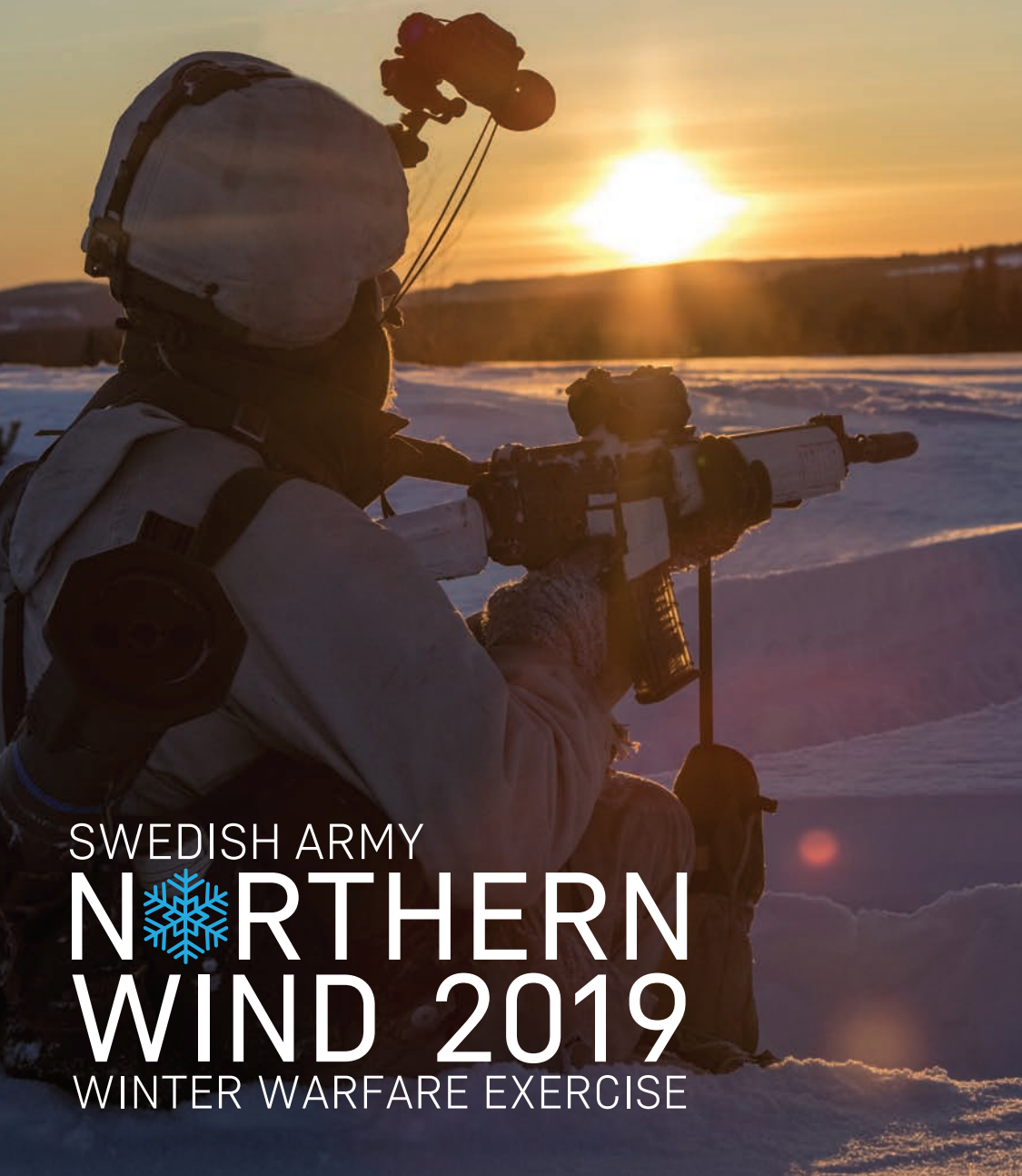


BATTLE OF THE NORTH
MARCH 2019



SWEDISH ARMY

N^{ORTHERN}
WIND 2019

WINTER WARFARE EXERCISE

NORTHERN WIND 2019 – WINTER WARFARE IN EXCELLENCE

The winter is here with cold and clear days in a snowy landscape. However, the seemingly frigid parts of northern Sweden and Finland are about to heat up as 10.000 soldiers and marines from five different nations join together for the Swedish Army exercise, Northern Wind.

