

CHAPTER 1

INTRODUCTION

1.1 Background

Modern warfare has experienced a significant paradigm shift along with technological developments and the complexity of armed conflict in the 21st century. The development of global military technology and industry as a response to overcoming various new emerging threats has consequences for transformations in the course of war (Rachmat, 2014). Today, warfare faces new challenges from asymmetric threats, cyber warfare, and long-range combat driven by advances in military technology.

Modern war makes the involvement of technology in the military inseparable and marks the evolution of battle strategy and tactics. Today's technology has become the backbone of military excellence, influencing almost all operational aspects, from intelligence gathering to long-range combat and cyber warfare. The communications system allows troops to communicate in *real-time*, strengthening cooperation and making quick and precise decisions. This capability allows troops to adapt to changing situations and meet emerging challenges more efficiently. Technology also influences monitoring and surveillance operations. Surveillance drones, satellites and advanced sensors provide intelligence about enemy movements, battlefields and potential threats.

Aspects of combat, technology creates deadly weapons and military equipment. Fighter aircraft with radar, accurate precision missiles and powerful armored fighting vehicles provide superiority on the battlefield. Currently, weapons technology with stealth capabilities and unmanned weapons such as *Unmanned Aerial Vehicles* (UAV) are the mainstay products of the defense industry in developed countries (Rachmat, 2014). Muhammad Iftitah Sulaiman Suryanagara say Modern war also involves collaboration, *joint forces* (a combination between forces), and *combined arms* (a combination between corps). All units and

weapons complement each other and cover each other's shortcomings (Savitri, 2022).

Changes mean that armour corps, which was previously associated with the use of horses and close combat, must transform towards armored fighting vehicles to remain relevant and effective in dynamic and complex modern warfare. Armour corps in the modern war era has an important role which is expected to provide tactical mobility by crossing various types of terrain, and exploiting speed to create opportunities. Modern armour corps must also be able to integrate high technology into operations. This includes the use of drones for aerial surveillance, satellite communications for coordination, and accurate navigation and tracking systems to coordinate strikes and maneuvers with high accuracy. Modern conflicts such as the war between Ukraine and Russia and the Armenia-Azerbaijan war show that the use of technology influences the course of war. The use of advanced technology in the military includes Modern Anti-Tank Weapons used to neutralize armour corps vehicles, especially light vehicles. Apart from that, there are military operations that involve cooperation between military units through air support.

The ever-evolving geopolitical dynamics mean that the development of war involving defense equipment technology has driven a deep transformation in the paradigm of a country's defense posture. The implications of technological advances have far-reaching impacts, forming a new strategic order and challenging and changing the way countries view, plan and implement national defense. The development of defense equipment technology significantly influences a country's defense posture. Countries must continually monitor and evaluate these technological advances to ensure that their defense posture remains effective and adaptive in the face of evolving threats.

Indonesia, as the largest archipelagic country in the world, occupies a very important strategic position in the Southeast Asia region. With more than 17 thousand islands and its vast territorial waters, Indonesia is not

only the largest maritime country, but also has a central role in maintaining stability and peace throughout the region. In the midst of an increasingly interconnected world and the complexity of global and regional geopolitical dynamics that continue to change, Indonesia is faced with various potential threats, including the threat of modern war. Therefore, building and maintaining a strong defense posture is imperative to protect the country's sovereignty, security and national interests.

Defense posture is a manifestation of the strength, capability and Deployment of National Defense and Security (Hankamneg) which aims to support the implementation of strategies in achieving the goals and objectives of Defense and Security. Defense posture includes three important aspects including *strength*, *capability* and *deployment*. (Yusup, 2014) Strength is the totality of the synergy of forces from elements that involve elements of combat power from the entire defense structure. This includes organization, personnel, materials, facilities and services, systems and methods, as well as the budget used to support the main tasks of the TNI. Capabilities are strengths and resources that can be used in carrying out a military operation. This capability is implemented through various forms of operations, both independently and as part of a joint operation. Meanwhile, Deployment is a concept that describes the strategy and layout of a country's defense resources. The deployment is directed at being ready to face various threats that may come, ranging from military threats to natural disasters or other emergency situations.

Law No. 34 of 2004 article 11 paragraph (1) states that the TNI's posture is built and prepared as part of the State's defense posture to overcome armed threats. Article 11 paragraph (2) states that the TNI posture as referred to in paragraph (1) is developed and prepared in accordance with National defense policy. TNI posture is a form of TNI appearance which is reflected in the integration of the TNI's strengths, abilities and deployments of strength. Development and deployment must pay attention to and prioritize security, border areas, conflict-prone areas

and remote islands according to geographical conditions and defense strategies.

