PREVENTIVE MEASURES FOR SAFE AND HEALTHY WORK WITH IMPROVISED EXPOLSIVE DEVICES IN MULTINATIONAL OPERATIONS

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Abstract:

Since the re-admission of the Republic of Serbia to the United Nations (UN), members of the Ministry of Defence (MoD) and the Serbian Armed Forces (SAF) have been engaged in multinational operations (MnOps). All countries which send their members to MnOps timely undertake measures so that individuals intended to participate in MnOps learn about the dangers of explosive devices, and prepare themselves for safe life and work in MnOps. One of the measures taken is to produce a brochure or a manual to help members of MnOps learn about the dangers of explosives in the particular territory and about general procedures in the event of encountering such danger.The main problem is the lack of literature as the essence of the training process and the preparation of individuals referred to MnOps. The paper combines the currently available literature with the experience of MoD and SAF members as well as foreign armed forces members previously engaged in MnOps regarding the preventive measures for safe and healthy work with explosives i.e. with a special kind of explosives - improvised explosive devices.

Key words: multinational operations, safety, procedures, prevention, measures, literature, explosives.

Introduction

The use of explosive devices during armed conflicts, and in particular their uncontrolled use, has left a large number of areas with

unexploded ordnance.The presence of explosives in some territory makes it difficult to live and work in it and pose a constant and imminent risk to health and safety of both local residents and members of MnOps. This danger is particularly present in countries with on-going or recently finished armed conflicts. Also, it is not negligible in countries where armed conflicts ended some time ago (for example: Croatia, Bosnia and Herzegovina, Angola). In such social situations, parts of the territories with explosive remnants of armed conflicts are not marked, and accordingly, both the local population and MnOp members are not familiar with their location. This fact is a direct cause of the occurrence of mine accidents (due to movement through dangerous territories). Besides the lack of information about the territories with unexploded ordnance, other causes of mine accidents are the lack of training of both the local population and MnOp members to identify dangerous territories, the lack of preventive security measures and procedures, as well as curiosity and lack of attention.

The work provides basic information about the dangers of explosive devices, definitions, classifications and examples of explosive devices, as well as instructions for identifying specific types of explosive devices – Improvised Explosive Devices and preventative measures for safe and healthy work with them. Preventive measures for safe and healthy work with improvised explosive devices, as well as procedures that are given in this paper, are of a general nature and some of the measures and procedures may not be used in all conditions and in all territories, and sometimes it will be necessary to adjust them in accordance with the specific situation in a particular territory.

Compliance with the Standing Operating Procedures (SOP) and the Rules of Engagement (ROE) for a specific MnOp, preventive measures for safe and healthy work presented in this paper, as well as the assessment of the situation in a particular territory help MnOp members reduce the risk of mine accidents caused by improvised explosive devices and thus save lives. Also, the data, instructions, measures and procedures presented in this paper can be used for the education of the local population and for joint actions in order to reduce the risk of mine threats.

Classification of explosive devices

Explosive devices can be classified on the basis of different characteristics (depending on their purpose, design, launcher

tube/caliber, etc.). The most common groups of explosives found in the territories with MnOps are as follows:

a) ***Munition;***
   1) Projectiles;
   2) Mortar shells;
   3) Rockets;
   4) Guided missiles;
   5) Rifle grenades;
   6) Hand grenades.

b) ***Mines*****;**

c) ***Submunition;***

d) ***Improvised Explosive Devices***. (NATO, 2010)

Munition – in everyday use, ,,munition" can be military and/or live ammunition and equipment. Ordnance - ammunition is a means filled with explosive, rocket fuel, pyrotechnic mixture, initial mixture or nuclear, biological or chemical material for use in military operations and for destruction (Australian Government, 2003). In territories where MnOps realize their tasks, the greatest risk of injury caused by ordnance represents a subtype of ordnance - unexploded ordnance - ammunition.

Projectiles - the term projectiles encompasses infantry, artillery and tank ammunition from the caliber of 20 mm in diameter and 2 inch (50.8 mm = 2 x 25.4 mm) to 4 foot (4 x 304.8 mm = 1219.2 mm) in length. They are fired from weapons or artillery and can have very different charges (chemical, smoke, illuminating, etc). Artillery projectiles can have a fuze at the bottom or at the top of the projectile. To stabilize the flight, projectiles can be equipped with a driving band or stabilizing fins. (Uprava inžinjerije, 1999)

Mortar shells – mortar shells can have a caliber of 45 mm to 280 mm in diameter. They are fired from mortars and may have different charges (chemical, smoke, illuminating, etc.). Mortar shells can also have a fuze at the bottom or at the top of the shell and can be stabilized by a driving band or stabilizing fins.

