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NATO STANDARD
ATP-3.12.1.3
ALLIED TACTICAL DOCTRINE
FOR ROUTE AND AREA CLEARANCE

Edition B Version 1

FEBRUARY 2020



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED TACTICAL PUBLICATION

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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

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NATO LETTER OF PROMULGATION

7 February 2020

1. The enclosed Allied Tactical Publication ATP-3.12.1.3, Edition B, Version 1, ALLIED TACTICAL DOCTRINE FOR ROUTE AND AREA CLEARANCE, which has been approved by the nations in the MCLSB, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2625.
2. ATP-3.12.1.3 Edition B, Version 1, is effective upon receipt and supersedes ATP-3.12.1.3 Edition A, Version 1, which shall be destroyed in accordance with the local procedure for the destruction of documents.
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4. This publication shall be handled in accordance with C-M(2002)60



Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
HRV	Croatian Armed Forces do not have capabilities for neutralization of unexploded ordnances on chemical way, for neutralization of chemical, biological and radiological ordnances and for neutralization of nuclear ammuniton.
SVN	The 4th subchapter of Chapter 2 discusses the use of modern technical capabilities that the SVN Armed Forces currently does not have in operational use. With the development and future procurements, we will develop the capacity to clean the roads with boarding.
<p>Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.</p>	

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PREFACE

0001. The successful execution of route and area clearance at the tactical level requires a clearly understood, harmonized and practical doctrine. This is especially important when tactical operations are to be conducted by Coalition forces. Although ATP-3.12.1.3 - Allied Tactical Publication for Route and Area Clearance is intended primarily for use by NATO forces, the Doctrine is equally applicable to operations conducted by a coalition of NATO with partners, non-NATO nations and other organizations.
0002. ATP-3.12.1.3 aims to provide a common understanding and frame of reference for tactical route and area clearance tasks as opposed to prescribing methods. It discusses the practical application of clearance capabilities and activities. It provides only clearance principles but does not cover tactics, techniques and procedures as nations have their own capabilities and tactics, techniques and procedures. This publication is intended for commander and staff at the tactical level.
0003. Route and area clearance is a mobility task, under the MILENG Support to joint functions manoeuvre and fires; of which some components fall under force protection (FP).

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CHAPTER 1 – INTRODUCTION TO CLEARANCE

1.1. SECTION 1 – OVERVIEW

1.1.1. Although numerous publications discuss clearance, this publication establishes the methodology and practical applicability for route and area clearance. Route and area clearance tasks are executed to enhance the availability of routes and operational areas to commanders at all levels.

1.1.2. **Context.** Route and area clearance are the manoeuver commander's responsibility within their area of operations. Military engineering (MILENG) facilitates the coordination, synchronization, and execution of clearance tasks. MILENG supports the commander through technical advice and capabilities to the mobility plan. Route and area clearance are MILENG tasks executed in support of other tactical tasks to achieve and maintain freedom of mobility. Unlike breaching, clearance is not normally conducted under threat of direct or indirect fire; however, planning must take into account the threat of possible enemy attack.

1.1.3. **Route Clearance is defined as:** The detection and if found, the confirmation, the identification, marking and neutralization, destruction or removal of explosive ordnance (EO), and non-explosive obstacles threatening a defined route to allow a military operation to continue with reduced risk. **AAP-06 (2018)**

The route is not just the road surface, but includes the shoulders, verges and any vulnerable points such as intersections, bridges or culverts etc.

1.1.4. **Area clearance is defined as:** In land operations, the detection and if found, the identification, marking and neutralization, destruction or removal of mines or other explosive ordnance, improvised explosive devices and booby traps in a defined area to allow a military operation to continue with reduced risk. **AAP-06 (2002).**

1.1.5. For the purpose of this publication, clearance tasks include the removal of both explosive and non-explosive obstacles from routes and areas. Routes include roads and other mobility areas between points.

1.1.6. Although clearance largely consists of deliberate measures to mitigate hazards on a specific route or area, the process is applicable to all movements within an area of operations. Commanders decide the requirement to conduct clearance as their situation dictates with input from their advisors. Every element of a force should be concerned with the hazards associated with their movement.

