The Role of the 51 UAV Air Squadron in Maintaining Land Border Security between Indonesia and Malaysia in West Kalimantan Province

Muhammad Nurdi Iriansyah
Security Studies, Universitas Padjadjaran, Indonesia
nurdi2007@gmail.com

R. Widya Setiabudi Sumadinata
International Relations, Universitas Padjadjaran, Indonesia
w.setiabudi@unpad.ac.id

Wawan Budi Darmawan
International Relations, Universitas Padjadjaran, Indonesia
wawan.budi.darmawan@unpad.ac.id

Yusa Djuyandi
Political Science, Universitas Padjadjaran, Indonesia
yusa.djuyandi@unpad.ac.id

Abstract:

The size of Indonesia's territory poses challenges related to border security. There are still many land border points between Indonesia and Malaysia on the island of Borneo that have not been agreed upon, as well as the specific topography of the area, which requires a new pattern of border control, compared to using the traditional pattern. This study elaborates on how a new pattern in border security uses UAV's, the strength of the 51st Air Squadron. The study was conducted using qualitative methods and selecting informants with purposive sampling techniques and data processing using the NVivo 12 Plus application. The results showed that the use of UAV's in border security was not optimal. From all research dimensions, the Country and Collaboration dimensions show a pattern that is not yet in accordance with the needs, indicating that the use of UAV's in border security must start from the policies and management organizations.

Keywords: Indonesia, UAV, 51st Air Squadron, Border, Security.

I. INTRODUCTION

With a total area of 1,917.5 million km2 (BPS, 2019) Indonesia faces challenges related to threats that may occur, including areas directly adjacent to foreign countries such as in the province of West Kalimantan which borders on land with East Malaysia. Violations that occur along the border of West Kalimantan with Malaysia are fairly frequent. Only 601.26 km long of the border between West Kalimantan and Malaysia has just been guarded by border security forces from the total of as far as 1,001 km.

A broader and contemporary concept of security was later developed by Buzan and Copenhagen Schools (Yani, Montratama, & Mahyudin, 2017), according to Buzan, security is a fairly complex issue where the state is no longer the only actor in security. The other actor in question is the inter-governmental organization. In the context of the state, the term national security is known. National security is defined as all efforts made by the state with the aim of creating stability in order to

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protect and provide a sense of security to the people/citizens in the country (Teivāns-treinovskis & Jefimovs, 2012).

The concept of national security has several elements including: citizens, government institutions, sovereignty and state integrity (Prihatono, Jessica, & Iis, 2007). In the context of national security, sovereignty refers to independence or freedom from all forms of coercion that comes from outside powers (Noveria, 2017) and an absolute power that is established with continuity that is continuous, indivisible, non-transferable and inalienable in the context of the state (Vincent, 2002). The state can do anything to fulfill its interests including voting and interacting with other countries, as long as it does not violate the provisions of the international law (Boer, 2005).

Meanwhile, the term border area includes land, waters, seabed as well as the land below and the air space. Borders are said to be spaces where actors who inhabit and cross them interact with different identities (regional, national and transnational) and are placed in different positions and are almost always asymmetrical (Ladino, 2017). Borders have a function as a barrier that aims to protect the country from possible threats originating from other countries (Newman, 2003). Threats from other countries vary, such as smuggling of illegal weapons, drugs, terrorism and so on. To protect the country from these threats, most countries try to build border posts in their countries in an effort to stem the entry of threats that are cross-border in nature (Linebarger & Bratihwaite, 2020).

In addition, current border guarding is still using conventional methods, by conducting security patrols using cars, motorbikes and on foot. Facing the natural conditions, such the forests, hills, swamps, these conditions force border security task forces has lack of capabilities to carry out their actions. Along with the times, border posts also experienced technological advances. Currently, border posts are equipped with modern reconnaissance systems, reconnaissance radar and remote control weapons systems (Linebarger & Bratihwaite, 2020).

The United States used unmanned aerial vehicle (UAV) technology to oversee national border security (Boyce, 2016). The United States optimizing UAVs to create border security control in large and difficult areas or terrain (Boyce, 2016) and very helpful in monitoring the movement of illegal immigrants and spying on drug smugglers from the border with Mexico (Padgett, 2009). The use of this UAV refers to the success of the United States Military when carrying out operatīonal tasks such as in Afghanistan, Kosovo and Iraq in 1991 to find out a broad, desert and risky/dangerous front field (Blazakis, 2006).

While not all land border areas in West Kalimantan with Malaysia can be deployed troops and surveillance posts to secure border areas, the Indonesian Air Force/Air Squadron 51 UAV has capabilities to monitor the borders, the flow of human movement that military soldiers cannot do due to natural factors and the long border lines. Moreover, by using UAV the task of supervising large and difficult areas such as mountains, steep ravines can be overcome (Haddal, 2011). The use of UAVs for border security forces saves time and poses no risk to humans as border security officers (Timothi, 2013).

