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Indonesian Navy Geostrategy: Building Under Surface Strength As A Center Of Gravity For National Defense

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Abstract – The discovery of a strange UUV (Unmanned Underwater Vehicle) in the form of a seaglider three times in Indonesian waters indicates a threat towards state sovereignty. Indonesia with its five pillars of the World Maritime Axis (PMD) is still struggling with issues of maritime threats often arise in the form of territorial violation, the pilferage of marine products, and other illegal activities. As an archipelagic country with a wide border gate of the sea, it is often difficult to control the violations occur. Indonesia has huge marine potential requires the attention of the state in order to create the protection from the threat of sovereignty in the maritime territory of the archipelago. Under sea level, including the seabed, is a component of the continental shelf that needs to be monitored, considering that this area can be a gateway for foreign powers who want to intrude on Indonesian sovereignty. In addition, the under-surface area can be a strategic strength for the Indonesian navy as a country with a very strong maritime style. The actualization of the fifth pillar of PMD (building maritime defense forces) is to ensure the realization of security which is transformed into a naval geostrategy with the development of under-surface forces as the Center of Gravity for Indonesian defense.

Keywords - Center of Gravity, Geostrategy, PMD (World Maritime Axis), Security, UUV (Unmanned Underwater Vehicle)

I. INTRODUCTION

We all know how great the maritime potential that Indonesia has. In terms of geographical location, wealth of resources, and the area covered by its waters, Indonesia is known to the world as a maritime country. Indonesia is located at the crossroads of two continents and two oceans, making the Indonesian territory a world trade route. Indonesia's sea area with an area of 3,544,743.9 km2 which represents about 65% of the total area of Indonesia also holds abundant wealth (Cassidy, et al., 2016). The islands of the archipelago which are scattered in 17 thousand island clusters are connected to one another in a single unit of the Unitary State of Indonesia.

The Vision of the Maritime Axis through its five main pillars namely: i) the development of Indonesian maritime culture; ii) optimal protection and management of marine resources for the benefit of the people; iii) infrastructure development and maritime connectivity; iv) maritime cooperation through diplomacy; and v) the development of maritime defense forces (Cassidy, et al., 2016), is a grand strategy for maritime awareness of the nation's leaders. Awareness of destiny that the Indonesian state should have made the sea and its marine sector the foundation of state life in a multidimensional field. Economic, political, cultural, social, and of course defense.

The vision of the Maritime Axis needs to be actualized through marine-oriented development policy priorities (National Ocean Policy) which contains programs and plans for Indonesian marine development and the direction of national maritime strategic policies (Cassidy, et al., 2016). Maritime-oriented development does not only prioritize economic aspects but is more aware of the nature of stability as a guarantor for development to continue. Stability is related to security which requires freedom

from threats that have positive implications for the survival of a nation. Especially in economic development, the creation of security provides space for a nation to continue to innovate and pursue its national interests.

In relation to maritime security as an aspect of maritime stability, this nation has faced countless territorial violations. The vision of the world's maritime axis with its five pillars still has to collide with maritime threats which have allowed the progress of Indonesia's maritime policies to be disrupted, even threatened. Maritime threats are often in the form of very sensitive threats to sovereignty. The Indonesian Navy plays an important role in upholding the sovereignty of the Republic of Indonesia in order to continue to support the strategic visions of making Indonesia the world's maritime axis.

This paper tries to present answers to two big questions, namely:

- 1. How does the Indonesian Navy's geography embody the fifth pillar in the vision of the World Maritime Axis?
- 2. How urgent is the development of subsurface forces as the center of gravity for Indonesia's defense?

The purpose of this writing is:

- 1. Describe the geostrategy of the Indonesian Navy in the framework of realizing the fifth pillar of the vision of the World Maritime Axis.
- 2. Describe the urgency of developing subsurface forces as the center of gravity of Indonesia's defense.
- 3. Provide academic contribution to the study of marine defense strategy science and enrichment materials for Indonesian defense personnel.

The pillar of Indonesia's maritime defense force development mandates the task of the Navy as the main defense stakeholder. Strategic steps are needed that are able to adapt to the demands of the times in order to achieve maritime independence as aspired to in the five pillars of the World Maritime Axis.