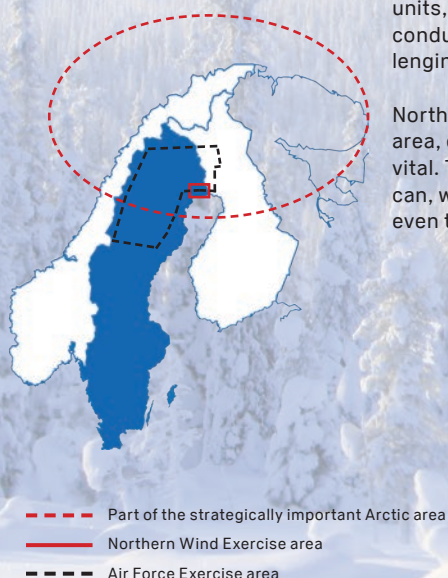
The focus of the exercise is to increase the ability of solving combat tasks within the frame of the brigade level. The Swedish Army Command, LCC, will during the exercise take command of a Finnish battalion together with the Swedish units, thus developing its ability to coordinate subordinate units and to liaise with other nations, in order to increase interoperability. The exercise will furthermore give us great opportunity to enhance the methods of command and control of battalions as well as enhancing the capabilities of important supporting functions. Further, the simultaneously conducted Air Force Exercise offers opportunities to coordinate Air Force assets and enhance air support abilities.

The battle between the opposing forces will be executed with the greatest freedom of manoeuvre in the designated area to create the best possible conditions for the commanders of each side to conduct tactics, and to handle all the normal frictions that occur on the battlefield.

The exercise environment will be challenging due to winter conditions and vast scarcely populated areas with low infrastructure. The area, despite that, allows great conditions that will enhance all participating units winter- and combat skills. This is part of the reason why a total of 10.000 participants from Finland, Great Britain, Norway and the United States along with Swedish Army units from all over the country gather for this exercise.

The large force contribution from our partner nations creates an additional dimension and gives all participants excellent opportunities to develop our capabilities, from the individual soldier and marine, to brigade command. These capabilities will further, through synergy between units, form a strong, effective fighting force capable of conducting high intensity combat operations in the challenging arctic environment.

Northern Wind 19 is held in a strategically important area, during a time when cooperation and partnership is vital. Together, we will demonstrate how partner nations can, with dedication and mutual effort, fight alongside in even the most difficult environments.

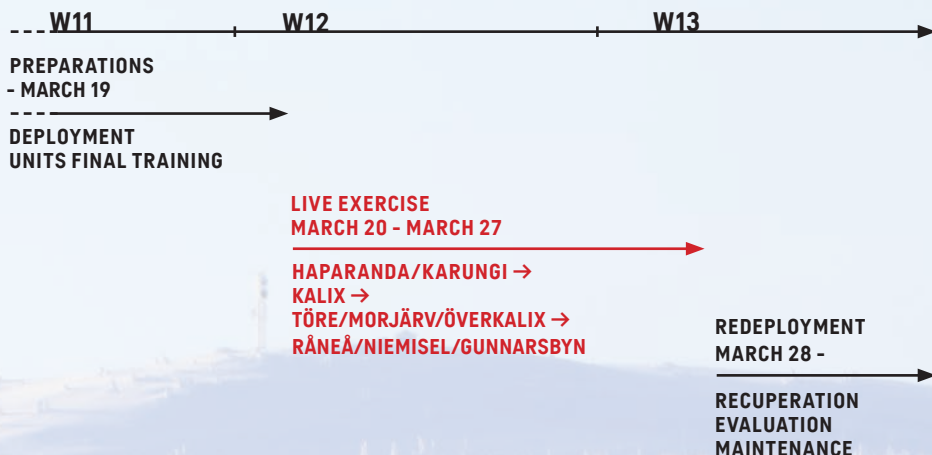


**Major General
Karl L E Engelbrektson,
Army Commander, Host
Exercise Northern Wind 2019**



**Brigadier General
Fredrik Ståhlberg, Deputy
Army Commander, COM LCC
Northern Wind 2019**

NORTHERN WIND 2019



WELCOME TO NORTHERN WIND 2019

Northern Wind is conducted in the north-east part of Sweden during march 2019. The aim is to conduct combat operations on brigade level together with units from other nations. As the exercise is conducted in northern Sweden during winter, it gives the participating units favorable conditions to enhance their winter warfare capabilities.

