

FLASH on English for the ARMED FORCES

Unit 1, pp. 4-7

- 1
 1 Uniform's basic items are boots, trousers, a T-shirt, a jacket and headgear (helmet).
 2 It is worn on very special occasions, as such as ceremonies and weddings.
 3 It is given to the enemy commander in case of defeat.
 4 An assault rifle is classed as a machine-gun since it can fire fully-automatic.
 5 It is the helical groove (or pattern of grooves) cut into the barrel walls.
 6 The main difference between regular and military time is how hours are expressed.

2 1 helmet, 2 jacket, 3 vest, 4 pistol holster, 5 trousers, 6 boots

3 1 c, 2 d, 3 e, 4 f, 5 a, 6 b

4 1 rucksack, 2 vest, 3 flashlight, 4 binoculars, 5 rifle, 6 bayonet, 7 canteen, 8 pistol

- 5
 1 F (It doesn't need to be charged.)
 2 F (A scope can be mounted on some rifles.)
 3 T
 4 F (You actually can.)
 5 T
 6 T

6  1

This is a brand new type of (1) **assault** uniform used by many military (2) **forces**, and it's not just a camouflage one, but it stretches (3) **further**. It's a uniform made from specific materials that 'bend (4) **light** around the wearer' so that they become partially (5) **invisible** across certain spectrums. So, not only these uniforms break up the (6) **outline** of the soldier for use on the (7) **battlefield** during the daytime, but also employ a distinctive appearance that makes them difficult to (8) **detect** with light amplification devices, such as Night-Vision Goggles (NVGs).

7 1 a, 2 b, 3 c, 4 b, 5 a, 6 a

8

Civilian Time	Military Time
12.30 a.m.	1200
3.15.30 p.m.	151530
6.25 a.m.	0625
11.59 p.m.	2359
1.40 p.m.	1340
11.40.57 a.m.	114057

9  2

- 1 Zero six hundred hours
 2 Twelve hundred hours
 3 Eleven forty-four
 4 Zero zero zero one

5 Twenty-two zero five
6 Sixteen fifteen

1 6.00 a.m. 2 12:00 3 11.44 a.m. 4 0.01 5 10.05 p.m. 6 4.15 p.m.

Unit 2, pp. 8-11

- 1 1 F (They are not allowed to cook or have any kind of burner in their rooms.)
2 T
3 T
4 T
5 F (They are not allowed to remove anything from their rooms.)
6 F (Inspections usually occur 2-3 times a week.)

- 2 1 b, 2 b, 3 c, 4 c, 5 b, 6 c

- 3 1 drying rooms, 2 gym, 3 dining room, 4 soldiers club, 5 athletics rink, 6 rooms, 7 canteen,
8 officers' quarters

- 4  3

Each floor of the barracks building has a (1) **laundry** room: there are several washers and (2) **dryers** that are free of charge for soldiers to wash their clothes. Usually there are general purpose washrooms too for washing boots, (3) **backpacks**, and other (4) **muddy** items so we don't have to clean our equipment in our bathrooms.

The barracks buildings have day rooms on each (5) **floor**, which are centrally located in the buildings. Day rooms are (6) **furnished** with chairs, tables, couches, a large TV, and a (7) **billiard** table.

Sports (8) **facilities** are available to all personnel and include a well-equipped gym, an indoor (9) **climbing** wall, a rugby pitch, an assault course.

Parking is available for personal owned (10) **vehicles** (trucks, cars, vans, motorcycles), but it's only allowed in the designated parking lots.

- 5 1 Today barracks are built in the countryside, because it's a better sanitary location, and military training can be carried out more effectively.
2 Sport is important because it is not just a way to keep fit but an excellent way of developing team spirit.
3 Yes, dogs are used in drug bust.
4 No, they aren't: they have separated quarters.
5 The leading principle of barracks policy is to facilitate the training of the army for war.
6 Troops are located in large quarters so they have space for training, gun and rifle practice, and manoeuvring.

- 6 Personal answers

- 7  4

Soldiers are responsible for the (1) **appearance** and (2) **cleanliness** of the assigned room and shared spaces.

Removal or (3) **swapping** out of any furniture is not authorized: soldiers residing in the (4) **barracks** will be held financially responsible for any and all furniture and appliances assigned to them. Hot plates, (5) **electric** skillets and similar small electrical appliances are not (6) **allowed** in the barracks.

Soldiers' rooms and common areas must (7) **comply** with health and safety regulations. Residents are (8) **responsible** for all visitors' actions or negligence in the barracks. Lost or stolen room keys will be immediately reported to the SSH staff. Residents will be held financially responsible for the cost of replacing keys or locks.

Unit 3, pp. 12-15

- 1
 1 It includes leadership and management as well as service-specific and combat training.
 2 Warrant officers are technicians and specialists.
 3 The main difference between them is the level of authority, the latter ones' being higher.
 4 Privates should address officers by title and last name.
 5 Officers are appointed by a royal commission or a presidential commission.
 6 Enlistment means entry into service.

- 2 1 Private 1st class, 2 Sergeant Major, 3 Private, 4 Colonel, 5 Captain, 6 First Lieutenant

- 3 1 Corporal, 2 Sergeant 1st class, 3 Master Sergeant, 4 Sergeant Major, 5 Second Lieutenant
 6 Lieutenant Colonel, 7 Colonel, 8 Brigadier General

- 4 1 Squad, 2 Platoon, 3 Company, 4 Battalion, 5 Regiment, 6 Brigade, 7 Division, 8 Army

- 5 1 c, 2 a, 3 h/d, 4 f, 5 h/d, 6 g, 7 e, 8 b

- 6 1 a, 2 b, 3 a, 4 b, 5 a, 6 b

- 7
 1 F (A Lieutenant is a commissioned officer.)
 2 T
 3 F (The smallest military unit is the fireunit.)
 4 F (A platoon is led by a Lieutenant.)
 5 T
 6 F (A non-commissioned officer can't command commissioned officers.)
 7 F (A Military Headquarters' shape and size depend on the formation it hosts.)
 8 F (One division is made up of at least 3 brigades.)