II. RESEARCH METHOD

The approach used by the author in this study is a qualitative approach. The qualitative approach is based on structural functionalism, realism, positivism, behaviorism and empiricism which essentially emphasizes concrete things, empirical tests, and real facts (Sarwono, 2006).

The data is descriptive in nature, that is, the presentation can be in the form of descriptions of categorized symptoms, or other forms such as photos, documents, artifacts or field notes during research (Sarwono, 2006). The research results are described descriptively, namely by describing the relationship of the phenomena found in the research. The data collection technique used is library research, which collects literature related to research sourced from scientific books, research reports, scientific essays, theses and dissertations, regulations, decrees, news, and written sources. both printed and on online web pages which are then analyzed and conclusions drawn.

III. DISCUSSION

The concept of the World Maritime Axis is outlined in Presidential Regulation Number 2 of 2015 concerning the 2015-2019 National Medium Term Development Plan (RPJMN). The concept of the World Maritime Axis (PMD) presented by President Joko Widodo at the 9th East Asia Summit (EAS) Summit in Myanmar on 13 November 2014 contains the pillars of the development agenda to realize the World Maritime Axis. The five main pillars of PMD development include (Humas, 2014):

The first pillar, rebuilding Indonesia's maritime culture. As an archipelagic country with 17 thousand islands and twothirds of its territory is sea, the Indonesian people need to realize their identity as a nation that depends on the management of the sea for its future prosperity. Management of territorial waters needs to be an urgency considering the potential sources of wealth contained by the sea. Understanding the concept of a maritime nation needs to be an agenda for instilling a paradigm from an early age in order to unify the framework of thinking of all levels of the nation. Maritime culture is the basic energy in order to achieve the ideals of the world's maritime axis.

The second pillar is protecting and managing marine resources, with a focus on building seafood sovereignty, through the development of the fishing industry, by placing fishermen as the main pillar. Optimal fishermen empowerment as the spearhead of marine product management is an urgency in order to achieve marine food sovereignty. As a philosophical basis, Article 33

paragraph 3 of the 1945 Constitution stipulates that the land, water and natural resources contained therein shall be controlled by the state for the greatest prosperity of the people. Referring to the mandate of the 1945 Constitution article 33 paragraph 3, the management of Indonesia's natural resources including maritime wealth is used as much as possible for the benefit of the people.

The third pillar gives priority to the development of maritime infrastructure and connectivity, by building sea highways, deep seaports, logistics, the shipping industry and maritime tourism. Infrastructure development is the spirit of Joko Widodo's government policy in realizing the nawacita. Maritime infrastructure and connectivity must be a priority as the embodiment of the values of unity between islands across the archipelago. The Djuanda Declaration in December 1947 declared to the world that the Indonesian seas, which include the seas around, between and within the Indonesian archipelago, are an integral part of the territory of the Unitary State of the Republic of Indonesia. Maritime infrastructure and its connectivity mean that the sea is a link and not a separator. So that the development agenda for remote areas of the country can be reached in the context of equitable distribution of national development.

Fourth, through maritime diplomacy, inviting all Indonesian partners to cooperate in the maritime field. Reducing prolonged maritime conflicts must be on the agenda of international cooperation. Problems such as fishing theft, violations of sovereignty, territorial disputes, piracy and marine pollution must become a common concern to be addressed in order to create maritime security in the region.

Fifth, as a country that is the fulcrum of two oceans, Indonesia has an obligation to build a maritime defense force. This is necessary not only to maintain Indonesia's maritime sovereignty and wealth, but also as a form of responsibility in maintaining shipping safety and maritime security. Maritime defense is the ultimate pillar to support the other four pillars. Defense is the basic survival of a nation to be able to survive, exist, and be able to compete in facing the onslaught of global civilization.

The above ideals and agenda will become Indonesia's focus in the 21st century. Indonesia will become the World Maritime Axis, a force that crosses two oceans, as a maritime nation that is prosperous and dignified (Humas, 2014). Idealism in the five pillars should indeed be an urgency considering that de facto Indonesia consists of 17,504 islands with 2/3 of its territory being waters/seas. Meanwhile, de jure, Indonesia is an archipelagic country that has been established based on the 1982 UNCLOS convention. The five pillars of PMD should receive more attention because such a large maritime potential can become the foundation for the survival of the Indonesian nation.