Rockets – rockets could be defined as self-propelled missiles. (International Mine Action Standards, 2003) They cannot be controlled during the flight. Their dimensions are from 37 mm to 380 mm in diameter, and from 1 foot to 9 feet (9 x 304.8 mm = 2743.2 mm) in length. Rockets generally have the following parts: warhead, motor and fuze. (Uprava inžinjerije, 1999)

Guided missiles - guided missiles are a special type of missiles and they represent an enhanced version of the rocket. Besides the design

solution, the main difference is a possibility of missile guidance. (International Mine Action Standards, 2003)

Rifle grenades – the paper explains one type of hand grenades, rifle grenades, so that the distinction between hand grenades and bombs is more visible. It is important to point out that the term rifle grenade which is used in the MnOp does not indicate the same type of explosive devices which exist in the Serbian Armed Forces. This term in MnOps denotes rifle grenades which are very similar to mortar shells and can be fired from specially designed launchers. They may have different charging (chemical, smoke, illuminating, etc.).

Hand grenades – hand grenades are intended for fight at close distances. They are classified based on their design solutions into the following types: offensive, defensive, antitank, smoke and illuminating (Australian Government, 2003). Hand grenades can be launched from certain types of weapons.

Mines - mines are the kind of explosive devices placed on/or in the ground, or on any other surface to be activated by the presence or contact with a person or a vehicle. Because of its characteristics, a mine is said to be „a perfect soldier, it never sleeps, never asks for payment or for food, never misses, does not ask about the task and does not care about the victims. On duty, it does not need replacement for fifty years or more. It is very difficult to find and inexpensive to purchase." (NATO, 2010)

A similar interpretation of mine has a project manager for mine demolition in the US Army, General A. Gardner: ,,Mines are obviously a cheap means of less powerful armies, especially of those who have to weigh their strength with large and well-trained armed forces such as the US Army. Put yourself in the position of US soldiers who are often exposed to randomly scattered mines that contain little or no metal, which are covered by direct or indirect fire at the time of darkness and so on. I think you begin to understand the difficulties of creating technology that can alert soldiers or units to start bypassing or other activity.“ (Radić, 2001)

Submunition - cluster munition is an explosive device separated from a larger ordnance type in order to accomplish its task (this refers to mines or some other explosive devices which are part of cluster bombs, artillery shells or rocket charges). (Radić, 2007)

Basic information about improvised explosive devices

In the last 20 years, there has not been a day without a terrorist attack and every attack, unfortunately, ends up with casualties; consequently, terrorism as a complex form of political violence has become ,,a social plague of the 21st century". For the execution of terrorist attacks and/or operations, terrorists use not only weapons, but also all kinds of explosive devices, and most often improvised explosive devices (IEDs).

Improvised Explosive Devices represent explosive devices made from nonmilitary explosives/components, intended for destruction and/or disabling of the living force, movable or fixed objects. There are various criteria for the classification of IEDs: based on their emplacement, mobility, quantity of explosives in them and similar. (UN mine action gateway, nd)

The classification used in MnOps when reporting about a found improvised explosive device is as follows:

- **Improvised Explosive Devices (IEDs)** – that are activated from a distance – by radio devices or electrical conductors.
- **Victim Improvised Explosive Devices (VIEDs)** – for suicide attacks.
- **Time Improvised Explosive Devices (TIEDs)** – with a delayed effect. (NATO, 2010)

Regarding the criterion “emplacement”, IEDs are classified as:

- **Improvised Explosive Devices (IEDs)** – placed in the ground and in buildings.
- **Person Borne Improvised Explosive Devices (PBIEDs)** – placed on persons.
- **Vehicle Borne Improvised Explosive Devices (VBIEDs**) – placed in vehicles. (NATO, 2010)

The most frequently used types of IEDs in MnOps are those based on the above criterion, so the rest of the paper will concentrate primarily on these IEDs.