- 8  5

As you surely know, military personnel must use certain forms of (1) **address** when speaking to each other. Someone of (2) **junior** rank may address a senior officer by his or her rank and last name, or (3) 'Sir' or 'Ma'am', definitely not the senior officer's (4) **first** name. Lieutenant Generals, Brigadier Generals, and Major Generals are all addressed as (5) '**General**'. All Lieutenants are addressed as 'Lieutenant'. A Master (6) **Sergeant** is called, 'Master Sergeant' and their last name or 'Sergeant' and last name. A (7) **Chief** Master Sergeant is called 'Chief' plus the last name, but (8) **never** 'Sergeant' only. Senior officers may call a junior officer by their last name only, but the junior officer can't do the same while speaking to a senior officer. Sergeants Major are (9) **addressed** as 'Sergeant Major.' First Sergeants are addressed as 'First Sergeant'. (10) **Other** Sergeants are addressed as 'Sergeant', and a Corporal is addressed as 'Corporal'. (11) **Privates** are generally spoken to by only their last name, but in (12) **written** communication, and some special situations, 'Private' is usually added.

- 9 Personal answers

Unit 4, pp. 16-19

- 1 1 Most armed forces expect their personnel to be fit to fight.
2 No, not all tests are timed.
3 No, they don't.
4 Mental fitness, or mindset and determination to carry on.
5 It's necessary in order to prevent injury.
- 2 1 distance, 2 climb, 3 cardio / aerobic, 4 strength building, 5 warm-up, 6 cool down, 7 mindset
- 3 1 d, 2 g, 3 a, 4 c, 5 e, 6 f, 7 b

4 rifle drills

5  6

- a Only one km to go! Keep pushing.
b Keep your hands behind your head. Your elbows must touch your knees.
c Come on. Pull your chin up to the bar.
d Arms straight! Don't drop it!
e Keep your body nice and straight. Don't bend your back!
f Nice and slowly. Touch your toes. Don't bend your knees.

1 b, 2 e, 3 c, 4 f, 5 a, 6 d

6  6

hands, head, knees, chin, arms, back

- 7 1 ditch, 2 tunnel, 3-4 ladder to platform and sand pit, 5 rope climbing, 6 wires, 7 wall climbing, 8 balance beam, 9 cargo net

8  7

OK listen in. This course consists of eight obstacles. I will now explain what you must do in order to complete each obstacle. You jump (1) **over** the ditch. You crawl (2) **through** the tunnel. You climb (3) **up** the ladder (4) **onto** the platform, and then jump (5) **into** the sand pit. You swing (6) **across** the gap using the rope. You crawl (7) **under** the wires. You climb up and climb (8) **over** the wall. You walk or run (9) **along** the balance beam. You climb up the cargo net, swing over the beam and jump (10) **down** the other side.

9 Personal answers

- 10 1 D, 2 A, 3 G, 4 H, 5 B, 6 F, 7 C, 8 E

Unit 5, pp. 20-23

- 1 1 A radio equipment is basically made of a transmitter and a receiver each having an antenna and an apt terminal equipment: a microphone at the transmitter and a loudspeaker at the receiver, in the case of a voice-communication system.

2 A 'simplex' system is when two stations take turns sending and receiving, using a single radio frequency; a 'duplex' system is used when two stations send and receive signals continuously and concurrently, by using two radio frequencies.

3 A Single Channel radio uses a single channel to transmit, while a Multiband radio uses more than one channel for two-way communication.

4 The Personal Role Radio allows infantry soldiers to communicate over short distances.

- 2
- | | |
|-------------|--|
| OVER | I have finished talking and am waiting for your reply. |
| OUT | I have finished talking and do not expect a reply. |
| ROGER | I understand what you just said. |
| WILCO | I understand what you just said and I will comply. |
| SAY AGAIN | Repeat your last transmission. |
| I SAY AGAIN | I am about to repeat my last transmission. |
| BREAK | I have an emergency message to deliver. |

3  8

- | | |
|---------------|---|
| COYOTE | DINGO, this is COYOTE, (1) OVER . |
| DINGO | COYOTE, this is DINGO, (2) CLEAR . |
| COYOTE | DINGO, this is COYOTE. Say your location, (3) OVER . |
| DINGO | COYOTE, this is DINGO. We are at the end of the enemy's minefield, map reference DUKE, FOW FIFE. (4) OVER . |
| COYOTE | DINGO, this is COYOTE, (5) SAY AGAIN , (6) OVER . |
| DINGO | COYOTE, this is DINGO. (7) I SAY AGAIN . We are at the end of the enemy's minefield, map reference DUKE, FOW FIFE. (8) OVER . |
| COYOTE | DINGO, this is COYOTE, ROGER. Return to Base, (9) OVER . |
| DINGO | COYOTE, this is DINGO. (10) WILCO . |
| COYOTE | DINGO, this is COYOTE. (11) OUT . |

- 4
- 1 It is an open code used to communicate letters phonetically to ensure the communication is actually clear.
 - 2 It's used in open communications that need to be quickly and accurately understood.
 - 3 Beside being spoken, it can be signalled with flags, lights, and Morse Code.
 - 4 Numbers are spoken digit by digit.
 - 5 Digit '5' is spelled 'fife' not to be confused for the word 'fire'.
 - 6 Cryptography is a way of converting messages into disguised, unreadable information.