Indonesia with its strategic position is between two continents and two oceans, a busy water area with the traffic of thousands of international merchant ships. The Indonesian Archipelagic Sea Lanes are also an important shipping lane for the world with choke points in the Malacca Strait, Sunda Strait, Lombok Strait and Makassar Strait. Indonesia's strategic location and abundant potential of marine resources are countless blessings for the life of the Indonesian nation. However, the opening of Indonesian territorial waters as part of the world's maritime axis has the potential to become a conventional threat because it can involve Indonesia in maritime issues (Hidayat & Ridwan, 2017). Due to Indonesia's open sea geography, it often creates many problems related to resource theft, illegal shipping activities, and exploitation by foreign parties. Not to mention the sea border conflicts that often arise, as well as intrusions by foreign parties into Indonesian territorial waters using ships on the surface, as well as using submarines and sea drones or seagliders below sea level.

Maritime issues that often arise need attention, moreover these problems are related to and offend state sovereignty. Sovereignty is the most important main issue in defense. President Joko Widodo emphasized that the sovereignty of the Unitary State of the Republic of Indonesia is a fixed price (Presidential Decree, 2020).

Sovereignty threats related to maritime security cover all aspects of the maritime area, not only on the surface, but also below the surface. In the Law on Marine Affairs of the Republic of Indonesia, it is explained that maritime affairs are matters related to the sea and/or activities in the sea area which include the seabed and the land beneath it, the water column and the surface of the sea, including coastal areas and small islands.

Under the sea is a very open gate of the risk of violations. First, the media aspect is so broad. Such a large column of sea water requires extra care, because it is not only related to its length but also the height of the water column from the bottom to the surface. Second, the nature of water over visibility makes optimal detection difficult. When there is a breakthrough, foreign objects through the subsurface will tend to be invisible, in contrast to objects that are above the surface which can easily be

detected even with the naked eye. Third, underwater defense has several obstacles with the lack of alusista owned by Indonesia in defending underwater areas (Legionosuko, Sumantri, & Purwanto, 2019).

Indonesia's underwater defense strategy has become so important that its strength has been questioned when our maritime defense has been "broken in" three times in the last 3 years. The three foreign objects that have penetrated Indonesian sea territory are the UUV (Unmanned Underwater Vehicle) or AUV (Autonomous Underwater Vehicle) in the form of a seaglider which began with its discovery in the Riau Archipelago Sea in March 2019. Then in January 2020, a similar discovery occurred in the East Java Sea. Finally, on 26 December 2020 a foreign seaglider was also found in the Selayar sea.

Unmanned Underwater Vehicle (UUV) is an unmanned underwater vehicle. Unmanned is defined that the operator who controls the vehicle under the surface of the water is not inside the ship, but controls the ship outside which is possible from a long distance. The use of this remote controlled vehicle was developed for military and research activities. In its development, unmanned underwater vehicles have become relatively high-tech and expensive. One of its predecessors was German electric ships in World War I which were equipped with explosives and directed at large, slow-moving warships (Munazid & Suwasono, 2017).

The Seaglider is an unmanned underwater vehicle developed for continuous long-term measurement of oceanographic parameters for research or defense purposes, if oceanographic observations cannot be carried out by remote sensing technology such as satellites (Purnomo, 2021). This UUV has the ability to retrieve Multibeam and Side Scan Sonar data, namely depth data collection, seabed imagery, CTD (Conductivity Temperature Depth) and SVP (Sound Velocity Profiler). Apart from being used for marine mapping purposes, this data is also for military purposes, such as underwater layer maps for submarines (Purnomo, 2021).

Military and intelligence observer Susaningtyas Kertapati stated that the foreign UUVs found by fishermen were all in a malfunction state, which meant that there were internal technical problems in the system (Rahayu, 2021). This condition then strengthens the view that Indonesia's defense equipment in defending its underwater areas is still lacking and its sophistication has not been able to compete with neighboring countries (Legionosuko, Sumantri, & Purwanto, 2019). The condition of the UUV found in a damaged condition also raises suspicions that there are many other UUV under the surface of the Indonesian sea that have not been detected.

