



U.S. ARMY



USAG Rheinland-Pfalz Installation Safety Office (ISO) Winter Drivers Orientation

2022-2023

Richard Cruikshank, GSP
Chief, ISO



Winter Drivers Orientation FY23

Topics

- References
- Contributing Factors
- Tire Rules
- Road Condition Standards
- Weather Effects
- Carbon Monoxide
- Summary





Winter Drivers Orientation FY23

References

AR 600-55 - THE ARMY DRIVER AND OPERATOR
STANDARDIZATION PROGRAM

TC 21-305 - TRAINING PROGRAM FOR WHEELED
VEHICLE ACCIDENT AVOIDANCE

AER 385-55 - PREVENTION OF MOTOR-VEHICLE
ACCIDENTS





Winter Drivers Orientation FY23

Contributing Factors



- Traction





Winter Drivers Orientation FY23

Contributing Factors



- Traction





Winter Drivers Orientation FY23

Contributing Factors

- Grade



- When approaching a hill or upgrade / downgrade remember to do the following:
 - Select the proper gear before approaching, usually a lower gear.
 - Use the same gear going down that you used going up. This will allow the engine to act as a brake, so you will not have to use your brake excessively.
- * On steep or very slippery grades, use at least one gear lower, and go slower *





Winter Drivers Orientation FY23

Contributing Factors

- Visibility

When driving in fog, use low-
beam headlights,

or

**STOP, GET OFF THE
ROADWAY, AND WAIT!!**



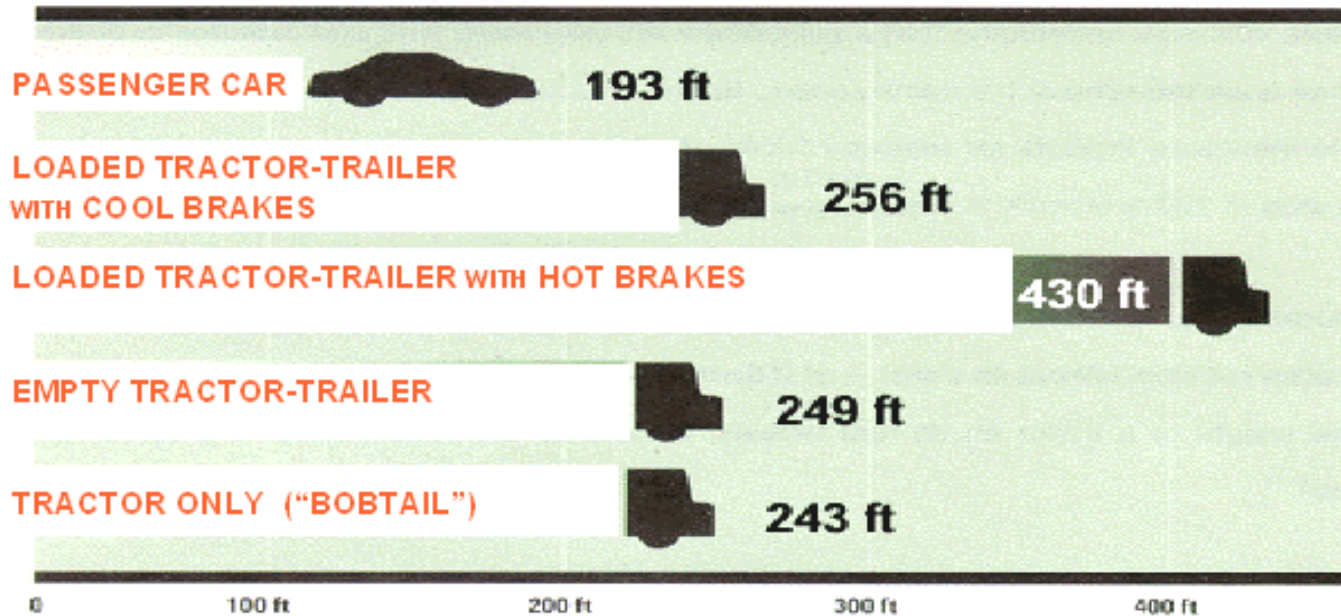


Winter Drivers Orientation FY23

Contributing Factors

SPEED AND BRAKING DISTANCE

Average Total Stopping Distance at 55 mph*



- Speed

- Speed and stopping distance
- Speed and distance ahead
- Speed and traffic flow





Winter Drivers Orientation FY23

Contributing Factors

BRAKING DISTANCE FORMULA

Perception Time

+ Reaction Time

+ Braking Distance

How quickly you can stop



BRAKING DISTANCE FORMULA

- Speed





Winter Drivers Orientation FY23

Contributing Factors

- Distractions
 - Cell Phones
 - Passengers
 - Radio
 - Eating/Drinking
 - Rubbernecking

THE THREE TYPES OF DISTRACTED DRIVING AND HOW TO AVOID THEM





Winter Drivers Orientation FY23

WINTER TIRE RULES IN GERMANY

When are snow tires required?