- 5
- 1 F (It has both single-frequency and frequency hopping modes.)
 - 2 F (It can be used for visual communication too, by flags.)
 - 3 T
 - 4 F (Modern radios use rechargeable lithium-ion batteries.)
 - 5 F (Military Alphabet is for numbers too.)
 - 6 F (The PRR is effective even through thick cover or the walls of buildings.)
 - 7 T
 - 8 T

- 6 1 c, 2 a, 3 e, 4 b, 5 f, 6 d

7  9

The Phonetic Alphabet spells letters in place of just saying the letter (1) **itself**: by using a fixed word for each letter there is less (2) **chance** that the listener will confuse letters and so get the message wrong.

The NATO Phonetic Alphabet is (3) **nowadays** universally employed, as it is also being used for civil (4) **aviation** all around the world. In this version numbers are spoken (5) **digit** by digit, but exact multiples of (6) **thousands** may be spoken as such.

Note that some digits are pronounced differently than their English standard, so they can be understood over a distorted (7) **signal**. The digit '3' is pronounced '(8) **tree**'; '4' is pronounced 'fo-
wer' to distinguish from 'for', '5' is pronounced 'fife' so it isn't confused with 'fire'; and '9' is pronounced '(9) **niner**', to avoid (10) **confusion** with 'nein', the German word for 'no'. So, for example, 82 is 'AIT TOO,' 3,450 is 'TREE FOW ER FIFE ZE RO,' and 61,000 is 'SIX WUN TOUSAND.'

Remember: the date-time group is always spoken digit by digit!

8 9

1 The NATO Phonetic Alphabet is also used for civil aviation.

2 They are spoken as such.

3 'AIT TREE', 'FIFE FOW WUN ZE RO' and 'NINER TOUSAND'.

Unit 6, pp. 24-27

1 1 C, 2 D, 3 B, 4 A

- 2 1 The world most widely used military light utility vehicle is the HMMWV.
2 Its main features are: a diesel engine, an automatic transmission, an all-wheel drive, a high power-to-weight ratio.
3 Tracks are crucial in tanks' moving gear because they allow the tank to move over uneven rugged terrain.
4 Nowadays tanks are mostly used for backing infantry in urban warfare and in counter-terrorism operations.
5 A military convoy is a group of vehicles (up to 30) travelling together.
6 The person responsible for the convoy route is the convoy commander.

3 10

An (1) **ambush** can occur to the front, middle or rear of a convoy, either stopping the convoy or (2) **splitting** it. There are three possible (3) **scenarios**: vehicles that have driven past the killing zone, vehicles trapped in the killing zone and vehicles about to enter the (4) **killing** zone. Those vehicles that can clear the killing zone should drive on to a safe zone. Those in the killing zone have a very (5) **narrow** range of choices. The drivers could get off and take up fighting (6) **positions** behind their trucks or wait inside until another truck can come and (7) **rescue** them. The vehicles outside the killing zone have more choices. They can continue to drive through, if they have the (8) **speed** to race through it, or they can halt and wait for (9) **reinforcements** to clear the killing zone. But be aware that halting makes the convoy a more vulnerable (10) **target**: it is harder to hit a moving target than a still one. The third option (whenever possible) is to turn around and get back to a safe place. If halted, the convoy must take up position ready for a (11) **hasty** ambush. It is (12) **essential** that everyone knows what to do in any of the three scenarios.

4 10

1 An ambush is when a vehicle or convoy is trapped by surprise by enemy forces.

- 2 The scenarios possible in an ambush are three.
 3 In the case of vehicles that can clear the killing zone they should drive on to a safe zone; the drivers of those in the killing zone could get off and take up fighting positions behind their trucks or wait inside until another truck can come and rescue them; the vehicles outside the killing zone can continue to drive through, or they can halt and wait for reinforcements to clear the killing zone.
 4 Because it is harder to hit a moving target than a still one.
 5 If halted, a convoy must take up position ready for a hasty ambush.

5 1 prohibitory, 2 warning, 3 prohibitory, 4 informative, 5 mandatory, 6 warning

- 6 1 A battleship is a large, heavily armed ship designed to engage enemy forces on the high seas.
 2 Because of its anti-submarine and land attack capabilities (it's armed with Tomahawk missiles).
 3 It's an anti-missile cruiser.
 4 The ship is considered the capital ship of a fleet is the aircraft carrier.
 5 The main feature of a submarine is to travel and operate underwater.
 6 It can change the amount of water and air in ballast tanks to change buoyancy.
 7 It means the submarine is powered by a nuclear reactor.
 8 The submarine doesn't need to surface frequently, and a large amount of power is produced.

7 1 B, 2 D, 3 A, 4 C

- 8 1 Airplanes are fixed-wing aircraft, while helicopters are rotary wing aircraft.
 2 The C-130 Hercules is designed to transport troops, goods and equipment.
 3 The main roles of an attack helicopter are to provide direct and accurate support for ground troops, and to be an anti-tank defence.
 4 The Chinook.
 5 The F-16 Fighting Falcon has been adapted to achieve several missions, including air-to-air fighting, ground attack and electronic warfare.

Unit 7, pp. 28-31

- 1 1 The main difference is the presence of civilians.
 2 Because they include fighting in 3 levels (air, ground, underground).
 3 The most employed military formation in urban operations is the squad.
 4 Attackers are more exposed than defenders because they must use the open streets more often, and are obviously unfamiliar with the hidden routes known to defenders.
 5 Collateral damages of urban combat usually are structural damages and civilian casualties.
 6 The goal of urban warfare simulation training is to ensure that soldiers are not surprised by anything they see.