Research and Operations on Technology & Society (ROOTS) researcher Riefqi Muna stated, as a strategic maritime country in the middle of the Indo-Pacific, this breach could have geopolitical meaning and is a sensitive issue for the dynamics of Indonesia's national security. With regard to diplomatic relations in the region which are currently heating up, the discovery of the seaglider means that there has been an intrusion by foreigners into the sovereign territory of the Indonesian state in the form of activities breaking through national borders (Rakhmatulloh, 2021).

Military observer from the Institute for Security and Strategic Studies (ISSES) Khairul Fahmi said the findings were detrimental to national interests and had the potential to threaten Indonesian sovereignty. The Seaglider, with its functions related to intelligence and security, allows it to obtain strategic data and information regarding the depth and layers of the sea, which are of course very useful for managing national resources for defense purposes.

UUV is very effectively used to obtain physical data of the water column of waters such as temperature, pressure, salinity and currents, waves and seabed conditions for a long duration to determine certain characteristics for various purposes, especially interests related to research and defense (Purnomo, 2021). UUV roaming period can usually reach several years and the pattern of work is to transmit the acquisition of roaming data via satellite connected to the owner from a very far away place.

The discovery of the seaglider means that in Indonesia's maritime security there are still many vulnerable gaps, both at the border and in territorial waters. The marine area as the main object of the world's maritime axis agenda still leaves a myriad of multidimensional threats. Legionosuko, et al (2019) explained that the nature of threats is classified into two forms, namely military threats and non-military threats. Among military threats include aggression, territorial violations, armed rebellion, sabotage, espionage, acts of armed terror, threats to sea and air security, as well as communal conflicts or civil wars. While non-military threats with ideological, political, economic, socio-cultural, technological and information dimensions, as well as public safety.

Judging from the nature and shape, seagliders that break through the boundaries of Indonesian territory can be classified into military threats in the form of territorial violations and espionage. Territorial Violation is a form of activity by one party to enter certain areas belonging to another party without permission (Legionosuko, Sumantri, & Purwanto, 2019). Territorial violations in a military context can be in the form of breakthroughs carried out using warplanes or warships of other countries. Basically, there are no regulations governing whether or not seagliders must enter the territory of a country. KSAL TNI Admiral Yudho Margono stated that the existence of this seaglider had not been regulated in state regulations (CNN, 2021). So far, the rules relating to permits only apply to identifiable tools which are instruments of war, while the identity of seagliders is not very clear. In this case the author agrees with KSAL Yudho that the existence of seagliders can spy on Indonesia's marine wealth so it is necessary to enact regulations regarding permits for foreign objects including those similar to seagliders to avoid other military threats in the form of espionage and other threats. Espionage comes from the French word espionnage which means reconnaissance or spying. Meanwhile, according to terminology, espionage is a practice to collect information about an organization or institution that is considered confidential without obtaining permission from the legitimate owner of the information (Legionosuko, Sumantri, & Purwanto, 2019). Espionage is a form of activity carried out by intelligence to obtain information or military secrets from a country. Even though the three seagliders have not found evidence of espionage practices, and other slices from several military-intelligence experts doubt the existence of espionage practices on these foreign objects, in order to strengthen the 5th PMD pillar, namely building a maritime defense force, preventive actions must always be considered to overcome serious threats to sovereignty.

The efforts of a country to deal with various threats that come from outside and from within the country in order to protect and safeguard the nation's national interests by using political, economic and military power is an understanding of the concept of national security (Darmono, 2010).

National security is also interpreted as the need to maintain and maintain the existence of the state through economic, military and political strength and the development of diplomacy. This concept emphasizes the ability of the government to protect the territorial integrity of the country from threats that come from outside and within the country (Darmono, 2010).