Following the criterion „ mobility“, we classify IEDs as:

- **Fixed** - placed on roads, bridges, underneath vehicles, in buildings and in other places;
- **Mobile** - placed in vehicles or on persons; thrown (most frequently from overpasses) or fired from various improvised launchers. (Landmine monitor, 2010)

Improvised Explosive Devices can be activated from a certain distance (orchestrated, i.e. controlled) and/or on site. IED activation from a distance is performed from a position where terrorists could observe the area, video the incident and open fire if needed. Activation is generally carried out by fuze and/or electrical means. However, during the last 20 years, radio activated devices have been increasingly used.

IED activation at the scene in many cases is a suicide attack, but IEDs at the site may be activated by a person who has accidentally come in contact with them in one of the following ways: by changing the pressure (by pressure, movement, release), changing the temperature of the immediate environment, radio frequency, light or in some other way. Also, IEDs can be activated at the site in case they are equipped with a time fuze.

Handy materials for making fuzes used to activate IEDs are car alarms, electrical wrist watches, alarm clocks - electrical and mechanical mechanisms and similar assets.

Besides IEDs, the most commonly used types of explosive devices by terrorists are ,,booby traps". Booby traps are explosive devices or some seemingly harmless objects intended to injure and/or kill during their handling or performing activities that are normally harmless. The main difference between IEDs and booby traps is that booby traps are made of military explosives. (Kovačević & Popović, 2016, pp. 387-393) General measures for safe and healthy work with booby traps are the same as with IEDs.

The measures and procedures for safe and healthy work with Improvised Explosive Devices

The signs (indicators) that indicate the possibility that at some point there are IEDs are similar to the indicators for antitank and/or anti-personnel mines. The indicators might include the following:

- a tug - blasting fire wire or miner's cable;
- detonating fuse;
- explosive device (sometimes covered with bags, sacks and alike);
- dead animals;
- traces of works (freshly dug earth) on the ground;
- piles of gravel beside the road or other material;
- absence of people from streets or the presence of only one person;
- call for a prayer at night;
- objects that hang from trees or poles;

- shot, alternative switching the lights on and off or some other signal that MnOp members are coming;
- absence of children from the place where they usually play;
- keeping children at home during the school day;
- children approaching a checkpoint with bags on their backs.

Preventive measures for safe and healthy work with IEDs undertaken to prepare MnOp members for the protection against the effects of IEDs are as follows:

- before each patrol, it is necessary to inform all the patrol members about the following facts:
  - ✓ the patrol risk of terrorist attack, i.e. that patrolling is not "going for a walk";
  - ✓ already known IED emplacement locations in the area of responsibility during the previous period;
  - ✓ previous experience in implementing and/or possible ways of setting up and activating IEDs;
  - ✓ possible indicators in the field indicating the existence of an IED;
  - ✓ procedures undertaken by patrol members in the event of detecting indicators or an IED or in case of an accident caused by an IED.
- Raising awareness of patrol leaders and other members that any indication must be taken seriously and checked; they must be constantly aware of their surroundings. In these situations it is necessary to trust one's instincts.
- People around them should be observed for signs of nervousness and whether they are going away from patrols. Unfamiliar faces should be looked for since most terrorists will not carry out an attack among their acquaintances.
- During the implementation of the training, it is necessary to regularly test the procedures in case of encountering an IED or in case of an accident caused by an IED.
- Inform patrol members that, during the task execution, it is strictly forbidden to remove parts of personal protective equipment (helmets, body armor, ballistic panels, etc.); many lives were saved thanks to this equipment.
- Keep a prescribed distance from each other following the terrain. In case the patrol stops, do not approach each other. In particular, patrol members should be cautious when moving in

dangerous areas, over bridges, narrow roads and through traffic jams.

- It is necessary for patrol members to develop awareness that any stopping or slowing patrol's movement by local population, or due to obstacles in the way are a possible sign of an IED.
- It should always be kept in mind that terrorists constantly create new types of IEDs or improve the existing ones.