Furthermore, the use of UAVs for border surveillance will provide great benefits and advantages (Blazakis, 2006). These indicates by The Custom and Border Protection respond to imaginary UAV data; and sufficient resources to investigate all targets identified by the UAV. Furthermore, if the those indicators are met, the implementation of border surveillance/supervision tasks by utilizing this technology will provide great benefits to overcome difficult terrain/natural geography constraints and be able to reach areas with a wide coverage (Haddal, 2011; Shofiyanti, 2011).

Previous researchers developed research in border surveillance using UAVs, in Turkey (Kahvecioglu & Oktal, 2014), United States (Rani, Modares, Sriram, Mikulski, & Lewis, 2016) and in Europe (Marin, 2017) and in Australia (Garrett, 2017). Their studies generally argue the

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implementation of national border security tasks assisted by using UAVs rather than using security systems based on technological forts/walls or cyber forts as in Europe.

From several previous studies there has been no research that discusses the use of UAV technology and the shared use of the results through cooperation, coordination and collaboration between units or institutions. The use of this technology is visible and important for optimizing Indonesia's border control, especially at the border between West Kalimantan and Malaysia.

Based on the description above, researchers are interested in the use of UAV technology to assist Indonesia's border surveillance task at the border of West Kalimantan with Sarawak, Malaysia. Based on the description that has been presented above, this study aims to analyze the role of the 51 UAV Air Squadron in maintaining the security of Indonesia's border with Malaysia in West Kalimantan Province.

II. METHODS

The method used in this research is qualitative to provide complex descriptions, examine words and detailed reports from respondents' views and are carried out in natural situations. The researcher will analyze the role of state border security by the 51 UAV Air Squadron on the border of West Kalimantan with Malaysia and see the pattern of coordination, cooperation and collaboration between units in conducting border security surveillance by digging in depth information through interviews with informants. Primary data is data obtained directly from informants collected from various backgrounds which researchers consider to know and have information related to the problems studied in order to answer the phenomenon under study. Primary data is considered accurate because this data is presented in detail. Primary data were obtained through interviews and focus group discussions (FGD) and also through observations. The informants selected here come from the military, National Border Management Agency (BNPP), Cross Border Post (PLBN), the Ministry of Foreign Affairs, and other related institutions and agency.

The results of data collection are processed and analyzed by researchers using the Nvivo12 Plus Software to make it easier for researchers to process and analyze qualitative data effectively and efficiently (Bandur, 2019). Data processing begins with inputting all the data obtained and has been transcribed into a file for further coding process, based on the research dimensions. The process continues with the creation of a coding matrix with the aim of seeing the relationship between the dimensions, and then proceeds to the crosstab query feature to understand the context of the informants to the dimensions and the next step is to visualize the data. The last stage is to do a coding comparison (comparing the coding process that has been carried out by the first person/researcher as the first coder and another person as the second coder using the same data source) to reduce subjective bias from the researcher. Bandur said that reliable research does not only analyze data from interviews, FGDs and observations, but also pays attention to other data sources such as documents, monthly report notes, meeting notes or also field notes (Bandur, 2019). From all data sources that have been obtained, the reliability test is then carried out using the inter-coder reliability/ICR technique. The results showed that the level of agreement / agreement produced was 0.73%, which means it was quite good.

III. RESULT AND DISCUSSION

1. Role of the 51st UAV Squadron

The 51 UAV Air Squadron has one of the tasks of carrying out control operations, border surveillance, reconnaissance, mapping and aerial photography. The results of the Cross Tab Query tabulation show that informants from the 51 Air Squadron and the Head of PLBN Entikong dominate the same information on the Border dimension compared to the other six informants.

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Border, which discusses how borders are managed, covers all activities of sovereignty enforcement, control, including supervision. This is in line with the view of Burt and Frew (2020) that surveillance is one element that has strategic value, namely to detect and reduce threats as early as possible before the threat reaches the border. It was stated by the Air Squadron 51 UAV that they had been doing it since 2015. 2015 was the year the Air Squadron 51 was inaugurated, and in carrying out its duties it carried out observations in real time and also recorded various activities that took place along the border area of West Kalimantan with Malaysia and the Indonesian Archipelago Sea Lane/ALKI I independently. However, in terms of human resources, there are still shortcomings, especially for personnel who are capable of analyzing data from video recordings and images obtained through recording and shooting UAV flights, besides that there is also a shortage of pilot personnel who have been certified to fly UAVs.