The concept of security for Indonesia is stated in the opening of the 1945 Constitution, namely "... protecting the entire Indonesian nation and all of Indonesia's bloodshed participating in carrying out world order based on freedom, eternal peace and social justice.". The purpose of the state in the fourth paragraph of the preamble of the 1945 Constitution is to secure the state to be present in national security efforts in order to achieve its national interests. In order to maintain national security, a country carries out defense duties to uphold the country's external sovereignty against external threats by using military force.

Deeper on national security, the concept of maritime security describes more concretely the conditions of conventional threats in marine studies that are faced by the Indonesian nation amid the aspirations of PMD.

Broadly speaking, maritime security is defined as a condition in which there is no maritime "threat" (absence of threats) such as disputes between countries; acts of terrorism at sea; piracy; trafficking in narcotics, people and smuggled goods; weapons proliferation; IUU fishing (illegal, unreported and unregulated fishing); environmental crimes; and marine disasters and accidents. Another definition complements the meaning of maritime security which is more than just the absence of threats, but also includes conditions that are accompanied by the creation of stability in the maritime area (Cassidy, et al., 2016).

The characteristics of maritime security include the following (Cassidy, et al., 2016): (i) threats to maritime security are not bound by national boundaries, and therefore require international cooperation; (ii) threat identification is influenced by non-traditional security perspectives because the scope of threats is broad, not only originating from military force, and focuses on state actors; and (iii) is determined by the construction of a country's security based on perceptions of what it considers to have the potential to threaten the stability of maritime security. Maritime security provides space for threats with a broad scope of nature; not limited to military, but also non-military; not only state actors, but also non-state actors, which have the potential to threaten maritime sovereignty.

The Vision of the World Maritime Axis is an effort to actualize Indonesia's geostrategic which is created from efforts to manage Indonesia's maritime potential both economically for welfare and strategically for defense and security. The fifth pillar of PMD, the development of maritime defense forces needs to be a concern given the urgency in it, that maritime defense has implications for the solidity of the other pillars; development of maritime culture, maintenance and management of marine resources, development of maritime infrastructure and connectivity, and maritime cooperation.

The key component of maritime defense is the Indonesian Navy. In responding to existing threats, to create stability and national security, the TNI as the main stakeholder in maritime defense needs to create an updated strategy that takes into account the expanse of Indonesia's surface relief. Strategy in utilizing the country's geographical conditions or constellation to determine policy goals, and means to realize the ideals of a nation is a general definition of geostrategy (Sulisworo, Wahyuningsih, & Arif, 2012).

The concept of Indonesia's geostrategy is essentially not developing strength for control of territories outside Indonesia or for expansion to other countries, but a strategic concept based on the conditions of the method, or ways to develop the potential of national power aimed at securing and maintaining the integrity of the sovereignty of the State of Indonesia and development. country from possible disturbances coming from within and from abroad.

Indonesia's national defense system is structured based on the geostrategic concept as an archipelagic country. This is stated in RI Law Number 3 of 2002 concerning National Defence, that national defense is prepared by considering the geographical conditions of Indonesia as an archipelagic country. Responding to the possibility of maritime threats coming from under the surface of the sea, the strategy that should be carried out by the Indonesian Navy is to develop subsurface forces. The ability to detect foreign objects and unlawful activities below the surface must be improved. In general, increasing the capability of personnel and defense equipment that can be optimized in securing Indonesia's underwater areas is a logical urgency that must be a concern of Indonesia's geostrategy. In defense policy, there are three interrelated components, namely the defense program, defense budget, and weapons procurement (Legionosuko, Sumantri, & Purwanto, 2019). Concentrating these three components for the development of subsurface defense forces is a strategic step considering that threats that may come from the subsurface can be a serious disturbance to sovereignty. Furthermore, we must realize the nature as a nation that is blessed with such a wide expanse of sea. So a geostrategy that focuses on the existence of the sea must be the main menu in Indonesia's defense system, including the development of subsurface forces.

The subsurface defense function is to realize and defend all aspects of the country's territory as a single defense unit capable of protecting the sovereignty of the Unitary State of the Republic of Indonesia, territorial integrity, and the safety of the entire Indonesian nation from every threat, both coming from outside and arising within the country (Legionosuko, Sumantri , & Purwanto, 2019). Subsurface defense can be used as a center of gravity as a geostrategic actualization of the Indonesian Navy in the context of actualizing the fifth pillar of PMD, building a maritime defense force.