1.2. SECTION II – FUNDAMENTALS OF ROUTE AND AREA CLEARANCE

- 1.2.1. Enables mobility.** Commanders conduct route and area clearance to open a route or area for military access or on a recurring basis to reduce risk within their areas of operations. Clearance capabilities may be limited and therefore should be prioritized in accordance with the Commander's intent and the threat assessment.
- 1.2.3. Mitigate risk.** During military operations, friendly forces should consider all movements as comprising a degree of risk. Route and area clearance reduce risk to the military mission, personnel, equipment and the environment. The reduction of risk is temporary. As time elapses and active observation on cleared routes and areas lapses, the level of assurance of the previous clearance is reduced.
- 1.2.4. Deliberate activities.** Accurately assessing risks, threats and hazards and their effect on mobility during the intelligence preparation of the battlefield will drive the clearance effort. Clearance activities must be integrated into the overall movement and manoeuvre concept of operations.
- 1.2.5. Specialized expertise.** Although clearance tasks frequently involve specialized equipment, the best tool for overcoming threats and hazards is the individual's senses and training. Clearance is primarily a MILENG task. Military engineering capabilities, such as military engineers, EOD, and military search, and others all conduct specific clearance tasks, normally as part of a larger team.

1.3 SECTION III - RESPONSIBILITIES

- 1.3.1. Commanders.** To enable movement and manoeuvre, commanders must integrate route and area clearance into their overall concept of operations. Route and area clearance facilitates the commander's freedom of mobility and mitigates specific risks. The commander's advisor for route and area clearance is the MILENG advisor.
- 1.3.2. MILENG Advisor.** Clearance is primarily a military engineering task in support of and supported by all arms manoeuvre and support elements. The MILENG advisor, regardless of echelon, will be responsible for providing advice to the commander regarding route and area clearance. Their input will focus on the specialized aspect of clearance, such as identifying potential areas where clearance is required as well as the method to be employed in order to meet the commander's intent. The MILENG advisor will ensure the commander and staff understand that different route clearance equipment and procedures may be required in different areas and that there may be reorganizations required during a route clearance task if there is a change in the physical environment along a route (e.g transition from a rural to urban environment). The MILENG advisor coordinates with principle staff elements to ensure all engineering capabilities are synchronized into the operations plan.

1.4. SECTION IV – PRINCIPLES

- 1.4.1. Route and area clearance is characterized by a set of principles as follows:
- 1.4.1.1. **Coordination and Integration.** Route and area clearance must be coordinated and integrated at all levels to ensure unity of effort. Route and area clearance conducted by multinational teams may be affected by differing national techniques and/or operating procedures, however the levels of route and area clearance are standardized in a command's area of operations.
 - 1.4.1.2. **Flexibility.** Plans and decisions must be flexible to adapt to a rapidly changing threat and to cope with limited capabilities for route and area clearance. To be effective, forces should be able to adapt tactics, techniques, and procedures to changing situations. To ensure flexibility, knowledge and training are required for planners, advisers and specialists engaged in route and area clearance.
 - 1.4.1.3. **Synchronization.** The synchronization of route and area clearance with other military actions in time, space, and purpose maximize their effects. This synchronization results in the reduction of residual risk to mobility throughout the area of operations.
 - 1.4.1.4. **Security.** During the conduct of route and area clearance, all clearance capabilities are likely to be exposed to explosive and enemy actions. For this reason, security considerations must be integrated into the plan.

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CHAPTER 2 – CONDUCT OF ROUTE AND AREA CLEARANCE

2.1. SECTION I – OVERVIEW

- 2.1.1. General.** The conduct of route and area clearance is based on the threat, time and capabilities available, the commander's intent, and desired outcome of the mission. In consideration of these factors, an appropriate clearance task organization is determined.
- 2.1.2. Interoperability.** National contributions to the Alliance vary amongst partners. While all nations contribute to route and area clearance with some capability, not all nations have the same capacity. The MILENG Advisor has the responsibility to understand the capability and capacity of all contributing nations as well as advise the commander on the employment of those forces.