2  11

One of the most (1) **common** defensive tasks a platoon will be given during urban operations is to conduct a strongpoint (2) **defence** of a building, part of a building, or a (3) **group** of small buildings. The platoon (4) **leader** organizes the (5) **operations** by (6) **positioning** troops and their weapons systems to maximize their capabilities. Troops are set into a series of individual, team, and squad fighting positions, (7) **placed** to cover avenues of approach and obstacles, and to provide mutual support in order to (8) push back the enemy approach. (9) **Snipers** should be positioned as a fire support. Although walls, floors, and ceilings can be used as protective cover, soldiers should always (10) **improve** these positions by using **sandbags**, rubble,

etc. (11) **Depending** on the length of the mission, the platoon should (12) **stockpile** munitions (especially grenades), food and water, medical supplies, and fire-fighting equipment.

- 3
- 1 In a urban warfare scenario weapons are usually **small and portable**.
 - 2 These weapons are chosen because **they requires little preliminary training or logistical support, and are extremely effective**.
 - 3 In the centre of a town there are buildings which can provide **adequate cover and concealment**.
 - 4 Rooftops are ideal places for **overhead fire**.
 - 5 Streets and alleys can be of good help to defenders, because **streets restrict armour manoeuvre, reducing the enemy's ability to reinforce; more rubble can be used to block enemy vehicles and conceal mines**.

4 Personal answers

5 1 e, 2 a, 3 d, 4 b, 5 f, 6 c

- 6
- 1 An IED is a homemade bomb.
 - 2 What are the basic components of a IED? a switch/trigger; an initiator (fuse); main charge (explosive fill); a power source for the switch/trigger; a container (body).
 - 3 How can IEDs be classified? By warhead, by deliver mechanism and by trigger mechanism.
 - 4 Inside an IED there are explosives; radiological, toxic, biological and chemical materials; nails, ball bearings or even small rocks.
 - 5 Personal answers
 - 6 A 'dirty bomb' is an explosive device incorporating radioactive materials.

- 7
- 1 T
 - 2 F (They cause unexpected random casualties and damage.)
 - 3 F (They explode when the victim touches it.)
 - 4 T
 - 5 F (Almost any item can be booby-trapped in some way.)
 - 6 T

8  12

Booby traps are unselective weapons: like anti-personnel mines, they can harm civilians and other non-combatants (during and after the conflict) who are unaware of their presence. In addition to their obvious faculty to kill or injure, the presence of such weapons has other effects such as these:

- dismay soldiers, as booby traps kill or badly wound comrades
- keep soldiers continually stressed, suspicious and unable to relax because it is difficult for them to know which areas, buildings or objects are safe
- slow down troop advance as soldiers have to sweep areas to see if there are more booby traps
- make soldiers cautious instead of aggressive and confident
- create no-go areas (real or imagined) after a booby trap has killed or wounded someone
- cause troops to have to stop in order to deal with casualties, causing slowdown and delay
- create confusion and disorientation as a prelude to an ambush.

- 1 Booby traps are unselective weapons because they can harm civilians and other non-combatant who are unaware of their presence.
- 2 Booby traps make soldiers dismayed, stressed, suspicious, and they can't relax.
- 3 Because troops to have to stop in order to deal with casualties

Unit 8, pp. 32-35

- 1
 1 Camouflage can be applied on skin, uniforms, vehicles.
 2 It reduces a vehicle's visual and radar signatures, providing a higher degree of concealment.
 3 With camouflage face paint sticks.
 4 You can camouflage your body with camouflage uniforms, adding netting covers o vegetation.
 5 Personal answer.

- 2
 1 F (Concealment means hiding, camouflage is disguising.)
 2 F (There are three set, in three different colours, for vegetation, desert, and snow.)
 3 F (They can be camouflaged by applying a thin layer of dust to the outside of the lenses.)
 4 F (It is the least effective one.)
 5 T

3  13

Light discipline, noise discipline, and movement discipline, contribute to concealment. Light discipline is controlling the use of lights at night by such things as not smoking in the open, not walking around with a flashlight on, and not using vehicle headlights. Noise discipline is taking action to deflect sounds generated by your unit (such as operating equipment) away from the enemy and, when possible, using methods to communicate that do not generate sounds (arm-and-hand signals). Movement discipline is such things as not moving about fighting positions unless necessary, and not moving on routes that lack cover and concealment.

- 1 Light discipline is controlling the use of lights at night, avoiding walking around with a flashlight on, and using vehicle headlights.
 2 Noise discipline is avoiding making any sound and, when possible, trying to use methods to communicate that do not generate sounds.
 3 Movement discipline is avoiding moving unless strictly necessary, both about fighting positions and moving on uncovered paths.

- 4
 1 The main goal of OPs is to **observe and gather information**.
 2 From an OP soldiers can **provide security and intelligence for the platoon**.
 3 The ideal site for OP **allow for the best and widest observation of the designated area**.
 4 The best form of communication is **by wire** but **it should be backed up by radio**.

5  14

An observation post or OP is usually a small (1) **construct**, often positioned very close to the (2) **enemy**, consisting largely of (3) **camouflage** materials. The (4) **position** may be temporary, such as a vehicle parked as a (5) **roadside** checkpoint, or fixed: in this case, it may develop into a bunker-like installation. From their OP, soldiers can watch enemy movements, and so warn of (6) **approaching** soldiers, or direct artillery fire.

