

Strengthening Naval Diplomacy RI-US in Intelligence, Surveillance, Reconnaissance through Cooperation Afloat Readiness and Training 2024

Yurizki Aliyah*, Jonni Mahroza, Tasdik Mustika Alam, Rudy Sutanto,
Sri Patmi & Lukman Yudho Prakoso

Sea Defense Strategy, The Republic of Indonesia Defense University, Indonesia

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*Corresponding Email: alivah.rizki@ymail.com

Abstract

This research discusses the joint exercise between the Indonesian Navy, the US Navy, and the US Marines (USMC), namely Cooperation Afloat Readiness and Training (CARAT) to carry out Intelligence, Surveillance, and Reconnaissance (ISR), littoral warfare, and coastal defense missions. This research uses descriptive qualitative related to Cooperation Afloat Readiness and Training (CARAT). CARAT is implemented bilaterally to enhance the maritime partnership between Indonesia and the US. For Indonesia, building a maritime partnership with the US should focus on bilateral interests and regional security. For the US, the CARAT program in Indonesia can be seen as part of an effort to strengthen its influence in Southeast Asia, including facing China's dominance in the region. Based on the above background, the researcher formulates the problem, namely how to strengthen Indonesia's cooperative relationship with the United States in the face of China's dominance in the Southeast Asian region. Data collection is obtained from a literature review by collecting various articles, books, journals, or other sources. The results of this study indicate that to strengthen Indonesia's cooperative relationship with the United States in the face of China's dominance in the Southeast Asian region is to increase cooperation in security and defense, through Cooperation Afloat Readiness and Training 2024. This will help strengthen Indonesia's defense capacity and also send a signal to China that Indonesia is not easily intimidated. It is also important to continue to build relations with China in a critical but constructive manner, by promoting dialogue and diplomacy to seek points of agreement and achieve stability in the Southeast Asian region. CARAT activities are an effective strategy for enhancing security stability in the region through maritime defense cooperation. The program benefits partner countries in building relationships of trust, enhancing defense capabilities, and combating maritime threats. To increase the effectiveness of CARAT, it is recommended that partner countries continue to be committed to the program and maintain good cooperation with the US Navy and other countries in the region.

Keywords: Coastal Defence, Cooperation Afloat Readiness and Training, Intelligence, Reconnaissance, Surveillance, Littoral Warfare

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INTRODUCTION

Sea defense is one of the important aspects of maintaining security stability in the region. *Cooperation Afloat Readiness and Training* (CARAT) is a strategy to enhance military cooperation and sea defense in Southeast Asia. The goal of CARAT is to strengthen the relationship between the US Navy and partner nations in the region to enhance defense capabilities and build trust and understanding.

In May 2024, the Indonesian Navy, US Navy, and US Marines will collaborate to organize *Cooperation Afloat Readiness and Training* (CARAT) 2024. According to Dispenal, the CARAT 2024 Latma aims to improve the professionalism of soldiers, enhance relations and understanding between the two countries, and maintain security stability in the region.

During this joint exercise, the capabilities of both countries will be combined to execute *Intelligence, Surveillance, and Reconnaissance* (ISR), *littoral warfare*, and *coastal defense* missions. The exercise will be supported by a *joint command control centre* which will be used to oversee the entire process of the exercise.

The concept of Latma CARAT 2024 will utilize an approach based on an *integrated scenario-based exercise*. This will involve all stages of exercise planning, preparation, and execution for each *working group* (WG). The material consists of tactical, technical, and procedural as well as the material during the *Staff Exercise* will be prioritized on the exercise scenario with the focus of the exercise material on *coastal defense* or anti-amphibious.

CARAT is implemented bilaterally to enhance the maritime partnership between Indonesia and the US. For Indonesia, building a maritime partnership with the US should be focused on bilateral interests as well as regional security. For the US, the CARAT program in Indonesia can be seen as part of an effort to strengthen its influence in Southeast Asia, including countering China's dominance in the region.

Based on the above background, the researcher formulates the problem, namely how to strengthen Indonesia's cooperative relationship with the United States in the face of China's dominance in the Southeast Asian region.

Bilateral relations between Indonesia and the United States are strong and long-standing, with massive joint military exercises. This shows that diplomacy with the United States can help Indonesia's national security both internally and externally. This will certainly have a direct impact on Indonesia's international presence, which will certainly help the security of the Southeast Asian region.

After studying the potential and existing efforts to improve security stability in the Southeast Asian region, researchers would like to develop ideas on additional ways to develop and enhance cooperation in the field of regional security, especially in the *Intelligence, Surveillance, and Reconnaissance* missions through *Cooperation Afloat Readiness and Training* 2024, by utilizing the support and great influence of the United States.

The primary objective of the study is to explore and strengthen the naval diplomacy between Indonesia and the United States through the *Intelligence, Surveillance, and Reconnaissance* (ISR) missions conducted under the *Cooperation Afloat Readiness and Training* (CARAT) program in 2024. This will involve enhancing the professionalism of soldiers, improving relations, and deepening the understanding between the two countries while also contributing to maintaining security stability in the region.