The preventive measures for safe and healthy work when encountering an IED are as follows:

- if you observe an IED, use binoculars and/or other similar means.
- If there is any indication to suspect a possibility of an IED, be sure to call explosive ordnance devices team (EOD team).
- In case you notice the existence of a detonating cord, do not touch it but immediately call the EOD team.
- In case of finding a blasting cable and/or fire wire, do not follow them because of a possibility of additional or secondary IEDs. Where a blasting cable leads to is tested only with the help of robots.
- During task implementation, never concentrate only on the found IED; the first step is to go back to a safe distance, secure the perimeter and inspect the terrain for additional or secondary IEDs, first in a radius of 5 m and then within a radius of 25 m around the vehicle. After that, report to superiors and wait for further instructions.
- In case of threat to personal safety, it is allowed to skip certain actions, use personal weapons and remove the threat to life.
- When submitting a report to the superior, the data on the IED is delivered exclusively in the form of the so-called ,,9-line Explosive Hazard Spot Report". (Australian Government, 2003)

Preventive security measures against terrorist attacks, particularly in suicide attacks, which have so far proved as the most appropriate solutions, are as follows:

- maintaining distance;
- controlling the area within a radius of 100 m;
- avoiding concentration of vehicles and persons;
- use of force.

Locations for positioning IEDs can be very different. The analysis of accidents has shown that in most cases IEDs are placed in territories that can be observed, recorded, and fired upon, as most terrorist attacks

using IEDs are mainly characterized by IED activation from a distance. Some examples of placing IEDs are given in Figures 1 to 4.

Figure 1 shows an IED in a form of an artillery shell that can be activated by pressure and/or move or release when a motor vehicle (m/v) passes near by.

Figure 1 – Positioning an IED behind a road metal barrier
Рис. 1 – Установка СВУ с задней стороны металлических дорожных отбойников
Слика 1 – IED постављен иза металних граничника пута

Near one of the busiest roads in Kabul, an IED was found in one of the sacks used for food delivery in one of local military bases. It was obvious that the terrorist's initial plan had been thwarted so the IED was intentionally left in the vicinity of a frequent road - Figure 2.

Figure 2 – An IED in a sack
Рис. 2 – Установка СВУ в мешке из мешковины
Слика 2 – IED постављен у џак од сарџије

Figure 3 shows an Improvised Explosive Device positioned in a niche in a wall, hidden behind a poster. Positioning an IED as illustrated allows for directed action, i.e. for an effect in a specific direction and in a particular time with modern means of activation.

Figure 3 – Positioning an IED in the wall, masked by a poster
Рис. 3 – Установка СВУ в стене, замаскированная плакатом
Слика 3 – IED постављен у зиду, маскиран постером

Figure 4 shows an IED found in the waste of cardboard boxes at an improvised landfill site close to the central market in Kandahar.

Figure 4 – Positioning an IED in cardboard waste
Рис. 4 – Установка СВУ в картонных отходах
Слика 4 – IED постављен у картонски отпад

The measures and procedures for safe and healthy working with Person Borne Improvised Explosive Devices

One of the most terrifying forms of terrorist attacks and/or actions has been the use of PBIEDs. This kind of attack represents a major threat to both MnOp members and local population. Such attacks are characterized by a large number of victims, but in most cases, the victims are civilians because they are performed most often in places where there are a lot of people (squares, shopping centers, intersections, cinemas, theaters, metro, train and bus stations, buses, etc.), which has a terrifying effect on the sense of security of the local population.

,,Cruel ingenuity" of terrorist organizations is best reflected in the involvement of suicide bombers (according to the classification of terrorism by prof. PhD Dragan Simeunović, suicide terrorism is only one of the types of terrorism, according to the methods of implementation of actions), who intentionally take on the role of a ,,smart bomb". They select when and where to activate the explosive which they have on them and thus cause the greatest damage not hesitating to sacrify their own lives to a greater cause. In the literature on terrorism, the terms PBIED and suicide bombers are often used as synonyms which is not true because it is actually a question of a means of carrying out terrorist actions and a special type of perpetrators.

Preventive measures for safe and healthy work with PBIEDs undertaken to prepare MnOp members to protect themselves against PBIED effects encompass informing MnOp members of the indicators of the PBIED existence:

- Since the effect of such attacks causes a great fear in the local population, an MnOp member should look out for the signs of locals around him behaving anxiously or moving away from him, or running from the scene because this is a sign that something is wrong and that there is a possibility of some kind of a threat to present people.