Most of the participants come from our partner nations: Finland, Norway, USA and Great Britain. Because of this, the exercise will further develop the ability to give and receive support together with other nations, the so called Host Nation Support.

The Live Exercise part of the exercise is set during 20th to 27th of March. This is preceded by preparations and movement to the exercise area. During the preparations, the participating units will conduct Winter Warfare Training, Signal Training and Brigade Support Training. 27th of March marks the end of the Live Exercise phase with maintenance and recovery following.

A total of 10 000 personnel is participating in Northern Wind. Of these, approx 7 000 comes from our partner nations: Finland, Norway, USA and Great Britain. We wish all of you a rewarding exercise. But remember, there are no situations where we are in such a hurry that we have to take risks, be careless, or violate safety regulations. Never hesitate to slow down and reevaluate possible risks or hazards. Safety first!



Colonel Stefan Smedman
Exercise Director Northern Wind 2019

Liutenant Colonel Johan Skiöld
Deputy Exercise Director Northern Wind 2019

PARTICIPATING UNITS

Northern Wind 2019 has a total of approximately 10 000 participants from Sweden, Norway, Finland, United Kingdom and United States.

TROOP CONTRIBUTING UNITS



Norrbotnen Regiment, I 19, is one of Sweden's largest regiments – equipped with powerful armoured vehicles and fast, highly mobile rangers. The regiment is based in Boden, but is active across the country. Its primary responsibilities include the recruitment and training of soldiers to its two mechanised battalions and its ranger battalion. The regiment participates with 192nd Mechanized Battalion, parts of 193rd Ranger Battalion, 3rd Brigade HQ, EXCON and the logistic unit LogE as well as evaluation personnel from the Swedish Armed Forces Subarctic Warfare Center. The regiment also participates with personnel from the 10th and 11th Home Guard battalions and from the 145th Home Guard Intelligence Company. The regiment participates with approximately 1600 persons.



Artillery Regiment, A 9, is responsible for the Swedish Armed Forces' capacity to deliver indirect fire support. The unit develops methods and materiel – typically artillery or grenade launchers – for use against ground

targets unseen from the position of attack. Specially trained personnel lead and control fire from the air. Participates with 92nd artillery battalion with approximately 320 soldiers and officers. Northern Wind is the final exercise for the recruits at the battalion.



Logistic Regiment, TrängR, from Skövde plays a vital role in the Armed Forces, ensuring that combat units receive the support they need to carry out their duties in Sweden and abroad. The regiment provides essentials such as food, water, fuel and spare parts, technical services, communications support and medical treatment. It also trains, develops and leads logistics units. The regiment participates with the 2nd Logistics Battalion.



Skaraborg Regiment, P 4, participates with the 1st Heavy Transports Company, the Swedish Armed Forces instrument to transport heavy vehicles and material fast over long distances. During Northern Wind the

company will deploy about 60 ranks and 30 vehicles and perform its main task, transportation of tanks and APC:s into the area of operations. The company will also be an instrument for the Higher Command for fast regrouping of its armored vehicles within an area of operations, as well as an instrument to regroup damaged vehicles to the Technical/Reparations-battalion.



Life Regiment Hussars, K 3. The 32nd Intelligence Battalion is one of its kind in Sweden. The battalion is characterized by its capabilities in information acquisition. The battalion moves by foot, by terrain vehicles, helicopter and can be dropped by parachute. They can operate over large areas and long distances and in depth behind enemy lines. In Northern Wind the battalion is represented by paratroopers.



