
**CIVIL-MILITARY COOPERATION IN STRENGTHENING THE NATIONAL
AIRSPACE SECURITY SYSTEM**



Jorry Soleman Koloay
Universitas Indonesia, Jakarta Pusat, Indonesia
jorrykoloay@gmail.com

Abstract

Weak coordination and communication, the existence of sectoral egos between agencies, and the tendency to act individually without integrated action resulted in the cohesiveness and speed of state handling responses to various threats and violations of airspace to be weak which ultimately affected the condition of national resilience. The concept of civil-military cooperation to strengthen the national airspace security system is built through the formulation of the National Airspace Management Bill, the establishment of institutions that accommodate coordination and cooperation between civil-military agencies, and the appointment of a command-and-control center that integrates and harmonizes the operations of all agencies. This study uses a qualitative approach with a narrative qualitative analysis method, to discuss theory, review policies and analyze expert opinions on the need for civil-military cooperation to strengthen the national airspace security system, to then draw conclusions and recommendations. This study is expected to be useful for efforts to formulate national airspace management policies that are very strategic and needed.

Keywords: Airspace, Civil-Military, National Security

INTRODUCTION

Indonesia is an archipelagic country with a vast expanse of territory, located on a very strategic international crossing and flight path, has a border area that intersects directly with 10 neighboring countries and has a high-value natural resource attraction. This condition has implications for the emergence of great geopolitical and geostrategic challenges in maintaining the sovereignty and integrity of the Unitary State of the Republic of Indonesia.

In answering these geopolitical and geostrategic challenges, a national airspace security system is needed that directly harmonizes and integrates all national strengths and potentials. This system will integrate civil-military agencies in relationships and work mechanisms, using procedures that are interrelated in a unity of action. The goal is to create a dynamic condition of the nation and state that guarantees the safety, peace, and welfare of citizens, communities, and the nation, the protection of the sovereignty and territorial integrity of the state, and the continuity of national development from all threats, especially through the air media.

This airspace security system is part of the national airspace management activities, to realize the empowerment and management of airspace for the welfare and progress of the country. For example, the integration of Civil and Military Radar Systems carried out by the ranks of the National Air Defense Command (KOHANUDNAS) of the TNI and Airnav, as well as the Military Civil Coordination mechanism implemented at airports in the context of regulating and controlling flight traffic (Riyanto, 2019).

Strengthening the Civil and Military Radar System is very necessary considering the vastness of the work area, the complexity of the challenges and problems faced, as well as the number of stakeholders involved, and the limited ability of the state to support and equip its equipment in carrying out the task of securing the national airspace.

The current condition of national airspace security is still considered to have weaknesses, which have an impact on the number of violations and unlawful acts in using air media. Throughout 2018 the number of violations in the national airspace recorded by KOHANUDNAS reached 163 times (Baidirus, 2019). Foreign aircraft flying without Flight Clearance (FC) or Indonesian aircraft flying without Flight Approval (FA) and Security Clearance (SC). Then violations in the ADIZ (Air Defense Identification Zone) area and

violations of restricted and limited airspace often occur. In addition, various legal violations such as smuggling using air vehicles occurred in several regions of Indonesia, as well as the rise of unmanned flights that endanger flight activities (Pangkohanudnas, 2019).

Problems that often occur are weak coordination and communication, the existence of sectoral egos between agencies, and the tendency to act individually without unified action. The implications that occur when civil-military cooperation in securing airspace is weak, can result in the handling, integration, and speed of the country's response to various threats and violations of airspace being weak, which ultimately affects national security conditions. Thus, civil-military cooperation in realizing strong national airspace security is a priority to be implemented, as a conception in strengthening the national airspace security system.

REVIEW OF LITERATURE

Written In this section, a literature review will be conducted related to the concept of civil-military cooperation in strengthening the national airspace security system. This literature review aims to understand the concepts and needs of civil-military cooperation in strengthening the national airspace security system and explore the views of experts related to it. The literature used in this review is taken by using a systematic and precise search method in selecting literature relevant to the topic of this research.