2.2. SECTION II – CLEARANCE TASKS

- 2.2.1. Introduction.** The tasks outlined below contribute to route and area clearance. These tasks can be conducted either dismounted or mounted, with or without vehicle mounted systems and in conjunction with military search. Each task is differentiated by time, threat and risk tolerance.
- 2.2.2. Reconnaissance.** Reconnaissance is not clearance however, it contributes to identifying threats and hazards along routes and in areas. The primary objective of the reconnaissance is to maintain operational tempo. This is an all arms task which confirms a route or area is free of obvious obstacles and allows mobility. Reconnaissance offers the lowest level of assurance against potential threats and hazards. Detection relies primarily on visual means to identify obstacles. Observed obstacles are marked, bypassed, recorded, and reported.
- 2.2.3. Targeted Clearance.** A targeted clearance is a reconnaissance with the addition of clearing specific points. Targeted clearance focuses on vulnerable points and areas and incorporates available technical capabilities (e.g. radar, electronic measures) as the primary detection method and reconnaissance of the remaining route. Targeted clearance requires deliberate planning to identify known or suspected threat locations and vulnerable points and areas along the route. Targeted clearance offers a higher level of assurance from threats and hazards due to deliberate planning and the clearance conducted. A targeted clearance employs the techniques of a route search as outlined in ATP-3.12.1.1.

- 2.2.4. Route Clearance.** Route clearance capabilities examines the route’s entire length and width, including the shoulders and ditches using technical and visual detection. This provides a high level of assurance from threats and hazards. Route clearance is a military engineering task which uses specialized techniques and equipment. All obstacles are detected and cleared. Additional detection can be done in depth along the entire route and shoulders followed by proofing of the route with another capability (e.g. rollers, ploughs, military working dogs, etc.) to increase the level of assurance.
- 2.2.5.** When thoroughness, not speed is critical to the mission, other equipment (e.g. bulldozers, chainsaws, graders etc) is incorporated to clear the shoulders of debris and obstructions. This supplementary task is time-consuming, but provides the highest level of assurance. This supplementary task is sometimes referred to as Route Sanitization or Route Sterilization.
- 2.2.6. Area Clearance.** Area clearance is a deliberately planned task where a defined space, required for use by military forces, is cleared of obstacles. Area clearance is time-consuming and provides a high level of assurance from hazards. Similar to route clearance, area clearance is conducted to a level equal to its suspected hazard condition and with corresponding techniques and equipment. Area clearance is not normally conducted under fire.

2.3. SECTION III – ELEMENTS AND FUNCTIONS.

2.3.1. Elements and Functions. Table 2-1 outlines the elements and functions of route and area clearance. The table applies to mounted and dismounted clearance.

<i>Element</i>	<i>Functions</i>
Command and control element	<ul style="list-style-type: none"> Integrates the activities of the security, detection and clearing, and improvement elements. Maintains communications with higher headquarters and with the commander of the area of operations. Plans the mission and continually updates the threat assessment.
Security element	<ul style="list-style-type: none"> Provides traffic control, crew-served weapons support, and force protection. Identifies hazards or obstacles in the route and area. Observes approaching traffic for threats, provides visual warning to approaching traffic, contains suspect vehicles, and provides traffic control within the area being searched or cleared. Provides overwatch against threats to the detection and clearing element.
Detection and clearing element (EOD and/or Engineers)	<ul style="list-style-type: none"> Scans the medians and shoulders of a route and sweeps them for explosive hazards. Pinpoints the location and remotely investigates a suspected obstacles to identify and classify it.

	<ul style="list-style-type: none"> • Marks, identifies, and reports explosive hazards and obstacles. • Reduce or clear and report explosive hazards and obstacles.
Improvement element (as required)	<ul style="list-style-type: none"> • Removes concealment for explosive hazards from the entire width of the median and from the shoulders of the route. • Secures and reports the discovery of explosive hazards. • May include dozers, scrapers, bucket loaders, and dump trucks

Table 2-1. Functions of clearing team elements

2.3.2 Detection and Clearing Element. The Detection and Clearing Element are the core of the clearance capability. Their functions can be described as identification, confirmation, marking and neutralization.

2.4. SECTION IV – CLEARANCE METHODS.

2.4.1. Route and area clearance can be executed dismounted, mounted or a combination of the two. Both methods have their advantages, disadvantages, and risk that need to be considered by the commander with advice from the MILENG advisor.