The analysis of suicide attacks has established a profile of people who are direct perpetrators of attacks (although this is not constantly the rule, most suicide bombers have the following characteristics):

- age from 18 to 24;
- male/female persons (up to September 1995, they were only men; since September 1995, the Lebanese terrorist organization Hezbollah has been ,,using" women ,,martyrs"-suicide killers; today it is unfortunately standard practice);
- unmarried, without family;

- short hair cut, shaved, and the use of strong perfumes (smell conceals explosives);
- nervous and sweating a lot, or too slow and calm;
- thoughtful and silent, or uttering a prayer in a low voice;
- there is a sign of desperation in their eyes. (Australian Government, nd)

The indicators that a certain person may be a suicide bomber are as follows:

- loose clothing that can cover PBIEDs under it;
- slow and unnatural gait;
- hands in the pockets;
- protrusions on the clothes;
- sewn clothing or covering garment;
- backpacks that are full, cannot be closed and/or with visible wires;
- handbags that have traces of work on them and/or with visible wires.

The preventive measures for safe and healthy work undertaken by MnOp members in case of encountering a potential suicide bomber are the following:

- Stop, alert the other patrol members and evacuate the area if possible.
- Take shelter, point a gun at the suspect and in a strong and loud voice warn a suspect to stop (in the given situation, there is a high likelihood that the suspect will activate a PBIED).
- In the event that the suspect obeys the order, the procedure is as follows:
  - ✓ Order the suspect to show his hands with fingers spread. In the given situation, there is a possibility that another person triggers the PBIED on the suspect.
  - ✓ Order the suspect to put his things onto the ground, to the side and to move away to a safety distance.
  - ✓ Lift up the upper part of clothes in order to check whether there are explosives beneath it.
  - ✓ Order the suspect to lie down on the ground, spread his arms and legs, palms turned upwards and face turned to one side.
  - ✓ Do not approach, call the EOD team. It is necessary to stand at a safety distance from the suspect if possible (about 300 m).
  - ✓ report to the superior. (NATO, 2010)
- In case the suspect does not follow the orders, the procedure is as follows:

- ✓ take a safety distance from the suspect and do not allow the suspect to move, do not to approach and call the EOD team.
- ✓ report to the superior.
- ✓ use firearms only in case the suspect moves or endangers the safety of the people present.

The measures and procedures for safe and healthy work with Vehicle Borne Improvised Explosive Devices

Vehicle Borne Improvised Explosive Devices allow terrorists effects with a higher amount of explosives.Terrorists can activate VBIEDs while they are parked and/or when they are in motion. In most cases, when a m/v is parked, VBIED activation is carried out from a certain distance, and when a m/v is in motion, activation represents a suicide attack. Targets of attacks are most commonly motorcads with MnOp members. Some terrorists are exclusively engaged to enter premises of MnOp members with VBIEDs. The preventive measures for safe and healthy work with VBIEDs undertaken to prepare MnOp members for the protection against VBIEDs are as follows:

- Before movement, it is necessary to warn the superiors and drivers (in the case of a motorcad) about possible VBIEDs during movement, and remind them of the procedure known as ,,**3D"** (**distance** - maintain the distance between the vehicles; **direction** - to move in the ordered direction, and **description** - recognize and be able to describe).
- Do not stop during the motion, unless it was previously determined by the action plan, and especially do not stop because of artificial barriers in the way, as it is possible that an IED is positioned nearby. In the case of artificial obstacles in the way, the commander of a m/v and the driver should immediately speed up and quickly leave the risk area to a safe tactical distance. The safety distance depends on the task, the opponents, the terrain and weather conditions, support, time available and other.
- If the commander of a m/v and the driver timely detect a possible IED on the road, they can leave the road and pass the IED at a safe distance.
- In case the task is to keep a safety distance from an IED, it is necessary to secure the area and inspect the terrain for additional or secondary IEDs, first in a radius of 5 m and then within a radius of 25 m around the vehicle.
- Report to superiors about the situation.

- Also, it is necessary to inspect the terrain and spot the signs of enemy's operations i.e. whether there are any lookouts near the IED or a person with a camera and the like, because an IED can serve for demonstration purposes, i.e. can be part of an organised attack.
- Further follow the instructions of superiors and not use communications means within a radius of 300 m from the IED. (NATO, 2010)

The type of suicide attacks with an m/v loaded with explosive on MnOp members is also called **SVIED - Suicide Vehicle Improvised Explosive Devices**. When a potential SVIED is spotted to approach too closely and/or at high speed, the procedures and actions of members of MnOps are as follows:

- signalize the m/v to slow down, with the traffic regulations, flares, green lasers, lights or in any other visible way.
- In case the m/v continues to approach posing a direct threat, it is necessary to warn the m/w by pointing the weapon at it, thus showing the readiness to use it, and then shoot into the air.
- In the event that the m/v does not stop at the warning signs and further endangers the safety, shoot first to the m/v engine block and then to the driver's seat until the m/v stops.
- In the event that the m/v stops, it is necessary to take a safety distance from the m/v if possible (a safety distance from the stopped m/v depends on the type and dimensions of the m/v, see a general overview given in Table 1). (UN mine action gateway,nd)
- Report to superiors and ask for further instructions for the operation.
- Secure the area and inspect the terrain in order to spot signs of enemy's operation, i.e. whether there are lookouts nearby or whether there are people with cameras, etc.

