a corner before they are warm. Go slow until the tires warm up, which you can feel when the car stops hopping like you are driving on a square tire.



Surviving a Blizzard

Here is some information which could help you, if you should become trapped in a blizzard.

1. Stay in the car. You are more likely to be found in your vehicle than if you are wandering around disoriented in blowing snow.
2. Crack a window for fresh air. Freezing wet snow can completely seal out oxygen.
3. Beware of carbon monoxide poisoning. Run the engine and heater sparingly and only with a window open for

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ventilation. Make sure the exhaust pipe is not blocked with snow.

4. Do not remain in one position. Clap your hands and move your arms and legs vigorously from time to time to stay warm.
5. Take turns keeping watch. If there is more than one person in the vehicle, do not all sleep at the same time. If alone, stay awake.
6. Turn on your dome light and clear off accumulated snow. Both will make your car more visible to work crews.
7. Beware of over exertion and over exposure.

Pedestrians: Remember to watch out for pedestrians, especially runners during PT hours. A copy of the approved running routes can be found on each installations web page. Runners should be wearing reflective clothing and use road guards at road crossings. Reduced visibility in the winter months means drivers must remain on the lookout for pedestrians in the road way. Slow down and give pedestrians a wide margin, especially in bad weather.

Last Safety Tip-WEAR YOUR SEAT BELT!

Road condition Information: <http://511.alaska.gov>
Or Phone report number 511

This and other winter safety information is available on the Fort Richardson Alaska Garrison Safety web page, located at http://www.usarak.army.mil/Garrison_Safety/ and the Fort Wainwright Garrison Safety Office at <https://fwa.pac.army.mil/postsafety/>

For more information or training videos please stop by the FRA Garrison Safety Office, building 1, room 238, or call 384-2382 or stop by the FWA Garrison Safety Office, BLDG 1051, Apt. 4, or call 353-7078.

BE SAFE

MAKE IT HOME

COFFEE CAN	\$0.00
CUP	\$0.99
EMERGENCY CANDLES	\$1.96
POCKET KNIFE	\$1.67
MAGNESIUM FIRE STARTER	\$5.95
MINI FOLDING SHOVEL	\$8.99
WHISTLE (2)	\$2.92
WATERPROOF FIRE STICKS	\$1.49
SIGNAL MIRROR	\$1.99
EMERGENCY BLANKET (2)	\$3.92
ALCOHOL PADS	\$0.75
WATERLESS HAND CLEANER	\$0.78
WATERPROOF MATCHES	\$0.37
550 CORD (50')	\$1.25
FLASHLIGHT	\$1.57
FINAL TOTAL	\$35.00

YOUR PEACE OF MIND ABOUT YOUR FAMILY'S SAFETY WHEN TRAVELLING:

PRICELESS!

finished product

This simple survival kit may mean the difference between life and death to you or your family some day. Take time to assemble one for each of your vehicles, and teach your family how to use these items for their survival.

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