2.4.1.1. Dismounted Clearance. Dismounted clearance may be supported by mounted elements, but the military search, detection, and clearance are conducted by dismounted personnel. Dismounted clearance may be required due to terrain restrictions, equipment availability, training, commander’s guidance, threat, or national guidance. The detection element consists of soldiers with available detection equipment. The advantages of dismounted clearance are a greater awareness over complex terrain and increased individual sensory involvement that visual and physical detection bring. Some disadvantages include increased time to execute and reduced force protection.

2.4.1.2. Mounted Clearance. Mounted clearance may be supported by dismounted elements, but the primary technical means of military search and detection employ mounted systems. The advantage of mounted clearance is increased coverage, force protection, capacity, and potentially, more capable detection equipment. A disadvantage of mounted clearance is terrain limitations.

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CHAPTER 3 – ROUTE AND AREA CLEARANCE PLANNING

3.1. SECTION I – PLANNING FOR EXECUTION

- 3.1.1. General.** The objective of route and area clearance planning is to ensure clearance activities are integrated and synchronized with the manoeuvre plan. The commander's guidance will specify the mission's desired outcome and acceptable risk. The MILENG advisor provides advice to the staff in support of the Commander's intent.
- 3.1.2. MILENG Staff Planning.** The MILENG advisor provides the manoeuvre staff with the engineering estimate which includes the capability and capacity of engineering resources for conducting each clearance task. The MILENG advisor also recommends engineering task organization. Planning at the tactical level must support the development and maintenance of freedom of mobility. It is therefore key that military engineers have adequate participation on early reconnaissance missions to determine what is required to counter explosive and non-explosive obstacles. As the staff conducts the operational planning process, the MILENG advisor ensures the necessary capabilities are identified; and those capabilities that are not organic to the assigned unit, but required, are requested.
- 3.1.3. Threat Assessment.** The threat assessment, as part of the intelligence preparation of the battlespace, is a command-driven process requiring input from both specialists and manoeuvre units of the area of operations. Interaction between specialists (generally military engineers and/or EOD operators) and intelligence staff is essential and mutual. The threat assessment is continually updated as the situation in the area of operations develops. A changing environment, such as from rural to urban, (or vice versa) may change the nature of the threat and alter the factors involved in the threat assessment. It is critical that the staff continues to refine the course of action to meet the threat. Generally, higher threat requires more complex, specialized and time-consuming measures.
- 3.1.4. Engineer clearance considerations.**
- Enemy
 - Explosive/Non-explosive obstacles
 - Fire (Direct/indirect)
 - Security of route/area
 - Historical obstacle locations
 - Environmental
 - Natural obstacles/terrain
 - Post-conflict areas
 - Explosive remnants of war/unexploded ordnance
 - Contaminated areas

- Civil/military traffic
- Populated areas
- Weather affected areas

3.1.4. Areas of interest. To determine areas of interests, a thorough threat assessment of factors alongside the manoeuvre plan assists in the prioritization of clearance efforts. A thorough threat assessment will assist in determining the areas (vulnerable points and vulnerable areas) where the identified threat is most likely to impact freedom of movement.

3.1.5. Route and area record and status. The staff, assisted by the MILENG advisor, should maintain a record of the routes within the area of operations. A route and area record is developed by intelligence, surveillance, and engineer route reconnaissance and encompasses the detailed information on a specified route or area. The staff maintains the route and area record to assist the Commander's scheme of manoeuvre. The commander and staff determine the current status of a route, road, or area (open, closed, or restricted). The MILENG staff contributes to the status by providing advice, current engineer reconnaissance reports, and route and area clearance status

3.2. SECTION II – PLANNING FOR POST-EXECUTION

3.2.1. Mitigation of Residual Risk. To mitigate the degree of residual risk, appropriate security forces and ISR assets are allocated to the area of operations before, during and after the clearance. It is critical for the staff to be aware of this fact and plan for ISR assets to over-watch or troops to secure the route, post clearance. Persistent surveillance should also be considered for long term security needs. After clearance, access control, or observation is terminated or lapsed, the commander will determine an acceptable level of residual risk along the route or area based on a number of factors to include time, threat, access, etc. At a point, the route or area is no longer considered clear.