Armed Forces Technical School, FMTS. Well-functioning equipment is key to an effective national defence, especially during international missions. The unit located in Halmstad, southern Sweden, ensures that the right equipment is available when it is

needed. All technical training within the Swedish Armed Forces is co-ordinated by FMTS, including training conducted by other units, schools and centres.



Life Guard Regiment, LG, The regiment is among various responsibilities and tasks responsible for training Sweden's military police. During Northern Wind, the Military Police Battalion is represented by a platoon and is in charge of enforcing discipline and the maintenance of law and order. The platoon will be subservient to the Third Brigade and in charge of duties connected to traffic control, maintenance of safety, security and investigations within the military environment as well as protection of military transports and military equipment and handling of prisoners of war.



Armed Forces Command and Control Regiment, LedR, support the Swedish Armed Forces with command and staff support, signals and communications, psychological operations, electronic warfare and meteorological and oceanographical information. The Joint Command and Staff School is also located at the regiment. The Command and Control Regiment will deploy 250 personnel to the exercise in the fields of communications, staff support, electronic warfare and psychological operations.



The Finnish Army will participate in the training exercise with a force whose strength will be approximately 1500 persons in total, and whose composition will mainly incorporate conscripts and professional soldiers serving in the Jaeger Brigade (Rovaniemi), Kainuu Brigade (Kajaani), Pori Brigade (Säkylä) and Armoured Brigade (Parolannummi). The Finnish troops will fight together with the troops from the Swedish 3rd brigade.



The Royal Marines are the UK's cold weather experts and have a long and sustained history in Northern Europe and the Arctic that stretches back to the 1940s. Exercise Northern Wind demonstrates the UK's ability and commitment to work alongside European allies in the High North. 3rd Commando Brigade will deploy 350 ranks to the exercise, which includes a close combat company alongside reconnaissance specialists and logistic support.



U.S. Marine Corps Forces Europe and Africa Marine Rotational Force-Europe facilitates military exercises in the Nordic region that increase interoperability with allied and partners militaries and improve the Marine Corps' cold weather and mountain warfare proficiencies. Approximately 450 marines participate in the exercise.



Brigade North. The Norwegian contribution to the exercise, will be the entire Brigade North, about 4500 persons. Brigade North is reinforced with an infantry battalion from the United States Marine Corps (USMC), and a company group from United Kingdom Royal Marines (UKRM). An element from the 339th Squadron stationed at Bardufoss Air Station, will also contribute with helicopters. Logbase Land will also participate in the exercise to support Brigade North's operations during the exercise.

In total the Norwegian Army, included units from UKRM and USMC, will consist of more than 5000 people during the exercise.

ENABLING AND SUPPORTING UNITS



Armed Forces Logistics, FMLOG. A fully functioning logistics service is critical for Armed Forces units to complete their missions, making the role of Armed Forces Logistics one of the utmost importance. FMLOG has a wide variety of tasks, including ensuring that the Armed Forces' transport and communication links function as intended, and that our units have the materiel they need in good condition. The Swedish Armed Forces Logistics will during the exercise coordinate all transports to and from the exercise area and provide civilian transport resources.



Land Warfare Centre, MSS, The centre serves as a hub for the combined expertise of the entire Army to develop capabilities and train individuals and response units in armed ground warfare. The Land Warfare Centre provides Northern Wind with the EXDIR, dep EXDIR and umpires, observers and controllers and other personnel with expertise in different functions. The Land Warfare Center is also providing the exercise with instrumentation and simulation systems in conjunction with SAAB training systems.