Figure 1 shows that not all informants provide information related to the existing dimensions. This is as shown by an informant from the Ministry of Foreign Affairs who did not provide any information regarding Border and Physical. Judging from the dimensions that exist in the study, from Figure 1 it is revealed that the Collaboration and Country Dimensions are the two dimensions most stated by informants. This can be seen from the total amount of information related to Collaboration and Country.

Furthermore, the Border dimension is the dimension that is least discussed by the informants, it can be seen from the total number which is smaller than the total number of other dimensions. However, the total number is actually not much different from the total number of the Physical dimension, which is in third place after collaboration and country.
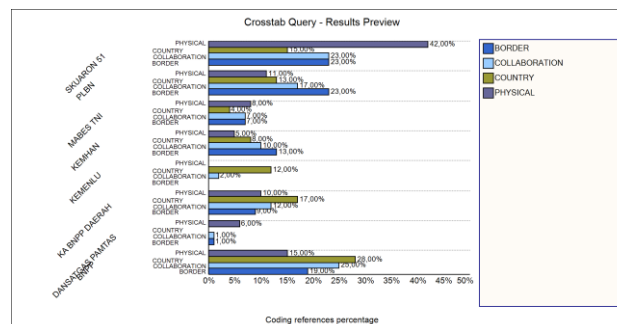
Source: Own Research, 2022

Fifure 1 Crosstab Query – Coding References Percentage

Figure 1 shows the distribution of the coding/coding results from all informants according to each dimension which is shown in the figure as a percentage. The 51 UAV Air Squadron and BNPP are the two informants who contributed the most information in providing information related to the dimensions used in this study. This can be seen through the high percentage of the two informants compared to other informants.

In the 51 UAV Air Squadron informants, the percentage is between 15%-42%, where the largest percentage is in the Physical Dimension which reaches 42% and the lowest is in the Country Dimension at 15%. Likewise with informants from BNPP. Informants from BNPP contributed information related to the dimensions of the study between 15%-28%. Where the Country Dimension is the highest dimension with the contribution of information reaching 28% and the lowest Physical Dimension with an achievement of 15%.

Informants from the Commander of Border Task Force and the Ministry of Foreign Affairs provided the least amount of information related to the dimensions of the research. Informants from the Ministry of Foreign Affairs contributed information with a percentage between 2%

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(Collaboration Dimension) and the highest was 12% (Country Dimension), while Dansatgas informants contributed 1% information on the Collaboration Dimension and also the Border.

The contribution of each informant in each dimension, it can be seen as follows:

1. In the Border Dimension, the 51 UAV Air Squadron (23%) and BNPP (19%) informants provided the most information, while the Ministry of Foreign Affairs informants provided the least amount of information at 0%.

2. In the Collaboration Dimension, BNPP is the informant who provides the most information, reaching 25%, while the least is the informant of the Ministry of Foreign Affairs, which is only 2%.

3. In the Country Dimension, BNPP is the informant who provides the most information, reaching 28%, while the least is the informant at TNI Headquarters which only reaches 4%.

4. In the Physical Dimension, informants from the 51 UAV Air Squadron are the informants who provide the most information, reaching 42%, while the least are informants from the Ministry of Foreign Affairs at 0%.

From the explanation above, a common thread can be drawn that of all informants who were asked for information related to the dimensions of the research, informants from BNPP and Squadron 51 were the informants who contributed the most to information related to the dimensions of the study, while the lowest came from informants. Ministry of Foreign Affairs.

The above situation seems to be related to the position of BNPP as the party that compiles all proposals produced by Ministries and Institutions (K/L), where on the BNPP's side the existing proposals/from each ministry and institution are then harmonized. This position makes BNPP have a spectrum of understanding complex issues related to border security management. On the other hand, the 51 UAV Air Squadron, which in carrying out its duties, namely in terms of border security and has indeed used UAVs as a product of technological advances, has made itself aware of how borders are controlled through air media using UAVs as a form of early warning against various possible threats.

In further discussion, it is known that the complexity of problems related to border security management lies on two sides, namely between policy and collaboration between government agencies. Thus, it can be concluded that judging from the factors that play a role, the contribution of each informant to the discussion or content related to the dimensions of the study compared to other informants shows a fairly deep variation, seen from the comparison of the contribution of information that is discussed by the informant, as well as seen of the amount of contribution to the dimensions studied for each informant. This can be seen from the high variation related to the information content according to the research dimensions of each informant.