In the context of CARAT 2024, the collaboration between the Indonesian Navy, US Navy, and US Marines offers a strategic opportunity to enhance maritime cooperation and defense capabilities. Through joint exercises focusing on ISR, littoral warfare, and coastal defense missions, both countries aim to bolster their operational effectiveness and interoperability. Central to this effort is the establishment of a joint command control center to facilitate coordination and communication throughout the exercises.

The concept of CARAT 2024's Latma exercises is grounded in integrated scenario-based training designed to simulate real-world operational scenarios. By incorporating tactical, technical, and procedural elements within the exercises and staff exercises, the participating working groups will be able to hone their skills and tactics, with a specific emphasis on coastal defense and anti-amphibious operations.

The bilateral implementation of CARAT serves as a cornerstone for strengthening the maritime partnership between Indonesia and the United States. This partnership is not only crucial for advancing shared interests but also plays a significant role in enhancing regional security. For Indonesia, collaboration with the US in maritime security is essential for safeguarding national interests, while for the US, engaging in such partnerships is part of a broader strategy to bolster its influence in Southeast Asia.

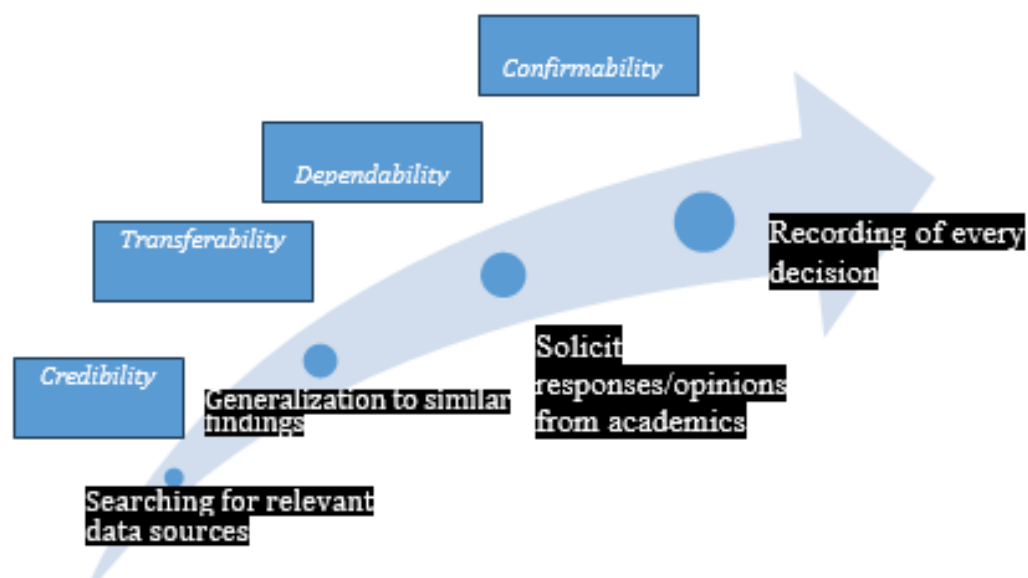
Given the growing regional challenges, particularly China's increasing influence in Southeast Asia, the study aims to address the pressing issue of strengthening Indonesia's cooperative ties with the United States. By examining the historical context and dynamics of the bilateral relationship, the research seeks to identify new avenues for collaboration and cooperation in addressing regional security challenges.

Building upon the existing foundation of strong bilateral relations and joint military exercises, the research aims to leverage the diplomatic and security benefits of engaging with the United States. By enhancing Indonesia's international presence and security capacities, the study anticipates a positive impact on regional security dynamics and stability in Southeast Asia.

RESEARCH METHODS

This research uses descriptive qualitative to get an in-depth and descriptive understanding of phenomena or issues related to Cooperation Afloat Readiness and Training (CARAT). Data collection is obtained by literature review by collecting various articles, books, journals, or other sources related to Strengthening Indonesia-US Naval Diplomacy in the Intelligence, Surveillance, and Reconnaissance mission through Cooperation Afloat Readiness and Training 2024.

The analysis process used is the theory proposed by Milles, Huberman, and Saldana (2014), which includes data collection, data condensation, data display, and drawing and verification of conclusions. The data validity tests used are dependability (reliability), transferability (external validity), credibility (internal validity), and confirmability (objectivity), carried out at each stage of the matter described in the following research design.



Picture 1. Research design

Source: Data Processed by the Author, 2023

The above is done to get the accuracy of the research results and the approach used by the researcher is consistent if used by other researchers on different topics (Gibbs, 2007 and Creswell, 2017). To enhance the methodological details of the research, the analysis process followed the framework proposed by Milles, Huberman, and Saldana (2014) which includes data collection, condensation, display, and conclusion. The validity tests conducted were

dependability (reliability), transferability (external validity), credibility (internal validity), and confirmability (objectivity), ensuring the reliability and credibility of the findings.

1. Dependability (reliability)

Dependability refers to the consistency and stability of the research findings. In the context of the research on strengthening naval diplomacy between Indonesia and the United States in intelligence, surveillance, and reconnaissance through Cooperation Afloat Readiness and Training (CARAT) in 2024, dependability entails ensuring that the data collection methods, analysis procedures, and interpretation of findings are reliable and consistent. This can be achieved by maintaining transparency in the research process, using standardized data collection tools and techniques, and documenting the steps taken to ensure the reliability of the research findings.