German federal law mandates the use of winter tires when conditions are icy. While there is no specific time period during which winter tires are required, many German drivers use the rule of thumb “von O bis O” – from O to O – meaning snow tires should be put on in October and remain on until Ostern (Easter). The laws also apply to motorbikes, trucks and buses, regardless of whether the driver is the owner or is renting the vehicle.

What types of tires are required?

European winter tires have two kinds of markings: a snowflake for snow tires or M+S for tires designed to work in “matsch und schnee”— mud and snow. All-season or all-weather tires may also have the M+S marking and are acceptable for winter driving. Only snow tires without spikes or studs are allowed in Germany. Tires designed for snow function better than multi-purpose tires, and it's best if all four tires match. All tires must have at least 1.6 millimeters of tread depth, but for maximum safety, tires with less than 4 millimeters should be replaced. A one euro coin can be used for a quick “tread check.” When placed in the tire's tread, you should not be able to see the golden edge of the coin. If you can, the tire needs to be replaced. The German automobile club ADAC recommends using tires that carry the “three peak mountain” seal, the mark of snow tires that meet the highest standards.

Can tire chains be used in Germany?

In some areas snow chains may be required, but only as directed by road signs or police. The maximum speed while driving a vehicle with chains is 50 kilometers per hour.

What are the penalties for driving without winter tires?

If you get caught driving without the correct tires on your vehicle, you can get a 40-euro ticket. If you cause an accident or create a road hazard or traffic jam as a result of not having the correct tires on your vehicle you can expect an 80-euro ticket and a point against your license. Police can assign blame to a motorist involved in a winter accident whose car does not have snow tires installed, regardless of who caused the accident. In addition, some insurance companies may deny coverage to motorists driving with summer tires on winter roads.

Traveling in Germany or Europe?

Pay attention with rental cars: Don't take for granted that rental cars are equipped with winter tires during the winter season. It is always your responsibility as the driver to ensure that the vehicle you operate is in a roadworthy condition, which includes suitable tires. You should clearly request winter tires when you reserve the car, and verify they are installed before accepting the car. Rental companies may charge an extra fee for winter tires. If your winter vacation takes you to another country, e.g. Austria or Switzerland, check what these countries' rules are. The European Road Safety website is a good resource.

https://ec.europa.eu/transport/road_safety/going_abroad/index_en.htm





Winter Drivers Orientation FY23

Road Condition Standards

Table H-1 Road-Condition Status Characteristics						
Road Condition	Road Surface	Snow	Ice	Snow Depth	Visibility	Temperature
Green	Dry	None or blowing powder	None	None	More than 164 ft (50 m)	Above 35 °F (+2 °C)
Amber	Wet	*Packed *Slush	*Patches *Black ice *Slush	*Less than 4 in (10 cm)	*Between 65.5-164 ft (20-50 m)	Between 30 °F (-1 °C) and 35 °F (+2 °C)
Red	*Flooded	*Drifting	*Sheet ice	*Between 4-8 in (10-20 cm)	*Between 50-65.5 ft (15-20 m)	Between 10 °F (-12 °C) and 30 °F (-1 °C)
Black	*Heavily flooded	*Heavy drifting	*Extreme sheet ice	*More than 8 in (20 cm)	*Less than 50 ft (15 m)	Less than 10 °F (-12 °C)
When one or more of the road conditions marked with an asterisk are noted, the corresponding road-condition status must be declared.						

Green- Unrestricted vehicle dispatches are authorized.

Amber- Unit commanders (captains and above) may authorize dispatches for their vehicles and garrison directors of public works (DPWs) or primary staff (S1, S2, S3, and S4) may authorize their vehicle dispatches.

Red- Only mission-essential and emergency-essential vehicle dispatches are authorized.

Black- Only emergency-essential vehicle dispatches are authorized.