When selecting an OP, obvious and conspicuous locations such as (7) **hilltops**, water towers or other (8) **isolated** terrain features are to be avoided, keeping well in mind that the observation post must be reached via a concealed route. This is especially important as the (9) **observer** in the post should be rotated every 20-30 minutes, as (10) **vigilance** decreases markedly after such a time. Observation posts should be (11) **manned** with at least two personnel and should be provided a means of communication with their chain of command, preferably by (12) **phone** instead of by radio. Further equipment for the OP includes flags, binoculars, maps, a compass, night vision devices (goggles or an anti-armour thermal sight), trip flares and other alert devices.

- 6
 1 B, 2 C, 3 A

7  15

Combat units should never proceed directly forward from a concealed position and each movement should always employ the use of natural cover.

Wear fatigues and other gear that's comfortable, avoiding any unnecessary item. Remember to match fatigues to the surroundings. Any item (dog tags, loose items) that make noise while walking should be secured using duct tape and bindings. Failing to secure these items could potentially uncover your location.

Use concealed routes and beaten paths intermittently, changing direction slightly from time to time, avoiding areas with no concealment. A valley represents the perfect example of an ambush site: there, enemy combatants can ambush your unit from higher ground.

When aerial surveillance is available movement should be coordinated between ground and air units. Otherwise, the basic precautions that should be taken are: stop, look, and listen before moving.

Be sure you know your destination before moving to another position.

1 Combat units should never proceed directly forward and always employ using of natural cover.

2 Noisy items should be secured using duct tape and bindings to avoid noise.

3 Before moving I should stop, look, and listen, and know the destination.

- 8
- 1 Hand and arm signals are useful when **silence is necessary**.
 - 2 Their understanding can be made difficult by **range and reliability**.
 - 3 They must be **clearly visible**.
 - 4 Hand and arm signals can be emphasized by **facial expressions**.

Unit 9, pp. 36-39

- 1
- 1 Reading a map is important not only to locate places on it, but to perfectly know the physical environment soldiers are acting in.
 - 2 A topographic map shows earth's surface in a three-dimension way.
 - 3 Contour lines are lines connecting places of equal elevation.
 - 4 They make possible to outline height, depth, and slope.
 - 5 There are other symbols to mark both natural and man-made features.
 - 6 On a topographic map we can find lines, rounds, squares, coloured areas, and other specific symbols for specific features.
 - 7 Topographic map can be coloured too: colours are used to show different features.

- 2
- 1 T
 - 2 F (Contour lines depict in detail ground relief.)
 - 3 F (Topographic maps can be 3-D too.)
 - 4 T
 - 5 F (A broken line on a topographic map indicates boundaries.)
 - 6 F (Every point along a contour line is the exact same elevation.)

3  16

Knowing how to read a (1) **topographic** map effectively is a key skill. The most (2) **valuable** feature of topographic maps is that they allows you to visualize three-dimensional terrain from a flat piece of paper.

Whilst 'normal' maps only allow you to think in terms of length and width only, the system of (3) **contour** lines add height too into the general (4) **picture**. Contour lines, connecting points with the same (5) **elevation**, indicate the (6) **steepness** of terrain: where they're close together, in roughly

circles, elevation is changing rapidly in short distance and the terrain is very steep. Where they are wide apart, elevation is changing slowly, indicating a gentle (7) **slope**. So, when you look at a (8) **circular** hill on a topographic map you will see contour lines at different elevations all the way up to the hill's (9) **peak**. To make it easier to read, most topographic maps use a 'contour (10) **interval**' that is specified in the legend. This allows you to determine the relative steepness of each elevation increase.

- 4 1 b, 2 a, 3 c, 4 d
- 5 1 On a topographic map any type of terrain, from planes to heights, can be represented.
2 Because the high ground goes in two opposite directions and lower ground in the other two directions.
3 A river.
4 It is usually represented by closed contour lines that have tick marks pointing toward low ground.
5 In a draw the ground slopes upward in three directions and downward in the other direction.
6 In a cliff. They represent a steep change of the land.
- 6 1 c, 2 d, 3 a, 4 f, 5 e, 6 b
- 7 1 hill, 2 valley, 3 ridge, 4 saddle, 5 depression, 6 draw, 7 spur, 8 hill
- 8 Possible answers: city, factory, oil station, windmill, railway, monument, mine

Unit 10, pp. 40-43

- 1 1 A dummy is a cartridge that is completely inert.
2 It's where the prime is located: along the rim, or in the centre of the cartridge.
3 The most commonly used material for cartridge is brass, because it is resistant to corrosion, can withstand the high pressures of cartridges, and allow for manipulation without tearing the metal.
4 The most common type of bullet is the Full Metal Jacket.
5 Bullets cause damage by the power of their impact.
6 The 'calibre' is the width of a bullet.

2 17

The propellant chemicals in a handgun bullet are not intended to explode suddenly, all at once: that would blow the whole gun open and very likely kill the person using it. They are supposed to start burning relatively slowly, so the bullet moves off smoothly down the barrel. As the bullet accelerates they burn faster, giving it a maximum explosive force just as it comes out of the muzzle. The explosion that fires a bullet takes place in the narrow space of the gun barrel. As the bullet flies out of the gun, the pressure of the explosion is suddenly released. Some bullets also make noise because they go so quickly. The fastest bullets travel at around 3000 km/h - that is, about three times the speed of sound. This means that these bullets make shock waves as they speed through the air, just like a supersonic jet.