2. Transferability (external validity)

Transferability refers to the extent to which the research findings can be applied to other contexts or settings. In the context of the research on naval diplomacy between Indonesia and the United States in intelligence, surveillance, and reconnaissance through CARAT 2024, transferability involves examining the generalizability of the findings to similar diplomatic relationships or collaborations in other regions or between other countries. To enhance transferability, the researchers should provide a detailed description of the research context, population, and methodology, as well as discuss the potential implications of the findings for other settings.

3. Credibility (internal validity)

Credibility refers to the trustworthiness and believability of the research findings. In the context of the research on strengthening naval diplomacy between Indonesia and the United States in intelligence, surveillance, and reconnaissance through CARAT 2024, credibility involves ensuring that the research methods are rigorous, the data analysis is thorough, and the conclusions are supported by evidence. To enhance credibility, the researchers should use multiple sources of data, triangulate the findings, and engage in peer debriefing or member checking to validate the interpretations of the data.

4. Confirmability (objectivity)

Confirmability refers to the objectivity and neutrality of the research findings. In the context of the research on naval diplomacy between Indonesia and the United States in intelligence, surveillance, and reconnaissance through CARAT 2024, confirmability entails ensuring that the researcher's biases, values, and assumptions do not unduly influence the research process or the interpretation of the findings. To enhance confirmability, the researchers should maintain an audit trail of the research process, clearly document their decision-making processes, and acknowledge any potential biases or limitations in the study.

In summary, ensuring dependability, transferability, credibility, and confirmability in the research on strengthening naval diplomacy between Indonesia and the United States in intelligence, surveillance, and reconnaissance through CARAT 2024 will help to improve the quality and validity of the study and increase the relevance and applicability of the findings to similar diplomatic relationships and collaborations.

RESULTS AND DISCUSSION

A. Naval Diplomacy

Rudi Sutanto in his book "Naval and Maritime Strategy" (2022), explains naval involvement in diplomatic activities is as old as civilization. Maritime strategy and the use of naval forces must be in line with the overall national strategy and the political goals that the country's leaders want to achieve. The great masters of classical maritime thought gave attention to the use of naval forces with great intensity, which was mostly directed at wartime.

Several considerations suggest that conventional maritime strategies do not provide much benefit to naval operations during peacetime. The contemporary era has largely filled the gap between the shifting focus of naval use politically. The disadvantages and risks of future situations in the nuclear age draw naval attention to the larger issue of what navies can and should do to achieve short-term peace (Sutanto, 2022).

All military and naval institutions come together to make statements about their respective strengths and objectives. The Navy is always helpful to government policy as it can influence communications during war and peace, as well as in all the complex stages between war and peace. They are the same as other armed forces in this respect; their presence can change the relationship of friends and foes to some extent (Sutanto, 2022).

In his book entitled "Indo-Pacific Naval Diplomacy Strategy" (2023), Rudi Sutanto also explains about defense diplomacy. Rather than military operations, defense diplomacy covers a wide range of defense activities, including assistance programs, confidence and security building, arms development restrictions, exercises, and education, as well as personnel exchanges, visits, and meetings of senior officials from the Ministry of Defence.

According to Andrew Cottey and Anthony Forste (2004) Defence diplomacy in the form of military cooperation can play a major role in politics, especially to expand cooperation, build trust, and establish common interests towards a peaceful environment. Defense diplomacy can also be a means to build or strengthen common interests toward a peaceful environment.

Defence Diplomacy is used for many purposes. The primary objective is to foster and maintain confidence in progress. Defense diplomacy in the form of defense and military cooperation can support the improvement of a partner country's defense. It can also improve relations with existing or potential adversaries, promote civil-military relations and security sector reform, help defense forces adapt to political change or conflict, and support regional peacekeeping initiatives (Drab, 2018).

Cooperation Afloat Readiness and Training (CARAT) serves as a platform for enhancing naval cooperation between Indonesia and the US, focusing on improving defense capabilities and fostering regional security. By engaging in joint military exercises and technology transfers, CARAT aims to strengthen maritime partnerships and enhance naval readiness against traditional and non-traditional security threats. The objectives of CARAT include enhancing regional cooperation, building friendships, professional skills, and naval readiness to counter maritime security challenges (CARAT Objectives).

With China's growing assertiveness in the South China Sea and the Indo-Pacific region, the naval cooperation between Indonesia and the US through CARAT becomes crucial in maintaining regional stability and countering Chinese dominance. By leveraging intelligence, surveillance, and reconnaissance capabilities, both nations can enhance maritime security, conduct joint patrols, and combat illegal activities, thus deterring any potential aggression or coercion from China in the region. Additionally, through personnel exchanges and joint exercises, CARAT can facilitate interoperability and coordination between naval forces, further strengthening the regional position against external threats (Benefits of CARAT).

In conclusion, the strategic naval cooperation between Indonesia and the US through CARAT plays a significant role in strengthening regional security, enhancing maritime surveillance capabilities, and fostering cooperation to counter Chinese dominance in the Indo-Pacific region. By aligning their defense strategies and operational readiness, both nations can effectively address maritime security challenges and promote peace and stability in the region.

B. Background of Cooperation Afloat Readiness and Training (CARAT)

CARAT was first launched in 1995 by the United States (US) Navy in response to the growing need to establish and maintain close and mutually beneficial cooperation with Southeast Asian countries. The program continues to grow and involves countries such as Indonesia, Malaysia, Singapore, Thailand, and the Philippines.

