

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Terrain

Terrain is a very important factor for all armies and soldiers. History has many examples of this. Wars in Vietnam were fought in jungle, which is ideal terrain for guerrilla warfare. Wars in Afghanistan have been fought in mountainous terrain, which is also ideal terrain for guerrilla warfare. Flat and open terrain, such as desert, is ideal terrain for warfare between conventional armies with tanks and armoured vehicles. We can say therefore that terrain often determines type of combat for soldiers.

Weather conditions are also important: for example heavy rains can change flat and firm terrain into mud. Such a change in terrain would make movement of tanks and vehicles very difficult. Therefore weather conditions also determine combat conditions. The importance of terrain and weather conditions means that all commanders must know what these conditions are, and reconnaissance reports always contain information about terrain.

The purpose of terrain reconnaissance is to obtain information about terrain, local population, installations, and environmental conditions. Reconnaissance of the terrain provides information about the possibilities the terrain provides for movement, cover, concealment, and obstacles. The study of maps is also an important source of information about terrain. Terrain reconnaissance also deals with environmental conditions. Weather conditions are studied to find out how visibility, temperature, rain, snow, and ice influence both the decisions of commanders and the activities of troops.

Terrain often contains obstacles. The purpose of terrain reinforcement is to make these obstacles bigger by building barriers. Barriers, e. g. tank traps, stop or limit an opponent in the way he can use terrain. This construction work is done by military engineers.

The purpose of improving terrain trafficability is to provide, maintain, or improve the mobility of friendly forces. These improvements are done by military engineers.

Resource: J. Dvořák, H. Hrdlička: Vojenské odborné texty z anglického jazyka

Read the statements and decide whether they are true or false.

- 1) Jungle and mountainous terrain are suitable for guerrilla warfare.
- 2) Weather conditions can impact the commander's decision.
- 3) The purpose of improvement terrain trafficability is to improve the mobility of enemy forces.
- 4) The construction work is done by recce patrols.
- 5) Terrain reconnaissance deals with environmental conditions too.

KEY: 1 T; 2 T; 3 F; 4 F; 5 T

Find the verbs to these nouns in the text.

determination, change, provision, deal, content, influence, reinforcement, limitation, improvement, maintenance

Key. Determine; change; provide; deal; contain; influence; reinforce; limit; improve; maintain

Match the words with the definitions.

- | | |
|-----------------|--|
| 1) guerilla | an irregular soldier fighting against regular troops |
| 2) to determine | to control or influence something directly or to decide what will happen |
| 3) to maintain | to keep a road, machine, etc. in good condition |
| 4) obstacle | a natural or man-made feature, which hinders or obstructs the movement of a person or vehicle |
| 5) engineer | a specialist soldier trained in the construction and demolition of bridges, field fortifications, obstacles, roads, etc. |
| 6) to reinforce | to make something stronger |
| 7) desert | an area, often covered with sand, where there is very little rain and not many plants |
| 8) purpose | aim, objective |
| 9) to conceal | to hide something |

Read the following text fill in the gaps.

The purpose of terrain reconnaissance is to _____ information about terrain, local population, installations, and environmental _____. Reconnaissance of the terrain _____ information about the possibilities the terrain provides for movement, cover, concealment, and obstacles. The study of maps is also an important _____ of information about terrain. Terrain _____ also deals with environmental conditions. _____ conditions are studied to find out how visibility, temperature, rain, snow, and ice influence both the _____ of commanders and the activities of troops.

KEY: 1. obtain; 2. conditions; 3. provides; 4. source; 5. reconnaissance; 6. weather; 7. decisions.

Read the following text fill in the gaps.

The purpose of terrain reconnaissance is to 1 _____ information about terrain, local population, installations, and environmental 2 _____. Reconnaissance of the terrain 3 _____ information about the possibilities the terrain provides for movement, cover, concealment, and obstacles. The study of maps is also an important 4 _____ of information about terrain. Terrain 5 _____ also deals with environmental conditions. 6 _____ conditions are studied to find out how visibility, temperature, rain, snow, and ice influence both the 8 _____ of commanders and the activities of troops.

KEY: 1. obtain; 2. conditions; 3. provides; 4. source; 5. reconnaissance; 6. Weather; 7. decisions.

Read the following text and retell its contents.

TYPES OF TERRAIN

The following categories are different generic forms of combat that are the most prevalent in today's ongoing wars and are also anticipated to be the fields of battle in future conflicts. Each category has a unique climate that provides combatants with different obstacles. It is no longer as simple as "the high ground controls the low ground."

Desert warfare

An arid climate poses unique challenges. In many desert areas across the globe, the sand is a main concern. The sand can hamper an army's attempts to remain hydrated because it can sap the moisture from skin. The sand is also very notorious for jamming the firing mechanisms for most firearms.