Figures 5 to 6 show places on different types of m/v where VBIEDs can be installed. Figure 5 shows a possibility of installing a VBIED in a passenger car. (Army technology, nd)

Figure 6 shows possible places of VBIED installation in a van. (Army technology, nd)

Table 1 – Review of a safety distance from a vehicle with a VBIED
Таблица 1 – Обзор безопасного расстояния от автомобилей с автомобильной бомбой
Табела 1 – Преглед безбедног одстојања од возила са *VBIED*

REVIEW **a safety distance from** VBIEDs	Maximum capacity of explosives in kg	Distance of lethal air blast in m	Minimum distance for evacuation in m	Fragmentation effect of the glass in m	Minimum distance for the evacuation of people in buildings in m
 Small car	227	30	457	381	98
 Big car	455	38	534	534	122
 Van	1818	61	838	838	195
 Small truck	4545	91	1143	1143	263
 Cistern	13636	137	1982	1982	375
 Motor vehicle with trailer	27273	183	2134	2134	475

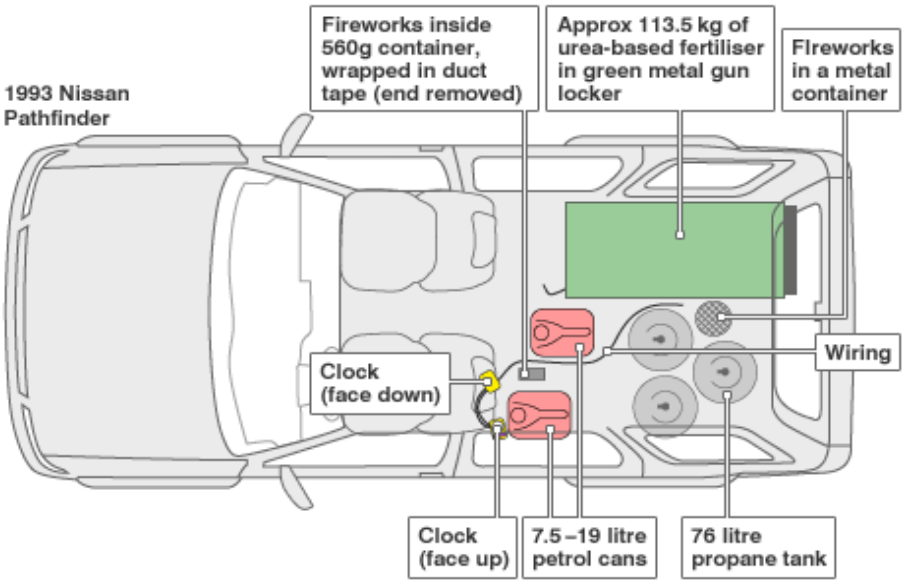

Figure 5 – Positioning a VBIED in a passenger car
Рис. 5 – Установка автомобильной бомбы в легковом автомобиле
Слика 5 – VBIED постављен у путнички аутомобил

Figure 6 – Positioning a VBIED in a van
Рис. 6 – Установка автомобильной бомбы в фургоне
Слика 6 – VBIED постављен у комби

Conclusion

In the last few years, the risk of injury at work is often a subject of much debate and discussion, particularly since the implementation of the provisions of the Law on Safety and Health at Work. Risk, as a result of a combination of the probability and hazardous events, may be reduced or eliminated solely by timely and diligent application of preventive measures, and by using the appropriate equipment which every individual (irrespective of work categories) has to apply permanently. Quality training, as a process, with all its elements, is the basic measure of prevention from accidents provoked by explosives. The basis of any kind of training consists of instructors, disposable and non-disposable goods as well as literature. (Kovačević, 2015, p.167)

These elements of the training have a cause-effect relation, and it is practically impossible to perform any kind of training without them. However, the generic link of all three elements of training is documentation, i.e. regulations and instructions that define the implementation sequence of all training elements. On the other hand, in order to achieve the quality of essential training documents, it is necessary to implement the lessons learned from practice, in particular in dealing with IEDs (and other types of explosive devices), acquired by members of the SAF and the MoD, as well as foreign armed forces, in MnOps. In other words, it is necessary to apply consultations on training as well as subsequent analyses in order to influence the process of drafting and adoption of documents that would regulate this complex area.