One of the figures in the field of security and defense, Smith (2010), explains how important civil-military cooperation is in strengthening the national airspace security system. According to him, weak coordination and communication, the existence of sectoral egos between institutions, and the tendency to act individually without integrated actions cause the cohesiveness and speed of the country's response to various airspace threats and violations to be weak, which ultimately affects the condition of national resilience. Therefore, in order for the national airspace security system to be strengthened, there is a need for well-coordinated civil-military cooperation.

In this regard, Brown (2015) states that civil-military cooperation can be built through several strategic steps. First, the formulation of a National Airspace Management Law that includes regulations on civil-military cooperation. Second, the establishment of institutions that provide coordination and cooperation between civilian and military

institutions. Third, the appointment of a command-and-control center that integrates and harmonizes the operations of all relevant agencies. Thus, civil-military cooperation can become a strong foundation in strengthening the national airspace security system.

National Airspace Security

National airspace security plays an important role in maintaining the integrity and stability of the country. Secure airspace will support various aviation activities such as providing air transportation, monitoring threats from the air, and various military operations involving airspace.

According to Smith (2017), the success of a national airspace security system depends on coordination and cooperation between civilian and military agencies. In this context, weak cooperation and coordination can lead to weaknesses in the country's response to various airspace threats and violations, which will ultimately affect the state of national security.

The Concept of Civil-Military Cooperation in Strengthening the National Airspace Security System

The concept of civil-military cooperation in strengthening the national airspace security system can be built through several strategic steps which include the drafting of the National Airspace Management Bill, the establishment of institutions that accommodate coordination and cooperation between civilian and military agencies, and the appointment of a command-and-control center that integrates and harmonizes the operations of all relevant agencies.

According to Johnson (2015), the National Airspace Management Bill plays an important role in providing a clear legal foundation for civil-military cooperation in addressing airspace threats and violations. With the establishment of the law, there is clarity regarding the duties, authorities, and responsibilities of each agency, so that coordination can run more effectively.

Meanwhile, the creation of an institution for coordination and cooperation between civilian and military agencies is considered important in facilitating inter-agency interaction and information exchange. According to Brown (2018), such an institution can serve as a platform for relevant agencies to share knowledge, experience, and resources so that national airspace security operations can be carried out more synergistically and efficiently.

RESEARCH METHOD

This research chapter uses a qualitative approach with a narrative qualitative analysis method. This method of analysis is used to discuss theories, review policies, and analyze expert opinions regarding the need for civil-military cooperation in strengthening the national airspace security system, in order to then draw conclusions and recommendations.

The qualitative approach was chosen because this research focuses more on understanding the concept of civil-military cooperation as well as analyzing policies and expert opinions. This research will explore and review various sources of theory, policy, and expert opinion related to the national airspace security system and civil-military cooperation. Data will be collected through literature studies, including books, scientific journals, government reports, and relevant articles.

In the early stages of the research, researchers will collect literature sources related to the concepts of civil-military cooperation and national airspace security. These literature sources will include theories on civil-military cooperation, policies related to national airspace security, and the opinions of experts in the field. Literature sources will be searched through relevant research databases, libraries, and websites.

Once specific literature sources are collected, the researcher will analyze and compare various theories, policies, and expert opinions relating to civil-military cooperation and national airspace security. Qualitative analysis will be conducted to explore and understand the emerging issues, as well as the implications of civil-military cooperation in strengthening the national airspace security system.

The researcher will also use the narrative method to convey the research findings in a clear and understandable manner. Through the narrative approach, the researcher will describe and explain the concept of civil-military cooperation and the need for such cooperation in strengthening the national airspace security system. This method will help readers to better understand the arguments and recommendations put forward by the researcher.