- 1 No, it doesn't: the bullet's propellant starts to burn slowly.
2 The pressure of the explosion is released when the bullet exits out of the gun.
3 Because they travel very fast, 3 times the speed of sound.
- 3 1 C, 2 A, 3 D, 4 B

- 4
- 1 The aims of landmines are **to create defensive tactical barriers and act as passive area-denial weapons.**
 - 2 Anti-personnel mines are usually triggered by **a person's feet.**
 - 3 Many landmines are made of plastic because **plastic is cheap and undetectable.**
 - 4 An anti-tank mine is usually **larger than an anti-personnel mine.**
 - 5 They need more **pressure to detonate.**
 - 6 The standard procedure to disarm landmines is **to destroy them on site without attempting to lift them.**

- 5
- 1 F (A body armour doesn't cover the limbs.)
 - 2 T
 - 3 F (Soft vests, especially the reinforced ones, offer protection against blades.)
 - 4 T
 - 5 F (Kevlar is the name of a highly resistant fibre.)
 - 6 F (The most advanced helmet model is the MICH.)

6  18

Ballistic vests use layers of very strong fibres, such as Kevlar or its (1) **latest** development Kevlar XP (which is more (2) **light**-weight and more comfortable to wear), to 'trap' a bullet and (3) **absorb** its energy, bringing it to a stop before it can (4) **completely** penetrate the textile substructure. The bullet can go deep into some layers, deforming from the impact, since the (5) **energy** is absorbed by a larger and larger fibre area.

So, while a vest can prevent bullet (6) **penetration**, both the vest and wearer still absorb the bullet's drive; heavy bullets have enough force to cause blunt force trauma under the impact point, and determining the kinetic (7) **energy** of a bullet at impact allows to measure the ballistic performance of a body armour. Such impact energy, called 'backface signature', is (8) **measured** by shooting an armour mounted in front of a backing material, typically oil-based modelling clay. After the impact with the bullet the vest is removed from the clay and the depth of the indentation in the clay is measured.

- 7
- 1 c, 2 d, 3 a, 4 b

- 8
- 1 They work by sensing the temperature difference between an object and its environment.
 - 2 A phosphor screen is coloured green because the human eye can differentiate more shades of green than other phosphor colours.
 - 3 Image intensifiers are small, lightweight, don't need much power to work and are relatively cheap.
 - 4 Peripheral vision is the part of vision outside the very centre field of vision.

Unit 11, pp. 44-47

- 1
- 1 'Combat arms' refers to those troops within armed forces which engage in direct tactical ground combat.
 - 2 Combat support units provide fire support and operational assistance to combat units.
 - 3 The main duties of a cavalry unit are reconnaissance and security.
 - 4 Infantry is made of airborne, air assault, light, long-range reconnaissance, mechanized, and ranger units.
 - 5 The mission shared by all infantry units is 'To close with and destroy the enemy by means of close combat, fire, and movement'.
 - 6 Air cavalry troops' role is to reconnoitre and maintain surveillance coverage.

- 2 1 artillery, 2 means, 3 forces, 4 scatterable, 5 friendly, 6 dead, 7 throughout, 8 air, 9 launchers, 10 targets

3  19

Psychological Operations is a Special Operations' branch whose purpose is to trigger off or support foreign attitudes and behaviour which are beneficial to the author's intentions. They aim to convey selected information to foreign audiences in order to affect and steer their emotions, motives, objective reasoning, and eventually the behaviour of foreign governments, organizations, groups, and individuals. PSYOP units can communicate to foreign audiences via radio, television, loudspeakers, and leaflets. The PSYOP operators' language skills, regional orientation, and knowledge of communication media are crucial features to an optimal delivery of critical information to host nation, neutral, and enemy audiences.

1 PSYOP units aim to convey selected information to foreign audiences to precise government intents.

2 They use radio, television, loudspeakers, and leaflets.

3 The crucial features of PSYOP units are language skills, regional orientation, and knowledge of communication media.

- 4 1 d, 2 f, 3 b, 4 a, 5 c, 6 e

- 5 A mortar, B howitzer, C Air Defence Artillery, D field gun

- 6 1 Artillery is the word used to **refer to all forms of military weapons**.
 2 The main task of Field Artillery **is to provide support to other arms in combat or to attack targets**.
 3 The Stokes mortar is considered the first **version of modern mortars**.
 4 A mortar's angle set at 85 degrees will fall **at a closer distance** than a 45 degree shot.
 5 Beside being a protection against missiles, ADA provides **intelligence and information operations** too.
 6 The range of the most recent artillery ballistic missiles can reach an **intercontinental range**.

7  20

An Armoured Fighting Vehicle (AFV) is a combat vehicle, wheeled or tracked, equipped with strong armour and weapons, combining operational mobility, tactical, offensive, and defensive capabilities. AFVs are usually referred to as armour.

The level of armour protection varies considerably depending on the vehicle: a battle tank will usually be structured to take blows from other tank guns and anti-tank missiles, while reconnaissance vehicles are often only lightly armoured. But as heavier armour provides better protection, it makes vehicles less mobile and requiring a more powerful engine (and of course more fuel); in addition, its increased weight can be an obstacle to being air-borne or to cross some bridges. While most current AFVs are powered by a diesel engine, the newest models feature a modern technology which includes the use of turbo-charging help to overcome the lower power-to-weight ratio of diesel engines compared to petrol.

In addition, steel armour is being less and less used: nowadays it is being replaced by composite armour, which is stronger and also allows the tank to be lighter and better protected. The level of protection also usually varies considerably throughout the single vehicle too, depending on the role of the vehicle and the probable direction of attack: a battle tank will usually have the heaviest armour on the hull front and the turret, a lighter armour on the sides of the hull and the thinnest armour on

the top and bottom of the tank, while other vehicles, such as the Mine-Resistant Ambush Protected (MRAP) ones, may be heavily armoured on the bottom of the hull.