Working with IEDs but also with other types of explosive devices is very hard and complex physical and mental work that requires, above all, a very good theoretical knowledge of the characteristics of specific IEDs, physical exertion as well as practical training for their clearance. The creation and use of new textbooks, regulations, lessons, scripts and manuals that develop didactic and methodical approach to work with IEDs during the preparation of persons for the engagement in MnOps greatly reduce the risks of injury, and to a large extent raise awareness about possible dangers and consequences that can arise from unskilled work with IEDs. This work represents a modest contribution of the authors to enrich the existing literature in this area.

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ПРОФИЛАКТИЧЕСКИЕ МЕРЫ ПО БЕЗОПАСНОЙ ДЛЯ ЖИЗНИ И ЗДОРОВЬЯ РАБОТЕ С САМОДЕЛЬНЫМИ ВЗРЫВНЫМИ УСТРОЙСТВАМИ В РАМКАХ МНОГОНАЦИОНАЛЬНЫХ ОПЕРАЦИЙ

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ОБЛАСТЬ: безопасность и охрана труда, инженерство
ВИД СТАТЬИ: профессиональная статья
ЯЗЫК СТАТЬИ: английский

Резюме:

После повторного приема Республики Сербия в Организацию Объединенных Наций (ООН) сотрудников Министерства обороны

(МО) и Вооруженных сил Сербии (ВСС) привлекают к участию в многонациональных операциях (МнОп). Все страны мира, прежде чем отправить своих сотрудников в МнОп, предпринимают все возможные меры, по их подготовке в предотвращении опасности от взрывных устройств, а также по подготовке безопасного проживания и работы во время МнОп. Одной из таких мер является публикация проспектов и инструкций по безопасности, с которыми члены МнОп должны ознакомиться, в цели предотвращения угрозы для их жизней и здоровья, во время работы со взрывчатыми веществами на территории МнОп. Главная проблема в том, что не существует соответствующая литература, применяемая в учебном процессе и подготовке лиц, задействованных в МнОп. В статье представлен обзор, имеющейся в настоящее время литературы и опыта МО и ВСС и иностранных вооруженных сил, участвовавших в МнОп, а также рекомендации профилактических мер по безопасной для жизни и здоровья работы с взрывчатыми веществами и самодельными взрывными устройствами.

Ключевые слова: многонациональные операции, оборона, процедуры, профилактика, меры, литература, взрывные устройства.

ПРЕВЕНТИВНЕ МЕРЕ ЗА БЕЗБЕДАН И ЗДРАВ РАД СА ИМПРОВИЗОВАНИМ ЕКСПЛОЗИВНИМ НАПРАВАМА У МУЛТИНАЦИОНАЛНИМ ОПЕРАЦИЈАМА

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ОБЛАСТ: безбедност и здравље на раду, инжињерија
ВРСТА ЧЛАНКА: стручни чланак
ЈЕЗИК ЧЛАНКА: енглески

Сажетак:

Након поновног пријема Републике Србије у Уједињене нације (УН) припадници Министарства одбране (МО) и Војске Србије (ВС) ангажују се у мултинационалним операцијама (МнОп). Све државе света чији се припадници упућују у МнОп правовремено предузимају мере да се они упознају са опасностима од експлозивних средстава и припремају их за безбедан живот и рад. Једна од мера које се предузимају јесте и израда брошура или приручника којима се припадници МнОп-а упознају са опасностима од експлозивних средстава и општим поступцима у случају наиласка на њих. Наиме, основни проблем представља недостатак литературе као

основе процеса обуке, односно припреме лица која се упућују у МнОп. Чланак представља преглед тренутно расположиве литературе и искустава припадника МО и ВС и страних оружаних снага који су били ангажовани у МнОп-у, а у вези са превентивним мерама за безбедан и здрав рад са експлозивним средствима, односно једном посебном врстом ових средстава – импровизованим ескплозивним направама.

Кључне речи: мултинационалне операције, заштита, процедуре, превенција, мере, литература, експлозиви.

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