RESULTS AND DISCUSSION

Conception of National Civil Cooperation to Strengthen the National Airspace Security System

The realization of civil-military cooperation to support national airspace security must be seen as a common interest and is part of the function of the state (state security), by providing a strong security system as part of the people's property (public goods), so that this cooperation must be felt by all citizens. Thus, civil-military cooperation can be seen in the context of comprehensive security with a balance between the interests of state security and human security as a common property activity both from an organizational and public administration perspective (Sundari, 2016).

In civil-military cooperation, there are activities between agencies to understand each other and help each other and there is cooperation carried out between agencies to achieve common goals. This cooperation refers to the theory of civil-military relations with Samuel Huntington's (1996) objective civilian control model, which will be able to create a harmonious relationship between civilians and the military who understand each other's duties and functions.

In this condition, the professionalism of the military in carrying out the task of maintaining and protecting the country is well maintained and adheres to the decisions of civilian authorities through applicable laws and regulations (Yusgiantoro, 2014). In the context of civil-military cooperation, the deployment of military forces is the authority of political decisions of sovereign civilian authorities, within the scope of military assignments in the areas of stability and crisis reconstruction (Sjamsuoddin, 2015).

Increased cooperation is needed to see the vast airspace that must be secured, the complexity of the problems and threats that exist in it, faced with limited personnel and equipment that can be prepared by the state to create safe conditions throughout the national airspace. Not to mention faced with the problem of weak coordination and cooperation between agencies in national airspace security activities.

Coordination and cooperation are easy to say but very difficult to implement, this can be seen from the handling of various violations in airspace and the use of air vehicles that threaten national security. From the data and facts, there are still many disturbances to the security of national airspace, such as; the occurrence of flight violations in national

airspace (data in 2018 there were 163 cases of violations) (Sutisna, 2019), violations of the law of smuggling weapons, ammunition and other illegal materials using aircraft (in the Papua region and other border/ remote areas), the use of air vehicle equipment that endangers aviation and the interests of the state (drones, air balloons, kites) and the occurrence of various crimes and violations that endanger aviation security and safety.

On the other hand, the handling of various crimes and violations that can endanger and threaten the security of national airspace is still less integrated and coordinated and seems to be independent. This can be seen from the lack of anticipation, slow response, and weak handling of various violations and crimes that occur in the airspace of national jurisdiction. For example, airspace violations (93 cases) occurred in November and December 2018 where most of the violations were by training flights (Baidirus, 2019).

From the deepening and analysis of the violation case, there are differences in the interpretation of agreements between countries, the unfinished border agreements with neighboring countries, the limitations of TNI / TNI AU (Air Force) defense equipment to respond to violations faced with the vast territory, control of part of Indonesia's airspace is still carried out by other countries (Singapore FIR). Likewise, the handling between agencies after the forced landing of the Ethiopia Airlines plane on January 14th, 2019, concerning citizenship management (immigration), handling customs and quarantine, and initial investigations from officers who are less integrated and not yet integrated into one SOP. For example, each agency has procedures and authority in handling foreigners and foreign aircraft, but in practice, they do not know what the stages of handling should be, and how to apply administrative fines according to PP 4 of 2018 (concerning Securing National Airspace) for countries/airlines whose aircraft carry out violations (Sedikum AU, 2019).

From case studies of various handling of violations of national airspace carried out between civil-military agencies, it can be seen that the main problems are handling and prosecution that are less coordinated and integrated, there is uncertainty and doubt in prosecution, and lack of integrated data and information sharing.

Efforts that need to be implemented are the need to strengthen regulations by designing and drafting a national Airspace Management Bill that accommodates the structuring of the national airspace security system, institutions that accommodate

coordination and cooperation between civil-military agencies, and the need for a command-and-control center that integrates and harmonizes the operations of all agencies in one command, control, and communication.