Regarding the concept map, Figure 2 describes the pattern between dimensions in this study. The Border Security Management model is approached through four dimensions consisting of the Border, Country, Physical and Collaboration Dimensions where each dimension is derived into sub-dimensions that help the study of border security management become intact.
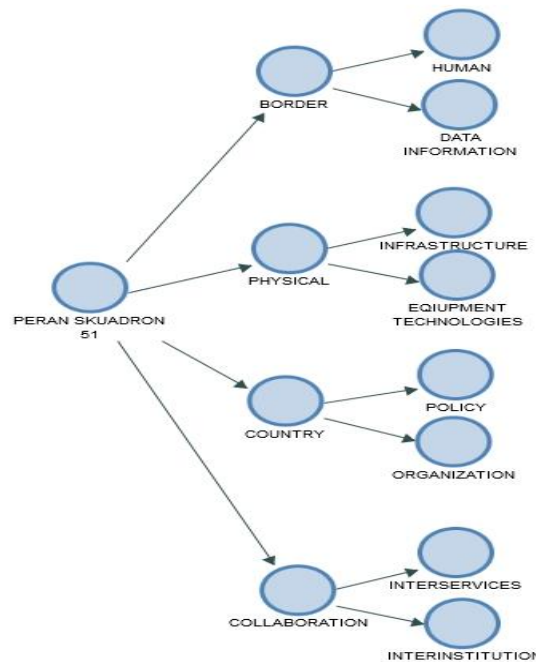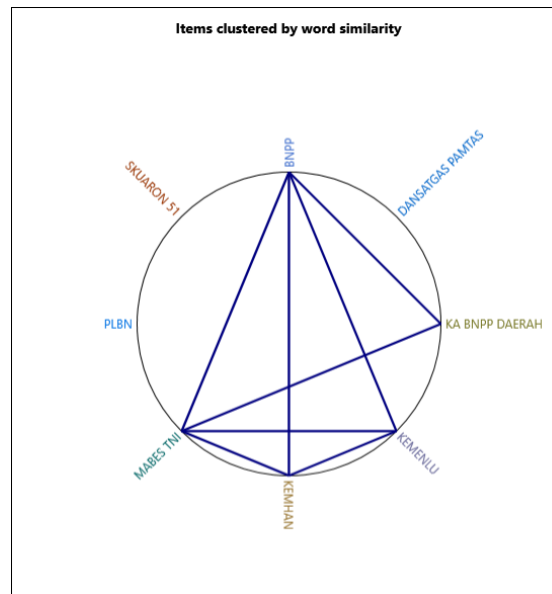
Source: Own Research, 2022

Figure 2 Concept Map

The next analysis is related to the Cluster Analysis of Word Similarity (Figure 3) shows that there are four dimensions that play a role in the discussion of border security management. Figure 3 illustrates that there are some similarities in terms of dimensions originating from informants, where each dimension is interconnected with other dimensions.
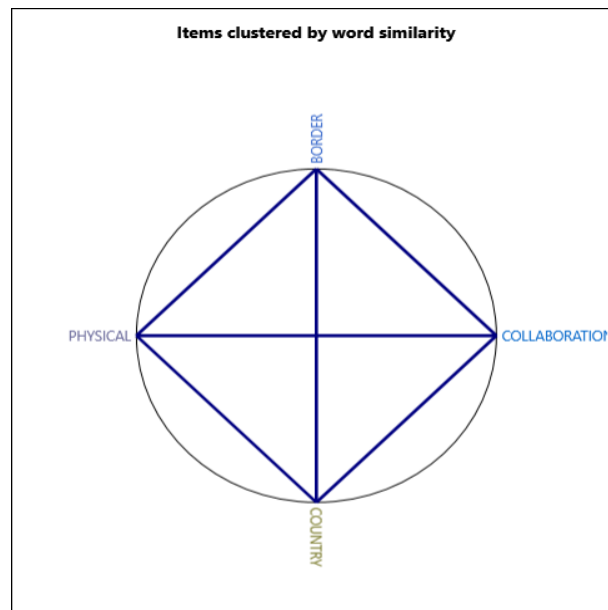
Source: Own Research, 2022

Figure 3 Item Clustered by Word Similarity Analysis-Dimensi

Figure 3 shows between the dimensions interwoven with the number of connecting lines. Dimensions that have a number of connecting lines with other Dimensions, indicate information originating from that Dimension has the same or similar to information from other Dimensions. While the dimensions that are not connected to other dimensions show that there is no similar information submitted by the informant associated with other dimensions. In other words, the discussion or information obtained from that Dimension is not related to the other Dimensions.

Source: Own Research, 2022

Figure 4 Item Clustered by Word Similarity Analysis Informan

Figure 4 shows that of the eight informants, there are three informants, namely PLBN, Border Task Force and Squadron 51th, which do not have word similarity with other informants. BNPP informants and TNI Headquarters have the most word similarity with the other four informants. Informants from the Ministry of Defence and the Ministry of Foreign Affairs had three words of similarity while BNPPD had two words of similarity with other informants.

For informants who do not have word similarity, these results indicate that each informant has limited, specific and focused information on information related to their field of work. Meanwhile, the informants who have word similarity indicate that there is a similarity in terms of the information provided to the researcher. This means that the relationship of information between informants is quite high.