CARAT Indonesia is a bilateral exercise between Indonesia and the United States that aims to foster cooperation for regional security, maintain and strengthen maritime partnerships, and enhance maritime interoperability. A series of joint military exercises between the United States Navy and partner nations in Southeast Asia has been ongoing for many years and continues to this day. The program has a long history and has proven effective in strengthening security and cooperation in the Southeast Asian region.

Exercise CARAT involves various operational and technical aspects, including military training, warship trips, joint exercises, personnel exchanges, and naval capacity building. During

the exercise, personnel from the United States Navy and partner nations interact and cooperate to enhance their readiness and capabilities to counter maritime security threats.

For example, in CARAT 2023, the exercise's primary mission was to enhance maritime surveillance and illegal apprehension capabilities through a joint at-sea exercise. The exercise involved personnel from Singapore and the US Navy collaborating on riverine operations, maritime border surveillance, and maritime law enforcement training.



Picture 2. Planning for the CARAT 2024 late in the Initial Planning Conference (IPC)
Source: Doc. Dispenal (2023)

C. Cooperation Afloat Readiness and Training (CARAT) Objectives

CARAT's primary objective is to enhance the defense and operational capabilities of partner countries' navies. This is achieved through several co-operations, such as technology transfer, military exercises, and training in planning and operations. In addition, CARAT cooperates in marine security areas such as joint patrols, illegal fishing, and disaster relief operations. The objectives of Cooperation Afloat Readiness and Training (CARAT) include:

1. **Enhancing Regional Cooperation:** CARAT aims to enhance regional cooperation among participating countries and strengthen maritime cooperation networks.
2. **Building Friendships:** CARAT also aims to build friendships between navies from various participating countries.
3. **Enhancing Professional Skills:** CARAT is designed to enhance the professional skills and readiness of navies in responding to maritime security challenges.
4. **Enhancing Naval Readiness:** CARAT aims to enhance naval readiness in response to maritime security challenges, including traditional and non-traditional threats.

By achieving these objectives, CARAT is expected to strengthen maritime cooperation, enhance naval readiness, and better respond to maritime security challenges.

D. Benefits of Cooperation Afloat Readiness and Training (CARAT)

Partner nations benefit from CARAT. First, the program builds trust and understanding among US navies and partner nations. Second, CARAT enhances regional security and reduces tensions. Third, CARAT enhances partner nations' defense capabilities through exercises, technology transfer, and knowledge exchange. Finally, CARAT helps build the capability and capacity of partner nations' navies to combat maritime threats such as terrorism and transboundary crime. The benefits of Cooperation Afloat Readiness and Training (CARAT) include:

1. **Enhancing Regional Cooperation:** CARAT helps enhance cooperation between participating countries, such as Bangladesh, Brunei, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, and Thailand, in dealing with maritime security challenges.

2. Building Friendships: CARAT also helps build camaraderie between the navies of the various participating countries, which can strengthen coordination and cooperation in responding to maritime threats.
3. Enhancing Professional Skills: CARAT is designed to enhance the professional skills and readiness of navies in responding to maritime security challenges, including traditional and non-traditional threats.
4. Enhancing Naval Readiness: By engaging navies in CARAT exercises, participating countries can enhance their readiness to respond to maritime security challenges and prepare navies to outflank threats.
5. Technology and Software Development: CARAT also provides opportunities to develop new technologies and software in maritime defense, as demonstrated in CARAT/MAREX Singapore 2022.

Overall, CARAT provided significant benefits in enhancing naval coordination, skills, and readiness in meeting regional maritime security challenges.

E. Previous Cooperation Afloat Readiness and Training (CARAT) activity

Over two weeks, CARAT will feature three distinct phases. The first phase will be more classroom-based and involve several expert exchange sessions on training materials. Maritime awareness and intelligence, drone systems, bands, public affairs, underwater diving and construction, force protection, law, and health are some of the topics that will be covered in this phase.

In the second phase, information learned during classroom discussions will be put to practical use, and a bilateral command and control center will be established. In the third phase, participating Indonesian and US forces will be responsible for sea and shore landing operations. In 2022, the Marine Working Group (MWG) consisting of Marine Corps Pasmabar 2 Soldiers and the US Marine Corps (USMC) conducted a Joint Exercise of Collaboration and Afloat Training (CARAT). At Puslatpurmar 5 Baluran Karang Tekok, East Java, they carried out amphibious operations with jungle combat patrol drills or jungle warfare. Latma Carat 2022 was held from 7-21 December. The Indonesian Navy deployed warships KRI RE Martadinata-331, KRI Abdul Halim Perdakusuma-355, KRI Diponegoro-365, KRI Teluk Palu-523, KRI Surabaya-591 and KRI Singa-651. US support for the amphibious operation includes the USS Makin Island (LHD-8) and USS Anchorage amphibious transport dock equipped with the 13th Marine Expeditionary Unit.



Picture 3. Jungle Survival which is one of the series of CARAT Joint Exercise

Source: (satuhaarapan.com, 2015)

According to a statement by Dispenal, the efforts made by the two units not only aim to improve the capabilities of soldiers but also to improve maneuver skills and combat instincts in a military operating environment, especially in forestry areas.