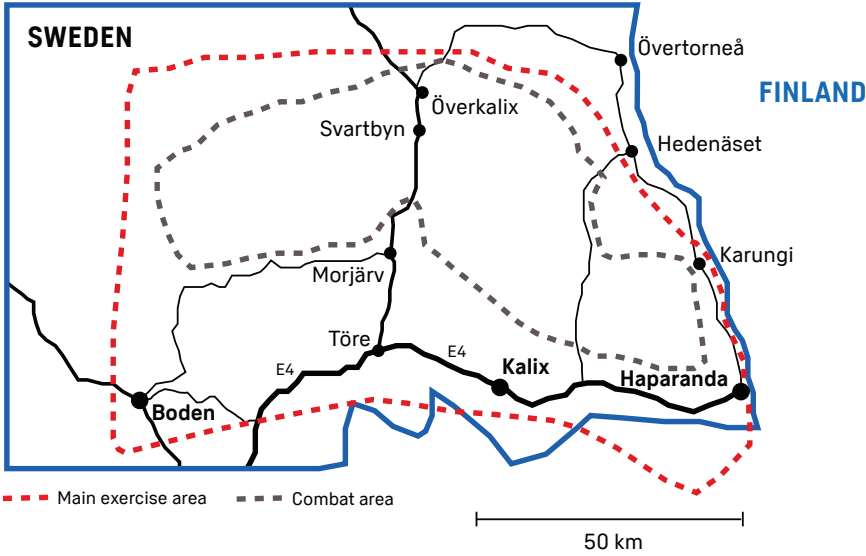
Armed Forces Communication and Information Systems Command, FMTIS (SwAF CISCOT), guarantees the Armed Forces ability to communicate and lead - 24 hours a day, 365 days a year. The unit is responsible for the Armed Forces technical management system which supports military operations at sea, on land and in the air. The unit will contribute to the exercise by strengthening support from technical personnel in our Operations Centre as well as in the exercise area.

Armed Forces Centre for Defence Medicine, FömedC. The preservation of human dignity lies at the heart of the work of the Armed Forces Centre for Defence Medicine. This includes everything from the wellbeing of personnel in peacetime, to emergency medical treatment of gunshot wounds in combat. Our highly qualified, well-equipped staff is made up of officers, civilian specialists, group commanders and officer reservists – tasked with ensuring care is provided during peacetime, on international missions, at times of crisis and in combat. During Northern Wind the unit will contribute with personnel in the EXCON.

THE EXERCISE AREA



- Army Exercise area March 18 to March 27
- Air Force Exercise area March 22 to March 27



NO COMBAT ON ROAD E4.
NO CIVILIAN AIR TRAFFIC (DRONES INCLUDED) ALLOWED WITHIN THE MAIN EXERCISE AREA MARCH 18, 12.00 - MARCH 27, 12.00.

ENVIRONMENTAL PROTECTION

The Livex of Northern Wind 2019 will be conducted in civilian terrain. The possibility to train in this terrain gives the exercise an extra dimension; the ability to fight in an unknown environment, with correct unit depth and distance. However, with this possibility comes further responsibility and extra consideration, in order for us to use these areas in the future.

Restrictions

Follow roads, forest roads, natural tracks and areas with permission. **Avoid driving in terrain, marshy and wet areas. The snow hide wet areas and open water/ice.**

No military activities are allowed after the Out of Bounds sign. Out of Bounds areas can also be marked with red/yellow plastic ribbons.



Out of Bounds. No military activities allowed



Restricted areas are marked red on the map. Restricted areas are only to be passed on open roads.

Most of the reindeers are in specific areas during the exercise, red marked on the map. Avoid unnecessary tracks, the animals can leave the area by the tracks. Don't stress the animals, keep distance. Report any obviously distressed or hurt animal to the commanding officer. No firing close to houses or animals. Cutting down whole trees is not allowed.

Military activity must be in proper distance from the following areas/objects:

- 200 m: Drinking water resources, health institutions, refugee Centre, churches and cemeteries, domestic animal farm and animals outdoor, reindeer fence in use, fish farms.

- 50 m: Cultural monuments, courtyards to houses, houses and huts.
- National parks, Natura 2000, water-protection areas, wildlife refuges, forest plantations, reindeer areas, electric power stations, railway and cultivated land are all out of bounds.

Petroleum, Oil, Lubricants (POL)

Use equipment for absorption when handling or refueling with POL. In case of a large amount of spill, call emergency 112. Localize the leakage and stop or reduce the leakage. Stop spreading with absorption material or flanges. Dig and clean up contaminated soil/snow. Keep the contaminated soil on a non-permeable material. Cover for protection from rain or snow. Contact the commanding officer.

Waste

Don't leave any waste in the terrain. All waste must be disposed of in marked containers at waste collection points set up for the exercise. Use of civilian containers is not allowed. Clean up the area if blank ammunition has been used.