To see the relationship between each dimension and the informants, a Group Query mapping was carried out, through which a description of the research model and informants would be obtained, which is presented in Figure 4. Figure 4 is obtained from processing data using Group Query Criteria, where the researcher analyses the informants studied with the information provided in accordance with the specified dimensions.

The pattern of information conveyed by the informants is grouped according to the dimensions of the study. So that the pattern of the relationship between the informants and the dimensions of the research appears. It is thus that the concept of border security management is formed by the existence of interrelated factors with other factors. In other words, there are interrelationships between the first and second dimensions and so on that can affect each other.

Figure 4 shows that of the eight informants whose information was extracted, six of them discussed all dimensions related to Border Security Management. Informants from the Border Task Force indicated that the information provided was related to the three dimensions of the study. Only informants from the Ministry of Foreign Affairs did not provide complete information related to the four dimensions studied in this study. Informants from the Ministry of Foreign Affairs only provide information related to Country and Collaboration.
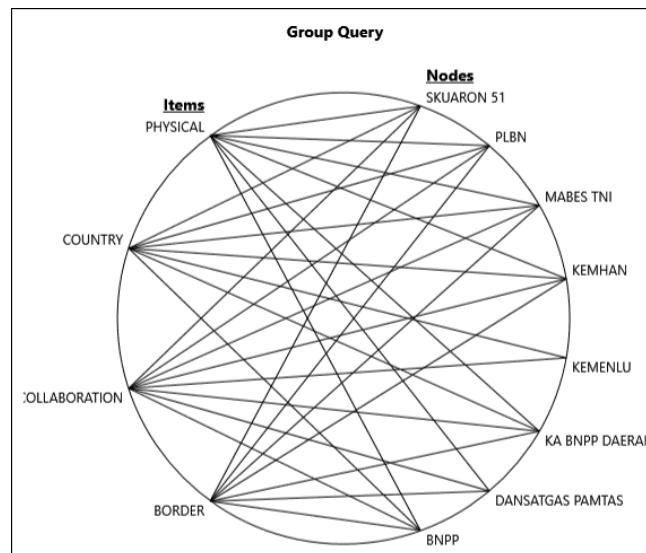
Source: Own Research, 2022

Figure 5 Group Query Dimensi

Based on the above results, it can be seen that efforts to optimize the role of the 51 UAV Air Squadron in border security must pay attention to these two things. So we need a new model or pattern that can be done related to policies or regulations, proper organizational management, and related to the formation of patterns of cooperation both inter-services and inter-institutional.

From the results of the analysis of the information from the interviews, it is known that it seems that each institution operates independently in terms of border management. Each institution operates in accordance with their respective duties and functions. Even the existing institutions that are tasked with being the coordinator in terms of border security management are also unable to become conductors in terms of border management. This in the author's view relates to different tasks and functions.

The difficulty in collaboration is indeed related to regulations, in this case how each ministry/institution has an agenda that often does not show one unity. Even the presence of representatives of institutions related to border management is also difficult to realize in order to remain on stand-by at the foreign border post. This has not yet touched on how traditional security patterns do not carry complete elements related to border security.

Conditions in the field are often when patrols find violations related to excise, it is difficult to take action because they do not have the authority to take action. Likewise with regard to animal quarantine, which in the case of border patrols does not have the capacity to do so. The same applies to immigration violations. Thus, one common thread can be drawn that the optimization of the role of Squadron 51 in terms of border management is closely related to policies that do not fully support optimal border management. Likewise with the organization. Unclear policies make the movement of border management organizations also not optimal. Who will actually be the leading sector in terms of border security? This is because each has a different task and function. Likewise, the role of the 51st Squadron became invisible.

In terms of equipment, the use of UAVs will provide very significant support in border security efforts. The author believes that this very significant support should be continued within the framework of joint border security. The role of conventional security may not be reduced, but instead gain additional strength with the presence of the 51st Air Squadron.

In fact, the Pamtas Task Force has also acknowledged that regarding drone support, there is not yet, and if there is it will be very helpful to wait for support from the top command. If there is, drones will be very helpful for the Pamtas task force, because they are very useful for monitoring

difficult areas such as in West Kalimantan, where illegal logging, illegal fishing and illegal trafficking occur a lot. Regular patrols are carried out every week but because the terrain is difficult, not all areas can be guarded.

2. Analysis by Research Dimension

a. Physical

The Physical dimension related to the use of equipment/technology and infrastructure, it discusses how to use technology in border security management. The results of the study shows that border surveillance needs to be carried out using drones, to save manpower and costs as well as to accelerate information access and mobilization. However, that the Indonesian Air Force already has the 51st Air Squadron that operates the UAV is not yet known. This is unfortunate because this knowledge is actually present outside of interested institution, such as academics.