The terrain is usually fairly flat, though in some regions there are vast, rolling sand dunes. The desert environment can also contain mountains; such is the case in Afghanistan and in certain areas around Israel. Due to the ongoing conflicts in the Middle East, the U.S. military has redesigned the uniforms for the different branches of service. All of the uniforms have a digital camouflage pattern that is very effective in the desert environment, and the boots have been changed from the standard polished black boots to a light brown colored suede leather boots. These boots are a lot cooler under the intense heat of the desert sun.

Jungle and forest warfare

The conditions of these regions are basically the opposite of those found in desert regions. There are thousands of flora and fauna, and there is always moisture present which presents its own difficulties. The moisture speeds up the rotting processes as well as causing wounds to become infected much easier because of all of the bacteria that live in the water. With proper filtration systems an army should have no problem keeping hydrated.

The densely packed trees and underbrush provide concealment from the air as well as from the ground. Ambushes can be easily conducted in this environment just like they can in an urban environment. The jungle can also contain mountains, but these mountains are organized

differently from those that exist in the desert. The jungle mountains have far more plant life, and are usually much more difficult to ascend. Helicopters have been proven as a very useful means of transportation through, actually over, jungle and forested areas; Vietnam was, of course, the testing ground for this. Tanks and other vehicles have a hard time maneuvering through and around the densely packed trees, and most military aircraft fly too fast to accurately observe the ground through the trees.

Winter warfare

This type of warfare is not based on a geographical design, but is based on the drastic differences in this particular climate. During war it is much harder to remain warm than it is to remain cool. Even Forested areas can, and many do, experience winter weather conditions. For this specific type of combat there are soldiers that are specifically trained to fight under the conditions individual to the winter season. It takes a special skill to fight in the deep snow and extreme cold. These conditions call for a drastically thicker and thus warmer uniform, and the weapons even need to be refitted with the proper devices to ensure that they will operate in the cold.

Mountain warfare

No two mountains are alike, and so the training for this form of combat is very intense and is always changing. The warriors that participate in this form of warfare are a special breed. These men do everything that all the other soldiers do, but they do it with less oxygen in their lungs. Fighting up a mountain can be very treacherous. There can be avalanches, rockslides, cliffs, and ambushes from higher up the slopes, and there are almost guaranteed to be caves somewhere in the mountain, such as the case in Afghanistan.

Mud

Mud is a universal menace to all armies. While it does not hamper the use of air power, it does slow, and sometimes stops, ground movements all together. The most common season for mud across the globe is spring. Following the thawing of winter's snow and the addition of the rains that the season brings, the ground becomes very soft and almost any military vehicle would get bogged down if not properly equipped. The mud is not always dependent on the spring. Rather, in some parts of the world, they are determined by the monsoons.

Read the following text (consult the dictionary, if necessary) and answer the questions.

TERRAIN APPRECIATION

The terrain can always be evaluated in terms of the following five factors:

- Observation
- Fields of fire
- Concealment and cover
- Obstacles
- Communications

1 **Observation** of the ground on which a fight is taking place is essential in order to bring effective fire to bear upon the enemy. Observation also aids in increasing the effectiveness of fire directed on an enemy stopped by obstacles.

2 **Fields of fire** are essential to the defence. An ideal field of fire for infantry is an open stretch of ground in which the enemy can be seen and in which he has to protect from fire as far as the limits of effective range of the infantry weapons. This is rarely realizable. Fields of fire can be improved by cutting or burning weeds, grass, and crops; by clearing brush and trees; by demolishing buildings, and by cutting lanes through woods; but concealment must be considered in each instance. The time and labour available for such improvement should be considered in evaluating the terrain. On the offensive, infantry suffers when the defenders have good fields of fire and therefore finds such fields of fire disadvantageous.

3 **Concealment and cover.** Concealment from view both from the air and from the ground may afford cover only while the enemy does not know that the natural or artificial feature is occupied. Cover includes protection from fire provided by natural or artificial obstacles.

4 **Obstacles** are obstructions to the movement of military forces. Some of the common natural obstacles of military value are mountains, rivers, streams, bodies of water, marshes, gullies, steep inclines, and heavily wooded terrain.

5 **Communications** (that is, roads, railroads, waterways, airways, and their facilities) are important to both offence and defence for the movements of troops and supplies. In some situations, especially in the operations of large bodies of troops, communications are of vital importance.

Questions

A Based on which factors can the terrain be evaluated?

B How can fields of fire be improved?

C What is the difference between concealment and cover?

D What part do obstacles play in the battle?

E What are natural/ artificial obstacles?

F What is of vital importance for the movement of large units?