Damages and complaints

All damages and complaints from civilians must be reported to the commanding officer as soon as possible.

QUESTIONS, DAMAGES IN THE TERRAIN OR CONCERNS FROM THE LOCAL POPULATION?

**CONTACT ENVIRONMENT AND PROTECTION CELL ON
+46 76-133 47 43**

SAFETY FIRST

It is everyone's responsibility to actively follow safety regulations. Report immediately if you are in any way unsuitable to participate in the exercise, i.e. if you are too tired or due to lack of knowledge regarding material or safety regulations. In short: Actively neutralize risks and hazards, and think twice before action!

It's important that you always know your location, as there are a number of wetlands that can pose hazard when moving with vehicles in the terrain. It is also important that your commander know where you are and can reach you if you are not reporting back in time. You will be informed by your commanders regarding restrictions within the area you are operating. Make sure that you have access to a map where these restriction areas are marked.

During the exercise you must be equipped with flashlight, ear protection, first aid kit, reflector and cell phone where appropriate.



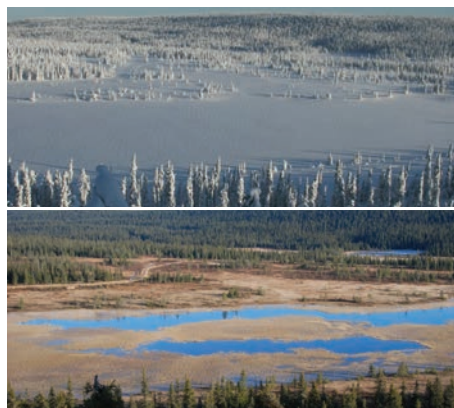
Be extra careful around powerlines

Powerlines in the exercise area are imperative for supplying northern Scandinavia with electric power. Damages are not tolerable. When advancing under power lines the units have to take the risk to hit wires/braces into account. Advance under power lines has to be pre-scouted in order to avoid antennas reaching danger close or vehicles hitting or gliding into bracing wires.

When powerlines are used to regroup units, following must be assured:

- Minimum distance when passing a foundation/pole/ stabilizing cable is 20m
- Max 5 km/h when passing foundation/ pole/stabilizing cable.
- Driver is to be supported by commander with free sight
- Main gun in position "12 o'clock" in order to decrease vehicular width.
- No fighting while moving close to foundation/pole/stabilizing cable.
- Umpire/ controller must reconnaissance and assess risk before movement commences.

Bad visibility might increase distances and decrease vehicular speed further more.



Do not pass wet areas!

The pictures above shows the exact same area, wintertime and summertime. See any risks? Make sure you always know your exact position on the map!

Traffic

Civilian traffic regulations are the foundation for all participating units during Northern Wind 2019, unless traffic is directed by MP or traffic controller.

Low beam headlights are the minimum light to be used when driving on plowed public and private roads.



There are narrow and crooked roads in the area. Therefore, if your vehicle is stationary on or in proximity of such roads, place a warning triangle on an appropriate location. If units become stationary during combat operations on roads, individual vehicles are to stay by the side of the road and keep an extended distance between each other. Especially important if emergency vehicles arrive.

Combat vehicles with rotatable turrets must be extra cautious towards surrounding traffic.

Sweden has special requirements regarding which type of tire and depth of the tire tread a certain vehicle is to have during wintry conditions. Make sure that your vehicle has the right tires and enough depth of the tire tread.

Combat vehicles, especially tanks, are prohibited to use terrain/snow grips on paved roads.

All drivers are to fill in the form regarding drive and rest time. The standard rest time for drivers is 6 hours continuous rest per 24 hours. Maximum driving time is 4 ½ hours and must be followed by 45 minutes rest.

You, as a driver, might during parts of the exercise be exempt from “driving and rest periods”. If so, there is an increased responsibility on you, and your Vehicle Commander when making decisions regarding your suitability to drive.

During the exercise, different vehicles and vehicle combinations will be limited in speed, especially when wearing terrain chains. Note that sunlit roads might quickly turn slippery in shady areas, where the temperature drops.