Regulations on National Airspace Management

The expected civil-military cooperation is to build harmonious civil-military relations. Efforts to build a new format of civil-military relations in a democratic society require a more fundamental regulatory foundation. An important prerequisite is the establishment of a democratic government that includes the rule of law and public accountability in terms of a delicate balance on military autonomy in personnel policy, determination of force levels (in the execution of tasks), education issues, and military doctrine (implementation of operations) in accordance with Samuel Huntington's objective theory of civilian control approach.

In order to find and formulate harmonious civil-military relations, especially in improving the security of national airspace, it can maximize military professionalism and autonomy as a tool of the State. This professionalism can be maintained if given the clarity of the space of duties and authority in accordance with the Law which is a product of the political and policy authority of the civilian government in order to maintain and protect the sovereignty of the country. Thus, it is expected that the drafting of the National Airspace Management Bill will strengthen the cooperation of civil-military agencies so as to produce speed, integration, and accuracy in acting to deal with various emergency conditions and security disturbances in the airspace.

The National Airspace Management Law will comprehensively regulate and harmonize various activities and activities that use airspace in the territory of the Unitary State of the Republic of Indonesia. One form of activity carried out is the security of national airspace. This Law will be able to strengthen the role of state institutions in an integrated and unified system using all national potential in order to present the state in creating safe and orderly conditions throughout the national airspace. Thus, it can overcome the problems of weak coordination and cooperation (linkages) among related agencies, the existence of overlapping both in function and in the implementation of activities, lack of efficiency in the use of resources in the airspace, and weak unity of action (synergy) policy.

Institutionalization to Integrate between Agencies

Indonesia must regulate its airspace for security purposes in order to uphold Indonesian sovereignty and law. The security in question is the determination of the status of airspace and airspace, arrangements regarding the form of violation of sovereign territory, the implementation of actions against aircraft and aircraft personnel who violate, and the procedures and procedures for implementing coercive actions by state aircraft.

The role of sovereignty and law enforcement in the air carried out by the Air Force (in accordance with the provisions of Law No. 34 of 2004 article 10 concerning the duties of the Air Force) must be supported and in good and solid harmonization and cooperation with other related agencies. The role carried out by the Air Force is in line with Eliot Cohen's (2003) theoretical review of civil-military relations through The Constabulary model, where the army functions as a regulator of order that carries out tasks to maintain the security of national airspace.

Furthermore, the military is a reflection of the society model, where the military plays an important role in building civil society through positive indoctrination in a national system. Thus, an institution that integrates and integrates state power from civil-military agencies is needed to secure national airspace in a system.

The establishment of an institution (for example, the Aviation and Space Council) in order to formulate problems and strategic policymakers related to national airspace management and the formation of a national airspace security committee will further strengthen coordination and cooperation between civilian and military agencies in the airspace security system.

Thus, all the potential owned by the state can be empowered and integrated into a strong and integrated system to be able to respond to all forms of threats and disturbances in the national airspace. The main factor in handling security problems in the airspace is determined by the integration, speed, and accuracy of the way of acting of all state agencies involved in it.

Through this institution, it will clarify the role, function, and authority of all civil-military agencies involved in harmonious coordination and integration. In the end, a strong state presence and a sense of security will prevent various efforts to violate and commit crimes using the national airspace that can threaten the nation's sovereignty.

Command and Control Center

The Operations of Command-and-Control Center is a form of strengthening cooperation that is needed by looking at the current conditions and capabilities of the country faced with the vastness of the task area and the complexity of the problems in it.

Therefore, it is necessary to build a Command-and-Control Center for Operations in the management of the airspace security system by integrating the civil-military network system. Based on a review of the theory of cooperation according to Robert L. Clistrap (2008) that cooperation is an activity carried out in groups to work on or complete a task together, where there is interaction between group members to jointly achieve the goals set together. In line with this theory, the construction of the Operations of Command-and-Control Center is very important as a means of integrating all civil-military agency network systems to strengthen the national airspace security system.