The Armour corps of the Indonesian National Army (TNI-AD) has the main task of carrying out the development and functions of the Armour corps in Military Operations for War (OMP) and Military Operations Other Than War (MOOTW). In carrying out their duties, the armour corps uses combat vehicles (Ranpur) and/or armour corps horses as their main equipment to support their main tasks. The main task of the TNI-AD is to carry out the TNI's land-based tasks in the defense sector . This task means all efforts, work and activities to ensure the upholding of the sovereignty, integrity and safety of the nation in border areas from threats and violations. The TNI armour corps has a role as a maneuver unit carrying out combat on land with the capability of maneuverability, firepower and shock power, supported by modern technological systems and applications.

Armour corps has the function of attacking and/or protecting. Deterrence is an offensive function to approach, destroy, paralyze and inhibit the enemy and increase the fighting power of the units being assisted. Security Function, to provide security to larger units, other weapons and/or large combined units as well as carrying out tasks as energy-saving troops. This function is that armour corps can be assigned as front, rear, hull, protective troops and curtain troops. Apart from that, he also carries out VIP and VVIP security duties, and continues to carry out surveillance duties.

The posture of the Indonesian Army armour corps includes Strength, Ability and Deployment. The TNI-AD Armour corps strength consists of personnel trained to specialize in the Armour corps and its defense equipment. This includes officers, non-commissioned officers, and enlisted technical officers who operate and maintain equipment and vehicles. Mounted armour corps had a special role in border surveillance, mobility in areas difficult to reach by armored vehicles, and light horse

operations. The capabilities of the TNI-AD Armour corps include high mobility capabilities, both with armored vehicles and horses. The TNI-AD armour corps has the capability to engage in tank battles and other armed conflicts. They are trained to master combat tactics and techniques using armored vehicles. Armour corps is also often stationed in border areas to carry out patrols and surveillance so that in this case armour corps plays an important role in maintaining state sovereignty. The TNI-AD Armour corps units are organized in an integrated manner that is balanced and proportional in accordance with Indonesia's geographical characteristics as a function of deterrence, action and recovery.

The TNI-AD armour corps currently has 36 armour corps units spread across several Kodams in Indonesia. Existing units include 1 Pussenkav Headquarters, 1 Armour corps Education Center, 1 Armour corps Brigade, 13 Yonkav, 1 Dronkavser, 1 Denkvakud, 3 Denkvak and 15 Kikav. Currently, there are a total of 8,100 Armour corps personnel, both officers, non-commissioned officers and enlisted men who fill various Satkav units. The Armour corps unit's materiel is in the form of defense equipment which fills the various satkav, a total of 943, both tank armor and panzer armor. The tank ranges operated include MBT Leopard, Marder 1A3, MBT ARV 2/3 RI, BT AEV 2 RI, MBT ABLB Beaver RI, MBT DTV, AMX-13, Scorpion, and Stormer. Meanwhile, the panzer weapons in operation include Tarantula, V-150, VAB, Anoa, APR 1 V1, BTR-40, Co.Scout, Panhard, Ferret, Saladin and Saracen.

In the MEF phase III framework, the TNI-AD Armour corps Road Map data for 2020-2044 has planned the development of posture in terms of strength, ability and Deployment aspects. This development is aimed at meeting ideal needs in supporting the main tasks and functions of the TNI-AD Armour corps. The phasing in development posture for 2020-2024, the strength aspect of armour corps units up to 2024, is expected to meet the needs of armour corps units in accordance with the TOP (Table of Organization and Equipment) totaling 38 armour corps units, personnel

aspects up to 2024 11,847, armored requirements: 1,573 units and implementation of maintenance and upkeep (harwat) Year 2022: 22 Units Amx-13 & 50 Units Scorpion-Stormer B) 2023: 22 Amx-13 units C) 2024: 20 Leopard Units . The development capability aspect will be carried out by increasing the capabilities of personnel, defense equipment and technology as well as carrying out maintenance and upkeep on the defense equipment currently owned to increase its durability. Meanwhile, the Deployment aspect is carried out by developing and/or forming new units which are placed in several regional military commands in Indonesia to meet the needs of the region.

Efforts to develop the TNI-AD armour corps posture in accordance with the MEF program included in the 2020-2044 TNI-AD Armour corps Road Map design data described above have encountered a number of obstacles in the field . In the 2020-2024 MEF III phasing, there are still deficiencies in aspects of armour corps posture, including aspects of strength, ability and Deployment. Strength aspects include the number of units, personnel and defense equipment used which cannot yet be met on the required scale. Strength Aspect The condition of the Indonesian Army's defense equipment, armour corps units, is in a condition that is not operationally ready, where the condition of the defense equipment, especially tanks, is at less than 60% TOP with technology that is no longer suitable for use in supporting a military operation. The condition of the TNI AD's defense equipment tanks should be at a minimum of 80% of TOP (Wardhana, 2018). Problems in maintaining the capability of other defense equipment lie in the issue of carrying out maintenance and upkeep (harwat) of military equipment, such as the Leopard 2RI tank, which is hampered by the lack of harwat budget and exacerbated by the Russo-Ukrainian War (Laboratorium Indonesia 2045, 2023). This could have a significant impact on military readiness and national defense. Another thing that is an obstacle in maintaining capability is the lack of training facilities for soldiers (Laboratorium Indonesia 2045, 2023). One of the