- 1 F (An Armoured Fighting Vehicle can be mounted on tracks or wheels.)
- 2 T
- 3 F (Reconnaissance vehicles are lightly armoured vehicles.)
- 4 T
- 5 F (The newest engines have a modern technology which uses turbo-charging help.)
- 6 F (AFVs' protection level depends on the armour's role.)

8 Personal answers

Unit 12, pp. 48-51

- 1
 - 1 laccio emostatico
 - 2 bendaggio /benda di emergenza
 - 3 bendaggio/fascia
 - 4 nastro adesivo chirurgico
 - 5 cannula nasofaringea
 - 6 guanti chirurgici
 - 7 garza emostatica

- 2
 - 1 The primary role of a first aid kit is to stop severe bleeding wounds.
 - 2 It is a lightweight stock of supplies designed to limit many combat injuries; it contains a tourniquet, gloves, a trauma bandage, a gauze, an oral pharyngeal tube.
 - 3 The Improved First Aid Kit's principal improvement is the Combat Application Tourniquet (CAT).
 - 4 An army has one IFAK for each soldier.

3 21

In early 2014, the US Army issued the IFAK 2: it consists of a water-(1) **repellent** pouch with two openings on either side, into which an insert is placed. It can be mounted on any modular vest, bag or pack. It is designed to be (2) **lightweight** (less than half a kilo) and easily accessible for right- and left- (3) **handed** soldiers. When removed the (4) **foldable** kit remains attached to the pouch by an elastic tether.

The IFAK 2 contains the same items as the IFAK, with the addition of a second (5) **tourniquet**, a mini-Sharpie marker and a (6) **tactical** combat casualty card (to note what kind of first aid the soldier got), an eye shield, a (7) **rubber** seal with a valve for sucking chest wounds, and a strap cutter. Really note-worthy is the Six Inch Israeli Pressure Bandage. It has a sterile, non-(8) **adhesive** pad that can act as a primary (9) **dressing**; it is elastic, so it applies pressure and acts like a tourniquet over the wound site. The easy (10) **closure** make it very quick to use in life-or-death situations, even enabling self-application.

- 4
 - 1 F (They stand for Airways, Breathing and Circulation.)
 - 2 F (Limbs are the most exposed parts of the body to combat wounds.)
 - 3 F (Tourniquets are only applied on limbs.)
 - 4 T
 - 5 T

5 1 b, 2 c, 3 d, 4 a

6 1 exsanguinating haemorrhage
2 airway obstruction
3 tension pneumothorax
4 shock

7 1 In MEDVAC patients are evacuated by medically equipped vehicles (ambulances or air ambulances), while in CASEVAC they are evacuated by any available vehicle.
2 CASEVAC transport seriously ill casualties when there's no time to wait for a MEDEVAC.
3 MEDEVAC transport are marked as unarmed vehicles, and are protected by Geneva Convention.
4 When a call for CASEVAC comes the closest available unit should respond to it.
5 A casualty should be transported on a stretcher. If no standard stretcher is available, an improvised stretcher can be used until the casualty can be transferred to a standard stretcher.

8  22

CASEVAC without (1) **medical** evacuation aids is difficult to (2) **manage**. The severity of injuries, number of (3) **casualties**, and availability of the nearest Medical (4) **Treatment** Facilities (MTF) are crucial factors to be taken into (5) **consideration** before moving a casualty: since en route medical care is not available, length and (6) **condition** of travel that the casualty can (7) **withstand** without their condition deteriorating must be carefully (8) **assessed**. The more severe casualties, the URGENT and URGENT- SURGICAL ones, should be (9) **evacuated** before PRIORITY or ROUTINE casualties, and should be moved by an (10) **ambulance** providing en route medical care. Additional care must be taken to ensure lower (11) **precedence** casualties are evacuated before their medical condition begins to deteriorate resulting in upgrading the (12) **severity** of their condition.

9  22

1 URGENT, 2 URGENT-SURGICAL, 3 PRIORITY, 4 ROUTINE

Unit 13, pp. 52-55

1 1 The key goal of an alliance is national security (protection against threats from other countries).
2 States enter into military alliances to prevent stronger powers from dominating them.
3 Balancing is an alliance made by joining forces against a threat, bandwagoning is an alliance made by joining forces with it.
4 It means that in military alliances common interest are more important than the members themselves.
5 'Free riders' could be an issue in an alliance because they want to take the advantages of the alliance without taking its responsibilities.
6 A caveat is a restriction that each member state puts on how the organization can employ their forces.

2 1 international, 2 strategy, 3 own, 4 increasing, 5 threatening, 6 power, 7 protection, 8 weaker, 9 considerable, 10 exchange

3  23

A treaty is an important point in defining alliances because it's where all the details and the conditions of the alliance are clearly stated: the threat against which the alliance is set up, how and when assistance is granted, the military support each ally must grant, the territory covered by the

alliance, and so on. By signing the treaty, allies commit themselves to mutually intervene alongside a party if it is attacked.

Another defining feature for the alliance is its purpose, which is a basically military one or an effort to enhance security. The main purpose of an alliance is to focus its military forces against a common enemy from outside the alliance. As a side benefit, it also reduces the chances of a conflict between the allies.

Reciprocity is another guiding principle in an alliance, giving it greater consistency and coherence, along with a legal and moral obligation to respect the commitment made through the alliance.

An alliance has also a political character: typically, allies expect that alliance partners support each other politically in their diplomatic efforts even in the absence of a specific requirement stated by the treaty.