The use of UAV with an armament system must consider the type of operation the UAV and the level of contingency. Border surveillance and observation in peaceful conditions certainly does not require the UAV to be equipped with weapons. The results of the study that UAV has capabilities detecting and supervising through the air in real time, which can be used as accurate intelligence data. Until now, the unit has not been involved in activities that are very important in maintaining state sovereignty.

However, Supadio Airbase currently only supports flight operations, so interoperability between ground and air units is needed in the RI-Malaysia Shield Equator-20 Border Task Force operations. This can be done through an integrated command line or Unity of Command. Therefore, in order to facilitate communication and coordination of support for the deployment of a communication network up to the task forces involved, including the Air Task Force, it is absolutely necessary.

Thus, in terms of equipment, the use of UAVs will provide very significant support in border security efforts. The author believes that this very significant support should be continued within the framework of joint border security. The role of conventional security may not be reduced, but instead gain additional strength with the presence of the 51st Air Squadron.

In fact, the Border Task Force has also acknowledged that regarding drone support, there is not yet, and if there is it will be very helpful to wait for support from the top command. If there is, drones will be very helpful for the Border Task Force, because they are very useful for monitoring difficult areas.

Infrastructure development relates to how infrastructure support relates to the role of the 51st Air Squadron in border security management. The results of the research show that Supadio Air Base has been an Air Task Force in the composition of Border Task Force operations is supported by personnel and weapons and land infrastructure. For example, data shows that in 2020 Supadio Air Base provided Air Operation support with a total of 68 Sorties. This support was felt to be inadequate.

The development of Border Patrol Inspection Road carried out by the Ministry of Defence is also the renovation of border posts, development of border monitoring technology, procurement of drones and airfields, helipads and the addition of communication and transportation tools at each border post is absolutely necessary. The purpose of the Border Patrol Inspection Road development is to make the border security with Malaysia can be monitored in real time, in addition to simplifying the task of border patrols carried out by the Indonesian Army.

In relation to border security infrastructure, communication efforts have also been made with the 51st Air Squadron by trying to deploy sensors in the surveillance area. There are also many obstacles deal with the budget for maintenance and priority scale, and considering that in difficult areas, electricity is difficult to find so using drones becomes even more difficult. The wider range of

cameras and surveillance at night is made easier with infrared. The use of drones is indeed cheaper. However, in the long term, the cost is quite large considering that there is a need for maintenance costs. This makes the use of drones only used for priority things.

The results showed there is a lack of infrastructure development related to support the role of the 51st Air Squadron in border security management. It can be concluded that more adequate infrastructure support is still needed in order to carry out border security more optimally. The short path that can be monitored with UAVs causes many border areas to escape monitoring. For that, it is necessary to increase the UAV equipment with a longer range. Another alternative is to build a deeper base so that the radius of reach will be longer.

b. Country

The Country dimension will look at how border security management is viewed from the country's perspective. This means how the state places the importance of upholding sovereignty at the border by looking at what the state is doing. For this reason, the study will look at the policy side, and the organization.

On the policy side, the issue of managing state borders has become a strategic issue, especially after the second amendment to the 1945 Constitution was made, namely the addition of Article 25 A which states that the Republic of Indonesia is an archipelagic state characterized by an archipelago with defined boundaries and rights. In 2008 The Law Number 43 of 2008 concerning State Territory was enacted.

In its development at the General Boarder Committee (GBC) meeting, this is very relevant and very strong with non-military issues. The issue of Transnational Organized Crimes is a problem in border security that new things emerge outside of what is regulated in the security arrangement. The real threat that is currently limited is more to transnational organized crime.

The organizational structure of the Indonesia-Malaysia border cooperation, the GBC which was formed in 1966 is headed by the Minister of Defence. The question is whether the formation is still relevant or not with the approach that has been handled by the Minister of Defence. In fact, the remaining 5% currently focus more on issues relevant to socio-economic and cultural aspects. If we look at the comparison of land border cooperation with two other countries, it turns out to be very thick in terms of non-military or non-security.

From a policy perspective, regarding the role of Squadron 51, the results of the interview show that currently there are no other rules or guidebooks regarding the involvement of Air Squadron 51 in monitoring and observing border areas. The existing proportions appear to have not been utilized optimally.

This study shows that there was no government policy that regulated the authority of each ministry regarding border security, no integration of policies to regulate the main tasks of Ministries/Agencies and Regional Governments in border security, even though there are regulations regarding the assistance of Border Management Agency in the regions.