TNI Marine Corps soldiers with the US Marine Corps (USMC) not only conduct technical and tactical exercises in combat drills, but they also conduct jungle survival by using the nature around them to adapt to difficult emergencies.

Lieutenant Colonel Mar Supriyono, Commander of Infantry Battalion 5 and Dansatgas Marine Corps hopes that the soldiers from the two countries participating in Latma CARAT can learn and apply combat tactics well in various terrains and become provisions in the area of assignment.

Several phases are performed during the exercise, which will be explained as follows:

1. First Phase

Theory and discussion of exercise material dominated the activities during the first phase. Maritime intelligence, drone systems, public affairs, underwater diving and construction, base defense, legal, medical, and inter-organizational communications were among the topics covered.

2. Second Phase

The second phase includes the implementation of discussed theories and talks, as well as the establishment of a joint command and control center. In Surabaya, the second phase of the Cooperation Afloat Readiness and Training (Carat) 2022 joint exercise (Latma) between the Indonesian Navy and the US Navy and US Marine Corps entered the second phase of the exercise, namely force integration.

Quoted from Dispenal's statement, each working group will synchronize the schedule of activities to improve tactical cooperation between components and units that will operate. The stages and materials of the exercise include briefings, as well as coordination between elements so that they can be monitored by the command and control center.



Picture 4. Joint Exercise Cooperation Afloat Readiness And Training (CARAT) carries out the Tank Infantry Cooperation (KSIT) in seizing enemy power

Source : tni.mil.id, 2022

3. Third phase

The third phase is the sea phase, where the joint command and control center will control sea operations, followed by the landing of troops on Banongan Situbondo Beach by the Indonesian Navy, US Navy, and US Marine Corps. The Indonesian Navy together with the US Navy and US Marine Corps conducted a tactical floor game (TFG) ahead of the sea phase in the Cooperation Afloat Readiness and Training (Carat) 2022 joint exercise.



Picture 5. Readiness of Indonesian Navy Soldiers Ahead of Sea Phase of CARAT Latma
Source: (Muriapos.com, 2022)

Quoted from Dispenal's statement, the tactical floor game (TFG) is an effort to maximally prepare several tactics and strategies to face the sea phase which takes place in the Java Sea Waters, Situbondo, East Java. TFG is part of the exercise scenario to finalize the operation plan developed with the staff and the perpetrators of the exercise between the Indonesian Navy, US Navy, and USMC before entering the sea phase.



Picture 6. Ahead of Sea Phase Latma Carat, Marines Embarkation to Warship
Source : (Dispen Kormar, 2022)

F. Cooperation Afloat Readiness and Training (CARAT) Activity Plan 2024

In May 2024, the Indonesian Navy, US Navy, and US Marines will collaborate to organize Cooperation Afloat Readiness and Training (CARAT) 2024. According to Dispenal, the CARAT 2024 Latma aims to improve the professionalism of soldiers, enhance relations and understanding between the two countries, and maintain security stability in the region.

During this joint exercise, the capabilities of both countries will be combined to execute Intelligence, Surveillance, and Reconnaissance (ISR), littoral warfare, and coastal defense missions. The exercise will be supported by a joint command control centre which will be used to oversee the entire process of the exercise.

The concept of Latma CARAT 2024 will utilize an approach based on an integrated scenario-based exercise. This will involve all stages of exercise planning, preparation, and execution for each working group (WG). The material consists of tactical, technical, and

procedural as well as material during the Staff Exercise (Staffex) will be prioritized on the exercise scenario with the focus of the exercise material on coastal defense or anti-amphibious.

Intelligence, Surveillance, and Reconnaissance (ISR) is a term used to describe a range of activities that aim to collect, analyze, and provide information to strategic and tactical decisions in military, intelligence, and security operations. ISR is an important aspect in helping countries or organizations gather information about adversaries that can be used for strategic and tactical purposes.

1. Intelligence

In ISR it refers to the process of gathering information about the threats, strengths, weaknesses, and intentions of an opponent or adversary. The intelligence gathered can be information from open sources such as the media, analyses of existing information, or sensitive sources such as secret agents, spies, or advanced technologies such as satellite reconnaissance. This intelligence is then analyzed and given value to aid strategic decision-making. Intelligence refers to the collection and analysis of information to provide commanders with insight into the capabilities, intentions, and vulnerabilities of adversaries. This information is essential for decision-making and planning. Intelligence can be gathered through various means, including human intelligence (HUMINT), signals intelligence (SIGINT), imagery intelligence (IMINT), and open-source intelligence (OSINT).

2. Surveillance

In ISR is the process of continuous monitoring of adversary activities or potential threats. This is necessary to collect accurate, real-time data and information about the adversary's activities and conditions. There are many ways to conduct surveillance, such as aerial reconnaissance using spy planes or drones, reconnaissance through electronic devices such as microphones or hidden cameras, and reconnaissance through communication or spy networks.

Surveillance involves the systematic observation of activities, behaviors, or other changing information, usually of people to influence, manage, direct, or protect them. In the context of ISR, surveillance often involves monitoring the activities, movements, and communications of adversaries to gather real-time information.