Winter Drivers Orientation FY23

Weather Effects on Equipment

- Cold weather can cause parts to seize and lubricants become less effective.
 - Do not race the engine
- Snow and ice will reduce visibility.
 - Clean all lights
 - Scrape all windows and mirrors
 - Sweep snow away





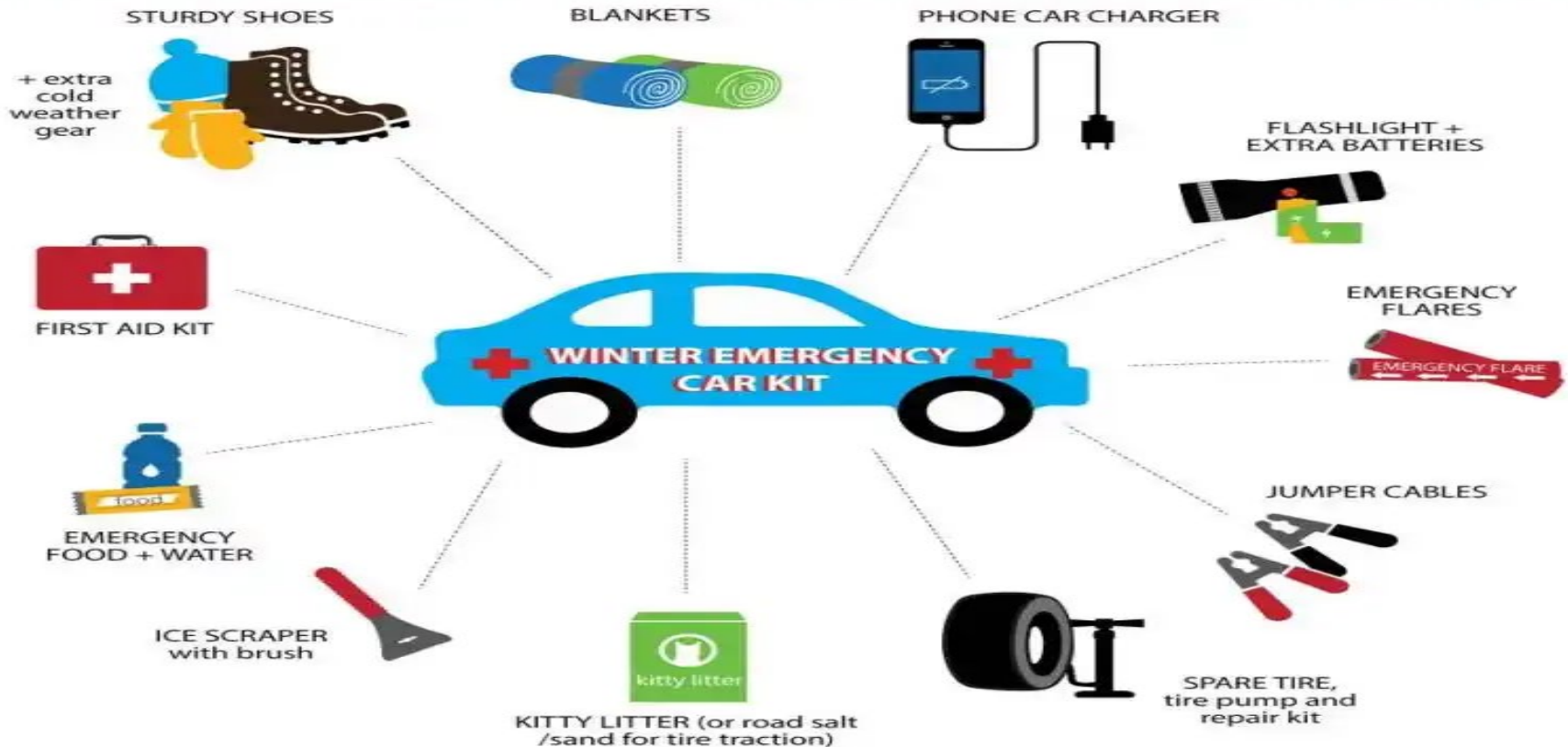
Winter Drivers Orientation FY23

Weather Effects on People



WINTER DRIVING SAFETY KIT:

Take stock of your **vehicle emergency supplies** to be as prepared as possible for winter weather emergencies





Winter Drivers Orientation FY23

Carbon Monoxide

- Carbon Monoxide Poisoning – Invisible/Odorless
 - Do not idle you vehicle any longer than necessary and never sleep in an idling automobile unless it is designed for that purpose.





Winter Drivers Orientation FY23

Summary

- ✓ **Cold weather greatly affects the operating performance of your equipment.**
- ✓ **Winter weather presents unique hazards, i.e.. snow, slush, ice, black ice, etc...**
- ✓ **Drivers must always exercise extreme caution for safe winter driving.**
- ✓ **INCREASE INTERVALS!**
- ✓ **SLOW DOWN!**