As heavy combat gear might increase personal damage in a collision, Vehicle Commanders should consider the level of combat gear worn by drivers and passengers in relation to risks, location and task.



Cellphones and other means of communication

Where there is no cellphone coverage available, either RAKEL or the tactical communication systems will work. Use these systems to warn or call for assistance. It is strictly forbidden to use your cellphone while driving a vehicle, unless hands-free is used.

Cooperation with armored vehicles

In order to avoid accidents, you should always approach vehicles from the side where the Commander is sitting. Do not climb or enter the vehicle without permission from the Commander.

Regardless of the situation, in the risk of harm for you or others, always stand up and make yourself noticed to the vehicle. If in the dark, make yourself visible with a flash of your flashlight! The safety distance to vehicles is 50 meters.

As Vehicle Commander you shall exercise significant caution, as well as clearly indicate that you have noticed civilian cars or unprotected personnel in the vicinity of the vehicle.



Is the bridge strong enough?

The exercise is performed partly outside of the public road network. This means that some roads and bridges in the area were built mainly for timber transports, and the level of road maintenance may vary. It is of utmost importance that the bridges in the area can handle your vehicles weight. If unsure, stop BEFORE and contact the nearest umpire/EXCON.

Drive very slowly in the middle of the bridge to decrease load. Check if the bridge seems to take damage on repeated crossings.

Prepare for and be aware of:

That the roads are slippery and narrow, as well as the risk of sudden encounters with combat vehicles, timber transports and reindeers.

That vehicles moving from the terrain to the road, might bring branches, ice and snow blocks on to the road. These must be removed urgently not to cause accidents.

The need to have warning triangle and shovel easily accessible on the vehicle.

Fatigue and how low level of alertness, bad weather, poor visibility, bad road conditions and poor local knowledge increases the risk of accidents.

Low-hanging power lines and railroad crossings, so remember to lower vehicle antennas as you pass.

The ground frost depth might be shallow, leading to limited bearing capacity in wetlands. **Do not pass areas marked blue on the map, meaning wet areas.**



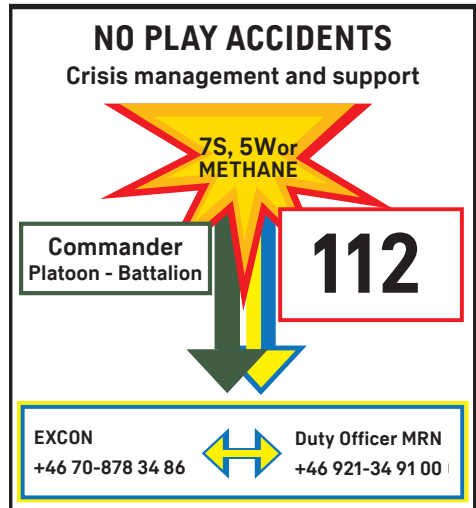
IN THE EVENT OF AN ACCIDENT

Provide the necessary first aid and call 112 to alert ambulance, police or fire brigade. Report the incident through the chain of command. Clear all incoming roads for the incoming help. Be prepared to leave directions for emergency vehicles or helicopter.

Keep in mind that you are in a remote area and that not all the roads in the area are plowed. Therefore, always plan ahead for a way to get injured personnel to a plowed road or suitable helicopter landing site.

Be prepared to address both the police and media. Do not contact relatives to accident victims and never dispatch details unless they are confirmed by your commanders or the police.

There are specially assigned crises management teams in Excon.



THINK. BEFORE.

Accidents don't just happen by themselves – they are caused. Everyone participating in the exercise shall make reasonable risk assessments; commonly called "common sense".

Make sure that your fellow road-users are able to see you if you stop your vehicle. Therefore, always use warning signs and equipment and choose the best possible place and positioning for you and your vehicle.



EXERCISE IDENTIFICATION



Brigade North



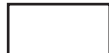
PAO, drivers, HNS, RLS



Swedish Military Guard
with live ammunition

No
marking

3rd Brigade



UOC, OC, EXCON



Armlets - EP, Mobility,
Eval, Observ, SIM.
Wests - Traffic, Safety

Killed vehicle - elevate main gun, stop at safe location. Works as a complement to sim equipment.