3. Reconnaissance

ISR is the process of gathering information about an area, region, terrain condition, or target relating to military or tactical operations. The purpose of Reconnaissance is to gain a better understanding of the area or target that will be acted upon by operational or tactical decisions. The methods used can involve direct observation using personnel or remote reconnaissance using technologies such as unmanned aircraft, satellites, or radar.

Reconnaissance is the exploration of an area to gain information. In a military context, reconnaissance involves gathering information about enemy forces or environmental features. This can be achieved through various means, such as patrols, unmanned aircraft (UAVs), or specialized recognition units.

Overall, ISR is a combination of Intelligence, Surveillance, and Reconnaissance activities that work together to collect, analyze, and provide accurate information to leaders and decision-makers in a variety of security and military contexts. ISR is essential to assist countries or organizations in understanding potential threats or adversaries, planning effective strategies, and taking appropriate actions in the national or security interest.

In addition to Intelligence, Surveillance, and Reconnaissance (ISR) missions, exercises will also be conducted: littoral warfare, and coastal defense.

1. Littoral warfare

Littoral warfare is a military concept and strategy that focuses on battles, operations, and strategies that take place in coastal or shallow water areas close to land. It involves combat and military operations in shallow waters such as rivers, estuaries, and coastal areas, which include harbors, islands, and river deltas. Littoral warfare is important because coastal and estuarine encirclement can provide significant strategic advantages. Coastal areas provide access to lines of communication, factories, harbors, and natural resources. In addition, military operations in these areas also relate to political, economic, and social interests. Some important aspects of littoral warfare include:

- a) **Combat capability:** Involves the preparation, securing, and use of military force in shallow waters. This includes the operation of warships, aircraft, amphibious forces, and logistical support to defend or seize coastal areas.
- b) **Access and resistance in the littoral area:** Involves monitoring, surveillance, reconnaissance, and control of the littoral. Both sides seek to gain information about the enemy's forces and plans and attempt to dissuade the enemy from achieving their objectives.
- c) **Amphibious operations:** Involves the deployment of troops from sea to land via warships, assault ships, or amphibious landing vehicles. These operations are conducted to capture or defend coastal areas.
- d) **Coastal defense:** Involves the construction, employment, and maintenance of fortifications, coastal cannons, surface-to-surface missiles, and anti-aircraft defense systems to protect coastal areas from enemy attack.

Littoral warfare through the littoral zone, which involves operations in and around the littoral zone, within a specified distance of the sinker, including observation, clearing of the marina, and support for descent operations and other types of warfare that shift from the water to out of the water and back. Littoral warfare has been conducted since humans started doing warfare. In the 21st century, the United States Marine Corps redefined warfare through the littoral zone.

Littoral Operations in a Contested Environment (LOCE) is a concept that describes the application of integration between the Fleet and Marine Corps to address a contested environment. LOCE emphasizes the loss of control, including using sea-based Marine Corps capabilities to support dismounted operations and other types of warfare that shift from water to out of the water and back.

Warfare through the littoral zone covers various aspects, including:

- a) **Observation:** Involves observation and surveillance of strategic areas, including monitoring of packing activities and salvaging relevant information.
- b) **Mina cleaning:** Cleaning of the mina in strategically important areas for descent, such as sand and breath.
- c) **Descent Operations Support:** Enables descent operations by providing the infrastructure and resources required for descent and other types of warfare.
- d) **Control of Control:** Utilise Marine Corps capabilities to control cross-control by enhancing the Fleet's ability to overcome mina and counter threats in critical areas, including sand and breath.

One example of warfare through the littoral zone is the Littoral Combat Ship (LCS), which is a war opportunity designed for operations in the littoral zone and deep sea. The LCS has capabilities that combine high speed, maneuverability, and flexibility in dealing with evolving threats in the littoral zone. The LCS has two variants, the Freedom-variant and the Independence-variant, which have different capabilities to perform various tasks, including monitoring, surveillance, and denial operations.

2. Coastal defence

Coastal defense refers to a series of measures and structures designed and used to protect the coast from the damaging effects of erosion, flooding, and marine storms. The main objective of coastal defense is to maintain the sustainability and stability of the coastline and the protection of assets and infrastructure around the coast.

Several types of coastal defense structures are commonly used, including:

- a) **Breakwater:** Breakwaters are artificial walls located in coastal waters to reduce the force of water waves. These structures tend to protect coastal areas that are prone to damage from erosion and flooding.
- b) **Groins:** Groins are linear structures that extend from land to sea to slow or stop sand movement and sedimentation. Groins can help maintain the balance of sand flow and prevent beach erosion.
- c) **Seawall:** Seawalls are standing walls built along the shoreline to protect land from rising sea levels and the impact of large waves. These structures can provide strong protection against flooding and coastal erosion.

- d) Mangrove Restoration: Mangrove restoration is a non-structural method that involves restoring the mangrove ecosystem along the coastline. Mangroves have strong roots that resist erosion and provide natural protection from strong winds and ocean waves.

G. Challenges faced in Cooperation Afloat Readiness and Training (CARAT)

Challenges faced in Cooperation Afloat Readiness and Training (CARAT) include:

1. Coordination between Navies: Given that CARAT involves several countries, a key challenge is ensuring effective coordination between different navies.
2. Differences in Policies and Procedures: Each country has different operational policies and procedures, which can be an obstacle in the conduct of joint exercises.
3. Resource Limitations: Other challenges may be related to resource limitations, including budget, personnel, and equipment, which may affect the scale and scope of the exercise.
4. Changes in Maritime Threats: Changes in maritime threats, including increased submarine activity and aggressive actions in disputed waters, can also pose challenges in designing responsive and effective exercises.