It is acknowledged that there are no derivative rules that regulate further from Presidential Decree No. 12 of 2010 and Presidential Decree No. 44 of 2017 concerning Border Management National Agency (BNPP) which regulates who does what in border security duties. The study shows even though Cross Border Post has command in border services, in terms of immigration, quarantine, security, there is no synergy. This means that, each officer carries out his main duties and functions based on the laws and regulations that apply to their respective agencies or institutions.

Synergy between institutions has not yet been established in an official bond, due to on each agency or institution having its own strategy. The cooperation and synergy in providing

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information in border security management has not yet been realized. With the problems still in the border area, the current procedure need to be reviewed whether changes or revisions need to be made according to the national development mission and the development of existing threats, both in Civilian and Military Agencies.

The sub-dimension of the organization will be seen how the role of each interested party in border security will be. The results of the interview obtained information that Supadio Airbase has Standard Procedures for several operations, such as handling natural disasters and handling refugees. The basis is the Decree of the Chief of Staff of the Indonesian Air Force Number Skep/281/VIII/2006 dated August 15, 2006 regarding technical instructions for providing assistance to the Air Force SAR Elements to the National SAR Agency in the implementation of National SAR Operations.

The results of the interview also obtained data that each organization has its own hierarchy so that the relationship between institutions is still not optimal. This can be seen from the information being distributed and shared in the form of periodic reports to the top management, where there has not been an open sharing of data. This also seems to be related to the degree of importance of the data.

Based on the results of the study, it can be seen that in terms of organization, each Ministry and Agency at the border has its own strategic management in accordance with their respective duties and functions, but all of them have the same goal, namely in order to maintain border security. Laws and regulations governing border areas, including elements of agencies that carry out supervision in accordance with their respective duties and functions.

In addition, each Ministry and Agency has its own legal basis which of course has been adjusted to the characteristics and duties and functions of each, so it is possible that there are intersecting tasks and functions but still have different weights in each institution. This can be seen from the function of Indonesia Customs Agency as a border protector which has the mission of trading facilities and guarding the border, generally carrying out its duties based on the laws and regulations in the field of Indonesia Customs Agency. Specifically related to borders, Indonesia Customs Agency carrying out their duties and functions as well as coordination and cooperation with other Ministry and Agency based on Government Regulation Number 34 of 2019 concerning Border Trade. Until now there is no policy that confirms the strengthening of the role of Squadron 51 in border security and with whom and how it can be implemented.

The existence of the 51st Air Squadron is very important in terms of border security. In particular, the use of UAVs in terms of border security is starting to gain ground. This can be indicated by the formation of the 52nd Air Squadron based in Natuna on October 22, 2021, Indonesia Air Force officially confirmed the existence of a new squadron serving at the foremost and strategic air base bordering the hot spot area, the South China Sea. This provides reinforcement that the existence of the 51st Air Squadron organization has an important role.

c. Collaboration

The collaborative dimension will look at the extent to which each organization is involved in cooperation in border security efforts. This will be seen from the cooperation namely inter-services and inter- institution.

Inter services collaboration explore how each institutions or agency cooperates internally runs these inter-services. For example, at Indonesia Customs Agency, under the Ministry of Finance, there are several regulations from the Minister of Finance that regulate data and information governance deal with data and information.

Currently, inter-institutional breakthroughs have been made by conducting MOUs or certain cross-institutional cooperation agreements. For example, Indonesia Customs Agency in Entikong Cross Border Post regularly submits reports related to supervision, including those related to

border security which is its duties and functions in stages through the West Kalimantan Regional Office.

Thus, with regard to inter-services, it appears that each agency collaborates on inter-services with its parent agency in accordance with the tasks and functions of the organization that have been regulated in the agency's rules. On the one hand, this shows a common thread in terms of clarity of assignments and the hierarchy of cooperation. Although in terms of cooperation between institutions is still not visible. In terms of inter-services collaboration, it can be seen that this is going well. The Indonesia Air Force has carried out various operational orders to 51th Air Squadron.

Inter-institutional describe how institutions and agency with an interest in border security are create collaboration. Thus, it will be seen how the pattern of cooperation between institutions is built. The cooperation that has been carried out in the context of making the border areas functionally effective has been going well. It's just that there are definitely obstacles, especially when it comes to achieving infrastructure because each ministry and agency is constrained by lack of budget. Indeed, every time there is a budget policy, infrastructure constraints can be seen from the lack of budget absorption. There is problems in confirming and maintaining institutional finances with the ministry and agency, especially in the context of development. In fact, National Border Management Agency (BNPP) should have been at the forefront cross-border management.

The author is of the view that in terms of inter-institutional cooperation, the 51st Air Squadron already has sufficient experience, such as surveillance in the territorial waters of ALKI I, carrying out observations of vital objects in the capital city of Jakarta during public demonstration, identify the existence of the terrorist group in Poso, Central Sulawesi, and special task force for the release of Abu Sayyaf hostages.