More details concerning identifications and umpiring in EXPLAN.



WINTER ADVICE

When conducting winter warfare exercises, make sure to be well prepared and always pay attention to the details, such as always have dry socks and stay hydrated. Here are some valuable tips from Swedish Armed Forces Subarctic Warfare Center.

Stay hydrated

Do not only drink when feeling thirsty, this is not enough and you will get dehydrated. You shall drink at least 2,5 liters/day, and in cold weather even more.

Dress correctly

You have been issued good equipment, use it. A larger number of thin fabrics in layers are more effective than few and thick layers.

Always cover your head, it works like a chimney. In a temperature of -20°C , your head will radiate a heat loss of 70-75%.

Protect your feet

Your shoes shall be of enough size to fit an extra pair socks and still admit full movement of your toes. Monitor each other. Check your colleagues face for white spots. These are signs of frostbites and can be thawed with a warm hand.

Wind		Air Temperature °C										Wind
m/s	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	km/h	
2	-2	-8	-14	-20	-26	-32	-37	-43	-49	-55	~7	
4	-4	-10	-17	-23	-29	-35	-41	-47	-53	-60	~15	
6	-5	-12	-18	-25	-31	-37	-44	-50	-56	-63	~20	
10	-7	-14	-20	-27	-34	-40	-47	-53	-60	-67	~35	
14	-8	-15	-22	-29	-35	-42	-49	-56	-63	-69	~50	
18	-9	-16	-23	-30	-37	-44	-51	-58	-65	-71	~65	
22	-10	-17	-24	-31	-38	-45	-52	-59	-67	-74	~80	
Risk for frostbites		High risk for frostbites			Very high risk for frostbites							

WEATHER

The weather in March is normally varying between cold, sunny and windy. Monthly average temperature lies around -6 to -9°C . Heavy snow-fall may occur.

During the month of March, there is about 10 hours of sunlight and 1 hour dusk. Day temperatures are between -15°C and $+1^{\circ}\text{C}$ and night temperatu-

res between -20°C and -5°C .

Road conditions

The roads in the area are expected to be covered in snow and ice, making them slippery.

Snow conditions

Snow depth in the area is during March between 40-80 cm.

MIC - MEDIA AND INFORMATION CENTER

During Northern Wind, a MIC is being manned with personnel from the Norrbotten Regiment, Artillery Regiment and the Land Warfare Centre. Articles are published on forsvarsmakten.se/nw19 (swedish), forsvarsmakten.se/northernwind (english), pictures are published on facebook.com/exercisenorthernwind - [other participating units can share these posts in their own channels](#). Instagram posts will be published on instagram.com/i19norrbottensregemente

IF YOU POST ON SOCIAL MEDIA, PLEASE USE THE HASHTAGS [#NW19](#) OR [#NORTHERNWIND2019](#)

Before publishing on social media, remember:

- Use your cellphone wisely. Turn off the location services and don't use programs using that feature.
- Always publish afterwards (what HAS happened, not what is GOING to happen).
- Do not publish information about time, places, combat tactics/strategies, protection, our abilities or potential limitations in our abilities.
- Do not take photos near places of importance, such as certain military facilities (ammunition storages etc). Do not photograph any sensitive material (registration plates, technical equipment etc) or other information that may be restricted.
- Think before publishing. If unsure about the suitability, refrain or ask your commander or EXCON.

MIC is responsible for crisis communication in case of accidents or any other unforeseen event. MIC is reached via the EXCON.

SECURITY

We know that other nations follow and register our activities. Sometimes even on location. If you suspect any form of intelligence gathering (including contact seeking on social media by strangers), individuals behaving suspiciously, for example documenting or asking questions, report through the chain of command and to the Security Cell number below.

IMPORTANT PHONE NUMBERS NORTHERN WIND

[SAVE THEM ON YOUR CELLPHONE](#)

EXCON +46 70-878 34 86

Environmental protection +46 76-133 47 43

Security Cell +46 70-681 06 34

Duty Officer Military Region North +46 921-34 91 00

Boden Garrison +46 921-34 80 00

In case of emergency 112



SWEDISH ARMED FORCES