In the face of these challenges, it is important to continue to enhance cooperation among participating countries, strengthen communication, and develop flexibility in the planning and execution of CARAT exercises.

H. Cooperation Afloat Readiness and Training (CARAT) Effectiveness

Some of the factors that influence the effectiveness of Cooperation Afloat Readiness and Training (CARAT) include:

1. Participation of Participating Countries: The level of engagement and commitment from participating countries can affect the effectiveness of the CARAT exercise.
2. Coordination and Communication: The ability to coordinate and communicate between the navies of the various participating countries is a key factor in determining the success of the CARAT exercise.
3. Resource Availability: Factors such as budget, personnel, and equipment can also affect the extent to which CARAT exercises can be implemented and how effective they are.
4. Changing Maritime Threats: Regional maritime threat dynamics can also influence the focus and relevance of CARAT exercises, affecting their effectiveness in preparing navies to respond to threats.

By considering these factors, efforts can be made to strengthen participation, improve coordination, allocate resources wisely, and respond to maritime threat dynamics, thereby increasing the effectiveness of CARAT exercises.

To improve the effectiveness of Cooperation Afloat Readiness and Training (CARAT), several steps can be taken, including:

1. Increased Regional Engagement: Expand countries' participation in CARAT exercises to strengthen regional cooperation and expand maritime cooperation networks.
2. Joint Capability Development: Focus on developing joint capabilities in response to traditional and non-traditional maritime security challenges, such as humanitarian assistance, disaster management, and maritime law enforcement.
3. Increased Exercise Complexity: Develop more complex and realistic exercises to enable partner navies to refine their operations and tactics in response to maritime security challenges.
4. Use of Technology: Utilise advanced technology, such as virtual joint training, to improve training efficiency and expand the scope of training.

By implementing these measures, CARAT is expected to become more effective in strengthening maritime cooperation, enhancing naval readiness and better responding to maritime security challenges.

Cooperation Afloat Readiness and Training (CARAT 2024): Intelligence, Surveillance, and Reconnaissance Mission

Through Cooperation Afloat Readiness and Training (CARAT) 2024, the Intelligence, Surveillance, and Reconnaissance (ISR) mission aims to enhance participating nations' ability to collect, monitor, and recognize information in the maritime environment. Participating countries

will work together to enhance their ISR capabilities, which is a critical component in monitoring and securing regional waters. Additionally, ISR missions will enable better intelligence and data collection and analysis practices in the maritime environment.

Military strategy requires intelligence, surveillance, and reconnaissance (ISR), which involves the collection and analysis of intelligence data to aid tactical, operational, and strategic decision-making. The ISR mission is an important part of Cooperation Afloat Readiness and Training (CARAT) 2024, which is a maritime exercise and cooperation involving Asia Pacific countries. It will enhance operational capabilities to support maritime security and national interests.

The Intelligence, Surveillance, and Reconnaissance (ISR) mission in Cooperation Afloat Readiness and Training (CARAT) 2024 is an integral part of naval preparation and training for challenges at sea. ISR involves information gathering, surveillance, and reconnaissance to support military decision-making and operations. In CARAT 2024, the ISR mission aims to improve understanding of the operational environment, identify threats, and provide tactical advantage. Several accessible sources provide insights into technological developments, training, and the role of ISR in military operations.

According to the U.S. Department of Defense, ISR is defined as "integrated operations and intelligence activities that harmonize and integrate the planning and operations of sensors, assets, and information processing, exploitation, and reporting". In addition, the market report states that the ISR industry is expected to continue to evolve and adapt to environmental changes, including the impact of pandemics and conflicts, which provides valuable insights for investors.

The importance of ISR in CARAT 2024 was also emphasized in events and workshops, such as the ISR Systems and Technology Workshop 2024, dedicated to the innovation of ISR capabilities for the Department of Defence and Intelligence Community. This reflects efforts to continuously develop ISR technologies and capabilities to support naval preparation and training for challenges at sea.

As such, the ISR mission in CARAT 2024 involves technology development, training, and application of ISR concepts to improve naval understanding, surveillance, and readiness to deal with threats in the maritime environment. Through this approach, it is hoped that navies can be more effective in maintaining the security and continuity of their operations at sea.

In CARAT 2024, the ISR mission aims to improve situational understanding and maritime defense by:

1. Improve data collection capabilities: Through cooperation between countries involved in CARAT 2024, more sources of data and intelligence can be gathered. This could include data collection through aerial reconnaissance, sea level observations, or information collection from coast guards.
2. Improve analytical skills: In CARAT 2024, member states can share their knowledge and experience in analyzing intelligence data. This can be done through training and discussions between intelligence personnel.
3. Improve reaction and response skills: With better quality and well-understood intelligence data, CARAT 2024 can improve the ability to plan and execute responsive actions in emergencies or security threats.
4. Intelligence gathering and analysis: The ISR mission aims to collect various types of data and intelligence information related to the maritime situation in the CARAT area of operations. Such information includes security threats, adversary activities, regional military capacities, and detailed maps of the area of operations. This data is critical to inform operations planning and tactical decision-making.
5. Maritime surveillance: ISR missions also focus on active surveillance of movements and activities at sea. This involves the use of advanced technologies such as aircraft, surveillance vessels, radars, sensors, and satellites to detect and monitor potential threats, illegal activities such as drug smuggling or illegal migration, and violations of territorial waters sovereignty.
6. Exercise monitoring and evaluation: One important aspect of CARAT is joint military exercises. This ISR mission serves to monitor and evaluate such exercises to assess the

effectiveness of the tactics, techniques, and procedures used, and provide useful feedback for the improvement of both sides' military capabilities and preparedness.