The concept of Center of Gravity ala Clausewitz's in the contemporary era in the translation of the book On War by Howard and Paret (1976) is interpreted as the center of all power and movement, on which everything depends. The Joint Publication 5-0 defines a center of gravity as "a source of strength that gives moral or physical strength, freedom of action, or the will to act." The definition of COG proposed by Eikmeier states that "a center of gravity is the main entity that has the inherent ability to achieve goals." (Eikmeier, 2010) From these various definitions, the meaning of the center of gravity can be drawn as a unified source of strength for freedom of action in order to achieve goals. The key word is source of power. As a maritime country, with the dominance of the sea area compared to the land area, the source of the country's defense power should have relied on the maritime sector. In this paper, the author offers the development of subsurface forces as a source of strength or center of gravity for Indonesia's defense. The geostrategic aspect of the maritime nation's awareness, the deployment of subsurface forces is a defense pattern that is unique to Indonesia. Besides deterring enemies who enter by sea either on the surface or under the surface, the development of this subsurface force is a complete form of defense for an archipelagic country like Indonesia.

Several reasons regarding the urgency of developing underwater defense forces put forward by Major General TNI Jonni Mahroza include (Mahroza, 2021):

- Under the sea can be used as a center of defense that is difficult to detect. Its position and mobility can be kept secret without the need to prepare and look for disguises like on land.
- Underwater defense technology will be difficult to destroy. When all forms of technology built on land or in the air can be destroyed instantly, undersea power is relatively difficult to destroy because of its hidden location and difficult for the enemy to reach.

- The dominant breadth, position and mobility of the subsurface forces will be more freely regulated to be able to provide protection for objects on the surface.
- Underwater power can be projected to attack various targets. Undersea forces are capable of attacking surface ships, aircraft in the air, or even targets on land.
- Underwater defense can be the last line of defense, when all land objects have been destroyed by the enemy. Underwater defense can be a hope in order to reverse the state of war, and determine the victory of war.

The development of subsurface forces as the center of gravity of Indonesia's defense, enables the acceleration of the achievement of the global maritime axis vision that the Indonesian nation aspires to. The most open entrance for Indonesia's enemies is the sea. The vast ocean would be difficult to watch and illogical to fence off. However, the development of underwater defense forces can be a strategy to optimize sea control, especially in deterring threats that disturb the sovereignty of the Unitary State of the Republic of Indonesia.

IV. CONCLUSIONS AND RECOMMENDATIONS

Indonesia with the vision of the World Maritime Axis cannot be separated from various maritime threats. The relief of Indonesia's expanse of the earth's surface is like two sides of a coin which offers a myriad of potential for prosperity as well as various disturbances to stability. The fifth pillar in the vision of the World Maritime Axis indicates the strengthening of maritime defense as a guarantor for the creation of maritime stability and security. The Indonesian Navy and other stakeholders need to pay attention to the development of subsurface defense forces as a geostrategy considering the urgency of responding to potential threats through subsurface gates, as well as its various advantages being applied as the center of gravity of national defense.

The strategic concept offered by Major General TNI Jonni Mahroza regarding subsurface geostrategy includes (Mahroza, 2021):

- First, the idea of prioritizing the ability to acquire sophisticated submarines, which are equipped with guided missiles capable of attacking objects on land and in the air, if necessary, nuclear-powered submarines that can dive for a long duration.
- Second, the ownership of underwater drones for surveillance and tactical attacks.
- Third, the enrichment of underwater infrastructure, including bases that are invisible from enemy spies.
- Fourthly, the development of subsurface contour research and mapping along with underwater weapons research.
- Fifth, political will from all levels, especially legislative and executive stakeholders, must be present in actualizing the geostrategy for the development of this subsurface defense force.

The application of this geostrategy is not a substitute for the defense and security system as the spirit of national defense, but complements and strengthens it by adjusting Indonesia's maritime posture. With this development, all stakeholders must be prepared with increasing the quantity of naval personnel and begin to transform into a true maritime nation by focusing on a source of strength or center of gravity on maritime aspects, especially subsurface defense.

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