Finally, common interests too play a role in building an alliance. Since an alliance tends to be formed between states with common interests, they make it be viable or useless, to be to a greater or lesser extent beneficial. Generally speaking, allies interests are only partially, but significantly shared.

1 The main point defining an alliance are a treaty, alliance's purpose, reciprocity, the political character of the alliance, common interests among its members.

2 Because it commits them to intervention in case one of them is attacked.

3 The main purpose of an alliance is to focus its military forces against a common enemy.

4 The principle of reciprocity.

4 1 e, 2 c, 3 a, 4 b, 5 d

5 1 The NATO was created to **prevent menaces from the Cold War**.

2 The main purpose of NATO is **to promote democratic values**, and its leading principle is **collective defence**.

3 All NATO members have **decision-making authority**.

4 Even in recent years, NATO had a crucial role for **the stabilisation of Eastern Europe**.

6  24

The Parties (1) **agree** that an armed attack against one or more of them in Europe or North America (2) **shall** be considered an attack (3) **against** them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or (4) **global** self-defence (5) **recognised** by Article 51 of the Charter of the United Nations, will (6) **assist** the Party or Parties so attacked by (7) **taking** forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and (8) **maintain** the security of the North Atlantic area.

Any such armed attack and all (9) **measures** taken as a result thereof shall immediately be reported to the (10) **Security Council**. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

7 1 d, 2 e, 3 b, 4 a, 5 c

8 Personal answers

Unit 14, pp. 56-59

1 1 Peacekeeping operations aims to **the maintenance of international peace and security**.

2 Peace processes can include **confidence-building measures, economic and social development, strengthening the rule of law, and electoral support**.

3 International peacekeepers' main role is **to halt an escalating conflict Interposing between fighting parties.**

4 Peacekeepers should use force **only in case of self-defence.**

5 In 1991 a mandate from UN set a precedent for **repelling aggression against another nation and intervening to defend an endangered minority within a nation.**

6 Measures as diplomacy, security guarantees, sanctions and arms control can actively help to **prevent violence at international level.**

2 1 e, 2 f, 3 a, 4 c, 5 b, 6 d

3 1 The most trending UN professionals are specialized personnel known as 'enablers' (engineers, helicopter's crews, medical personnel, communicators).

2 High levels of training are mandatory because personnel come from more than 120 different countries, with different background and formation.

3 The UN can deploy military personnel after a Security Council resolution that authorizes it.

4 No, it hasn't. Because it would be too costly to maintain it.

4 1 The context UN troops operate in is essentially a **highly heterogeneous-melting pot.**

2 The difficulties they have to deal with are about **different language and cultures.**

3 Coming from many different countries affects troops' **capabilities, training, equipment, standards and procedures.**

4 Conflicts between contingents can lead to **a dangerous lack of mutual support in the field.**

5 1 Because the peacekept population will grant its consent to peacekeepers.

2 Peacekept population must feel as a part of the process itself.

3 Peacekeepers can get a thorough knowledge of the place they are in through the official training and briefings, and more through the news, reading books or speaking with other UN personnel.

4 The less successful approach was the one of the troops that were less integrated into the local scene, and found themselves quite disconnected from the population.

5 Peacekeepers should always must act with respect towards people, places and local laws, and with impartiality, integrity and tact.

6 1 PKOs can improve soldiers' lives: they **feel more self-confident, more resilient, they gain in terms of personal strength and a sense of fulfilment.**

2 The negative sides of PKOs can show up **before, during and after deployment.**

3 One of the forethought is about the uncertainty of the mission: soldier fear **about the duration of the mission, or they'll feel isolated, because It will be difficult to get in touch with home.**

4 Since they're often deployed in distant countries and communications are difficult, they may experience **both physical and psychological isolation.**

5 The situation called 'double helplessness' happens when **soldiers witness atrocities and human suffering without being able to help.**

6 Once they're back home, soldier may experience **difficulties about the readjusting to a different routine.**

7 Personal answers

Unit 15, pp. 60-63

- 1** Personal answers
- 2**
- 1 To present yourself and your qualifications, work history, skills and experience in order to be selected for an interview.
 - 2 It should be no more than 2 or 3 sides of paper, so that the reader can see the applicant's career at a glance without wasting time or getting bored.
 - 3 No, the CV should slightly vary according to the job one is applying for. The applicant must highlight the specific skills requested for the job.
 - 4 So that the reader can have a general idea of the type of applicant.
 - 5 Starting from the most recent, so as to give an idea of the present level of competence of the applicant.
 - 6 It depends on the job you apply for, but usually hobbies, sport, social and cultural interests. Giving useless information could be negative.
 - 7 To confirm the applicants' statement about themselves and their skills.
 - 8 Personal answers
- 3** Personal answers
- 4**
- 1 Director of security.
 - 2 School diploma or equivalent.
 - 3 The candidate has the right qualifications and some of the required experience.
 - 4 Personal answers
- 5**
- 1 A covering letter has to make a good impression and stand out from the others as it is the first contact with a potential employer, together with a CV.
 - 2 It should be short, clear, well laid out with no mistakes.
 - 3 It starts with a reference to how you heard about the job (after the opening salutation which is the same as a business letter).
 - 4 No, it shouldn't, because it would be boring and repetitive. (You need to make the reader interested in you without giving all the information.)
 - 5 Because it will not sound personally addressed to the reader. It needs to refer to the specific details of the job and why you would be perfect for it.
- 6** Personal answers
- 7** Personal answers
- 8**
- 1 T
 - 2 T
 - 3 T
 - 4 F (Talking about salary expectations and career goals it's a very important step of the interview.)
 - 5 T
 - 6 T
- 9** Personal answers