7. Capacity and capability development: The ISR CARAT 2024 mission also aims to develop partner nations' capabilities and capacities in intelligence, surveillance, and monitoring. This is done through training, technology transfer, and information exchange between the United States Navy and partner nations.

In its execution, the ISR mission in CARAT 2024 involves the use of advanced technologies and cooperation between the navies of partner nations. Existing human, aircraft, ship, radar, and sensor resources are maximized to achieve effective intelligence, surveillance, and monitoring objectives. Emphasis is placed on real-time information exchange, accurate intelligence analysis, and efficient tactical coordination between all parties involved.

CONCLUSION

The results of this paper show that to strengthen Indonesia's cooperative relationship with the United States in the face of China's dominance in the Southeast Asian region, one of the steps that can be taken is to increase cooperation in the field of security and defense, through Cooperation Afloat Readiness and Training 2024.

Indonesia can enhance security and defense cooperation with the United States through the development and enhancement of cooperation in regional security, especially in the Intelligence, Surveillance, and Reconnaissance mission in the Cooperation Afloat Readiness and Training 2024. This will help strengthen Indonesia's defense capacity and also send a signal to China that Indonesia is not easily intimidated. It is also important to continue to build relations with China in a critical but constructive manner, by promoting dialogue and diplomacy to seek points of agreement and achieve stability in the Southeast Asian region.

The Cooperation Afloat Readiness and Training (CARAT) activity is an effective strategy for enhancing security stability in the region through maritime defense cooperation. The program benefits partner countries in building relationships of trust, enhancing defense capabilities, and combating maritime threats. To increase the effectiveness of CARAT, it is recommended that partner countries continue to commit to the program and maintain good cooperation with the US Navy and other countries in the region.

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As such, the ISR mission in CARAT 2024 involves technology development, training, and application of ISR concepts to improve naval understanding, surveillance, and readiness to deal with threats in the maritime environment. Through this approach, it is hoped that navies can be more effective in maintaining the security and continuity of their operations at sea.

In conclusion, CARAT has proven to be a successful program in strengthening the cooperative relationship between the United States Navy and Southeast Asian countries. Through this exercise, partner countries can improve their capabilities and readiness in facing increasingly complex maritime security threats.

However, several suggestions can be made to improve the effectiveness of CARAT. Firstly, it is important to continue to strengthen cooperation and communication between all member

countries. This can be done through personnel exchanges, policy dialogues, and regular discussion forums.

In addition, CARAT should also expand the scope of the exercise to include aspects of cyber security and cyber defense. Cyber threats are increasing and can be very detrimental to maritime security. So it is important to engage relevant experts and resources to enhance member states' ability to deal with these threats.

In this regard, CARAT 2024 should be an opportunity to base the exercise on the principles of innovation and the latest technology. By updating existing training methods and incorporating the use of advanced technologies, CARAT can provide greater benefits in strengthening maritime security in the Southeast Asian region.

To enhance ISR's mission in cooperation afloat readiness and training in 2024, here are some suggestions:

1. Good Coordination: Good coordination between different countries, organizations, and resources is essential to deal with maritime threats.
2. Ongoing Training and Education: Training and education on ISR concepts, systems, and test evaluation must continue to maintain flotilla capability and sustainability.
3. Innovation and Development: Innovation and development in the field of ISR, such as observation and surveillance systems, analytics, and task organization, are essential to meet the challenges of planning and using ISR systems.
4. International Cooperation: Enhance international cooperation between countries and organizations in dealing with maritime threats through training and education on ISR.

Cyber security can be integrated into CARAT through the implementation of appropriate technology and security policies. Some steps that can be taken to enhance cyber security within the framework of CARAT between Indonesia and the United States include, but are not limited to:

1. Cyber security training: Conducting joint training and exercises between Indonesian and American military personnel on cyber security. This aims to improve skills and awareness of cyber security threats that may be faced during joint operations.
2. System security audits: Conduct regular audits on the systems and IT infrastructure used in CARAT to ensure they are secure from cyber-attacks and threats.
3. Cooperation in detecting and responding to cyber attacks: Building cooperation between both countries to detect and respond to cyber security attacks that may occur during CARAT operations. This can be done through the exchange of information and resources to enhance responses to such attacks.

Additional benefits of integrating cyber security into CARAT include an increase in awareness and skills in addressing cyber threats, protecting sensitive data, and securing communication infrastructure. Thus, this will strengthen naval diplomacy cooperation between Indonesia and the United States in the field of intelligence, surveillance, and reconnaissance (ISR) in 2024 through CARAT, making this cooperation more effective and secure from potential cyber security disruptions.

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