3.2.2. Upon the completion of the mission, there are post-mission requirements. The below information contributes to future mission planning.

3.2.3. Debriefs. After the completion of a clearance, debriefs help to document all the details of that operation. This should be facilitated with the operations and intelligence staff in order to document all necessary operational and intelligence developments. The debriefing should include all significant actions during the operation, the intelligence requirements from the commander, and the actions or developments from the adversary. The debriefing should be captured in reports to facilitate information management.

3.1.4. Reports. Commanders direct reporting requirements for their subordinate organizations. The following references are relevant for reporting clearance activities:

- a. STANAG 2430 (AEngrP-02(B)) - Land Force Combat Engineer Messages Reports and Returns

- b.** STANAG 2485 - Countermine Operations in Land Warfare (Annex A and B)
- c.** STANAG 2221 (AEODP-6) - Explosive Ordnance Disposal Reports and Messages

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ANNEX A - LEXICON

Part I – ACRONYMS AND ABBREVIATIONS

ATP	Allied tactical publication
EOD	explosive ordnance disposal
IED	improvised explosive device
ISR	Intelligence, surveillance and reconnaissance
MILENG	Military Engineering
NATO	North Atlantic Treaty Organization
STANAG	NATO standardization agreement

Part II – TERMS AND DEFINITIONS**Area clearance**

In land operations, the detection and if found, the identification, marking and neutralization, destruction or removal of mines or other explosive ordnance, improvised explosive devices and booby traps in a defined area to allow a military operation to continue with reduced risk (AAP-06).

Route clearance

The detection and, if found, the confirmation, identification, marking and neutralization, destruction or removal of explosive ordnance and non-explosive obstacles threatening a defined route to allow a military operation to continue with reduced risk (AAP-06).

Explosive ordnance

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature (AAP-06).

Explosive ordnance disposal

The detection, accessing, uncovering, identification, mitigation, rendering safe, recovery, exploitation and final disposal of explosive ordnance, regardless of condition (AAP-06).

Force Protection

All measures and means to minimize the vulnerability of personnel, facilities, equipment and operations to any threat and in all situations, to preserve freedom of action and the operational effectiveness of the force (AAP-06).

Improvised explosive device

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract (AAP-06).

Neutralization

In countering improvised explosive devices, action intended to render an explosive ordnance either temporarily or permanently ineffective (AAP-06).

Detection

The discovery by any means of the presence of a person, object or phenomenon of potential military significance (AAP-06).

Proofing

In land operations, the process following breaching, route or area clearance to further reduce the risk from mines or other explosive ordnance, improvised explosive devices and booby traps in a defined area (AAP-06).

Identification

The process of attaining an accurate characterization of a detected entity by any act or means so that high confidence real-time decisions, including weapons engagement, can be made (AAP-06).

Marking

In explosive ordnance disposal, the emplacement of one or more signs to identify the position of a hazard or the boundary of a hazardous area (AAP-06).

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ANNEX B - REFERENCE PUBLICATIONS

MC 0560/2 - Military Committee Policy for Military Engineering
AJP-3.12(B) – Allied Joint Doctrine for Military Engineering
ATP-3.12.1 - Allied Tactical Doctrine for Military Engineering
AJP-3.15(C) - Allied Joint Doctrine for Countering Improvised Explosive Devices
AJP-3.14(A) - Allied Joint Doctrine for Force Protection
ATP-3.12.1.1 - Allied Tactical Doctrine for Military Search
ATP-3.12.1.2 - Allied Tactical Doctrine for Military Search Training Requirements
STANAG 2485 - Countermine Operations in Land Warfare
STANAG 2294 - Countering Improvised Explosive Devices Training Requirements- ACIEDP-01(B)
STANAG 2430 (AEngrP-3.12.1.10) - Land Forces Combat Engineer Messages, Reports and Returns
STANAG 2221 (AEODP-6(B)) - Explosive Ordnance Disposal Reports and Messages
ATP-76 - Convoy Operations
Bi-SC Capability Codes `MILENG-SPEC-RC-TM`
NATO RTO SCI-233 `Route Clearance Concepts`

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