main impacts of the lack of training facilities is the inability of soldiers to master the latest technology and tactics. Soldiers who do not have access or opportunities to train with the latest technology, such as weapons, communications systems, or combat simulations, can feel marginalized and underprepared in real situations. In the Capability aspect, personnel need to adapt to new technologies and improve interoperability with other corps. The current aspect of armour corps units' Deployments is not in line with the needs of modern warfare which requires flexible and modern capabilities.

Efforts to develop the TNI-AD's armour corps posture and faced with the phenomenon of modern warfare, there are problems that need to be overcome in order to support the implementation of main functions and tasks. From the experience of modern wars between Ukraine and Russia as well as Armenia and Azerbaijan, it shows a number of weaknesses faced by armour corps. This means that the Armour corps needs to immediately adapt to increase the capacity of Indonesia's land defense strategy to face modern war. This includes better Anti-Tank protection , the latest defense technology as well as integration support with other units and air support for armour corps which currently does not yet need to be fulfilled immediately. Apart from that, the problem that needs to be addressed is the implementation of efforts to develop the posture of the TNI-AD armour corps in terms of Strength, Capability and Deployment in accordance with the MEF and the 2020-2044 TNI-AD Armour corps Road Map, which to date has not been optimal. As stated by Dirbinsen Pussenkav TNI AD Brigadier General TNI Agus Erwan in the Webinar on Armour corps Challenges in Modern War, the relevance of a armour corps unit's posture is determined by its ability to adapt to modern technology (Sasongko, 2022). This makes the posture of the TNI AD armour corps units require modernization of weapons and organization because armour corps unit operations can only be effective in a joint TNI operation

(Sasongko, 2022). Because of this, it is important to develop an appropriate armour corps posture to be able to face modern warfare.

With the background described previously, supporting efforts to develop the TNI-AD Armour corps posture requires systematic analysis. This is to identify strategic factors and formulate relevant strategies that can be prioritized in developing the TNI-AD's armour corps posture to support military operations to face modern war . Therefore, this research will analyze the efforts to develop the TNI-AD Armour corps posture that have been carried out.

1.2. Research Focus and Sub-Focus

1.2.1 Research focus

Based on existing phenomena, this research focuses on the development of the armour corps posture of the Indonesian National Army to face modern warfare.

1.2.2 Research Subfocus

The subfocuses in this research are:

- a. Development of the posture of the Armour corps of the Indonesian National Army, which has been carried out to face Modern War
- b. Obstacles to the Development of the Armour corps of the Indonesian National Army's posture to face Modern War
- c. Strategy for developing the posture of the Armour corps of the Indonesian National Army to face Modern War

1.3. Problem Formulation

Based on the description of the background of the problem above, the problem in this research can be formulated as follows:

- a. How has the posture of the Armour corps of the Indonesian National Army been carried out to face modern warfare?
- b. What are the obstacles to developing the posture of the Armour corps of the Indonesian National Army to face Modern War?
- c. What is the strategy for developing a good armour corps posture for the Indonesian National Army to face modern warfare?

1.4. Research Purposes

The purpose of writing this research is specifically prepared based on the research focus which is the formulation of the problem in this thesis, namely as follows:

- a. To identify the development of the armour corps posture of the Indonesian National Army, which has been carried out to face modern warfare.
- b. To analyze the obstacles to developing the posture of the Armour corps of the Indonesian National Army for Facing Modern War.
- c. To formulate a strategy for developing a Proportional Posture for the Armour corps of the Indonesian National Army to face Modern War .

1.5. Research Benefits

1.5.1 Theoretical Benefits

Theoretically, this research can be useful to add to the study regarding the Development of the Armour corps Posture of the Indonesian National Army to face Modern War . For the Defense University, this research is useful for enriching studies on topics that can be used as references for the educational curriculum.

1.5.2 Practical Benefits

It is hoped that this research will provide practical benefits for several parties, including:

- a. Ministry of Defense as input that can be used in creating strategies for developing TNI posture
- b. For the Indonesian National Army Headquarters, it is an input that can be used by upper command units in providing support to Force Headquarters to provide guidance to lower units.
- c. For the Indonesian Army National Army Headquarters, it is an input that can be used in conducting training carried out through the Army's Central Executive Agency, Armour corps Armament Center, to provide guidance to lower unit