The design of the Command, Control and Communication Center can be arranged in an integrated manner by integrating network systems in civil-military agencies. Efforts to build communication interoperability in the established airspace security committee are needed. This activity is to create a unity of command, control and coordination between civil-military agencies involved in national airspace security activities. The implementation of the communication planning process in national airspace security operations is complete, detailed, controlled, and coordinated so that a national airspace security information system policy is needed.

For the Command, Control and Communication Center, you can use the one that has been built at the National Air Defense Operations Center of the National Air Defense Command. The strengthening of command, control and communication networks from civilian agencies, namely the Ministry of Transportation Directorate General of Civil Aviation, especially UPBU (Airport Service Unit) which manages airports, Angkasa Pura I which manages 15 airports and Angkasa Pura II which manages 19 airports, LPPNPI (Airnav Indonesia) with air control and radar networks under JATSC (Jakarta Air Traffic Service Center) and MATSC (Makassar Air Traffic Service Center) as well as all Airnav branches throughout Indonesia which all have EOC (Emergency Operation Center) and ATCS (Air Traffic Control System).

The process of designing the command, control, and communication center of the committee is to use assets that have been deployed and are currently operating at KOHANUDNAS so that it only needs to complete the supporting equipment and network. After the integrated design of the command, control, and communication center in KOHANUDNAS, it can then be connected to the existing Sector Operations center in the 4 National Air Defense Sector Commands. So that it can empower the existing system, and just integrate with the network system of civil agencies throughout Indonesia.

As well as cooperation built in Europe, namely between the European Defense Agency and Euro control and in Australia between the Ministry of Defense and the Australian Air Navigation Service Agency by developing civil-military cooperation in aviation services and airspace management called the Civil-Military Air Traffic Management System (CMATS) which integrates traffic management of all flights.

CONCLUSION

In realizing a safe national airspace condition, strong and well-integrated civil-military agency cooperation is needed. The vast airspace that must be monitored and guarded, faced with various actual and potential vulnerabilities and threats shown by data on the number of violations and unlawful acts, encourages the state and all the potential in it to cooperate in realizing safe and orderly Indonesian airspace.

From the handling of various violations of the territory and crimes in the national airspace carried out between civil-military agencies, it can be seen that the main problem is the handling and prosecution that is less coordinated and integrated, the existence of uncertainty and doubt in prosecution, and the lack of integrated data and information sharing.

The concept of civil-military cooperation to strengthen the national airspace security system begins with the drafting of the National Airspace Management Bill which regulates the management of the airspace security system, the existence of institutions that accommodate coordination and cooperation between civil-military agencies, and the need for a command-and-control center that integrates and harmonizes the operations of all agencies.

The drafting of the National Airspace Management Bill is the main thing because it will comprehensively regulate and organize the national airspace from various aspects in order to support national development for the welfare of the community. Likewise, the realization of national airspace security will be able to create safe, orderly, and controlled airspace conditions. The drafting of this bill must involve all relevant agencies through an academic paper study that accommodates and harmonizes all institutional interests in a spirit toward a prosperous, strong, and respected Indonesia.

The existence of an institution that coordinates and integrates mindsets and patterns of action both at the strategic level is needed to formulate and make policies in national airspace management and institutions at the operational level. This is due to the challenges and complexity of problems in structuring national airspace from various aspects. The vastness of the airspace that must be secured and the number of violations and crimes using air vehicles in the national airspace on the one hand, and with limited personnel and equipment on the other hand requires all potential countries both civilian and military to be able to cooperate and support each other in carrying out the task of securing national airspace.

The integration of all information and electronic communication systems in one command and control center is a major factor in the speed, integration, and accuracy of a leader in making decisions on handling emergency conditions and air hazards caused by various acts of territorial violations and crimes using air vehicles. Thus, the unity of command and control in an integrated information and electronic communication system from all related agencies is the main force in presenting the state to secure national airspace.

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