The results of the study indicate that in the field of implementation, cooperation between agencies and institutions has been carried out although it is not optimal, because it is limited to the type of military operation. However, for the type of cooperation related to border security, it seems that it is not yet optimal, especially since it has not been defined and regulated in laws and regulations, therefore it is necessary to immediately strengthen it in the form of legislation that regulates the pattern and form of cooperation between agencies and institutions.

The actual success in various military operations involving cooperation with other institutions is owned by the 51st Air Squadron in border security cooperation. The challenge is how to build the necessary framework to form the basis of inter-institutional cooperation in border management.

d. Border

The border dimension is related to how border management is carried out by interested institutions. This will be seen from the support of Human Resources and Information Data as the backbone in managing state sovereignty at the border.

The Human sub-dimension describe the willingness of human resources in border management in each interested agency. The results of the study shows that management and administration functions are carried out. Technically it will be submitted to the relevant ministry and agencies. For land areas with the TNI AD Headquarters, for the sea with the Navy Headquarters or with Indonesia Cost Guard.

The results of the study indicate that related to the Human Sub-Dimension, the existence of HR is indeed a challenge. In terms of border security, some points are still blind spots where the apparatus is not present. Even if the apparatus is present, it will has limitation authority when there was a violation of the law. Even though this is not the domain of the Indonesia Army, but the realm of the Indonesia Police. The regular Border Task Force also face problems with the supply of personnel, which are usually brought in from other battalions. Not to mention that border stake

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operations are also related to suggestions for dropping logistics which cannot be fully carried out smoothly because helipad facilities are not always available in the field. In this case, the use of UAVs that are able to reduce the need for HR personnel has not been included as a priority.

In terms of humans in the 51st Air Squadron, in fact, the existing personnel are already qualified. The data that the author received shows that before carrying out their duties, the operators and support personnel have received adequate training. The available information even shows that the existing training is not only carried out in one place but also moves as needed with foreign instructors who are imported directly from the manufacturer. The rigorous selection includes an examination with certain standards that are required before the prospective operator can be declared passed and can operate the UAV.

Data and information is one of the backbones in building strong border security, in particularly, how actions will be taken and executed will depend on the data and information held. The results of the study indicate that related to this data and information, each interested party is still working independently.

The results of the study indicate that related to data and information, each institutions and agencies holds their own data and has not been shared between institutions. This relates to the needs of each agency and the absence of regulations governing it. Both the PLBN, the Ministry of Defence, the Police and other agencies, all hold their own data. Apart from that, decision making cannot be done precisely based on the analysis of existing field data.

This can be seen in the National Border Management Agency which only has a database related to transnational organized crime that was successfully thwarted in Cross Border Post and areas surrounding. There is also Indonesia Customs which has own data application which is used together with the Indonesia Police, and the Department of Transportation for the purpose of recording and monitoring Malaysian vehicles that leave/enter the border gate. Even though there is already information and data that is shared, it is not optimal in upholding border sovereignty between Kalimantan and Malaysia.

In terms of data and information, the 51st Air Squadron has experience in data and information. All military operations that have been carried out by the 51st Air Squadron by involving other elements or institutions demonstrate the 51st Air Squadron's ability to handle the data and information needed in terms of securing the Indonesia-Malaysia land border. This can be seen from the pattern of sharing data and information on the results of UAV monitoring with the commanding officers in the field.

CONCLUSIONS

Based on the results of research related to the role of the 51 UAV Air Squadron in border surveillance, which was studied through the dimensions of Border, Collaboration, Physical and Country, it was found that the 51 UAV Air Squadron had real capabilities in border security based on its physical dimensions. The capability of the 51 UAV Air Squadron in border security is based on the use of UAVs that are able to work to provide information quickly, precisely and bypass boundaries that are usually done conventionally. In terms of endurance, the use of UAVs is able to reduce the risk to the pilot and eliminate the emergence of pilot fatigue or fatigue which can have a fatal impact.

The role of the 51 UAV Air Squadron in border surveillance has not been optimal. This can be seen from the absence of the 51 UAV Air Squadron in border surveillance. The use of observations with UAVs cannot be optimized in an effort to enforce border sovereignty in real terms. Until now, the recording of border surveillance is only kept by the 51 UAV Air Squadron and very minimally used for cracking down on border violations.

The results of the study show that the role of the 51 UAV Air Squadron in border surveillance is not yet optimal due to the Country and Collaboration dimensions. The Country dimension which includes policy and organization has not shown or given a role to the 51 UAV Air Squadron to contribute significantly. Likewise with collaboration, the absence of a legal umbrella and organization that is fully responsible for border security causes coordination to be not optimal and the role of the 51 UAV Air Squadron is also not optimal.

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