THE AIR DEFENSE IDENTIFICATION ZONE (ADIZ) INDONESIA
IN ORDER TO ENSURE SECURITY IN THE AIR REGION
JURISDICTION OF NATIONAL JURISDICTION

Amelia Farissa Devi
Air Defense Strategy Study Program
Faculty of Defense Strategy
Defense University
farissa.ameliadevi@gmail.com

Abstract –
For the purpose of tracking down and identifying aircraft detected by radar, the Air Defense Identification Zone (ADIZ) was established as a support facility for the national air defense system. Airspace above the high seas, which borders other countries’ sovereignty, usually extends from the territorial area of the founding country. Analysis of ADIZ Indonesia’s role in supporting Indonesia Air Force airspace security was a primary goal of the study. Qualitative methods are employed in this study. Data was gathered through a combination of direct observation, in-depth interviews, and documentation. According to the findings of the study, the identification zone for ADIZ should be outside of national airspace sovereignty in order to identify foreign aircraft entering national airspace sovereignty. ADIZ Indonesia developed will be adhered to by countries if supported by adequate defense equipment. ADIZ Indonesia, which is supported by adequate defense equipment, will be obeyed by other countries. If enforcement is carried out firmly and continuously accompanied by diplomatic efforts by the Minister of Foreign Affairs and software synchronization that regulates the airspace above the Indonesian Archipelagic Sea Lane. The suggestion of this research is that efforts are needed to optimize the implementation of ADIZ Indonesia, which can be implemented and adhered to by other countries if the government of Indonesia can support the needs of the Indonesian Air Force weapon system. For this reason, commitment from government and relevant stakeholders is needed in overcoming the existing problems.

Keywords: implementation, identification zone, air defense, national jurisdiction, regional security
1. **Introduction**

Sovereignty is an important attribute for the existence of a State as an international person. Therefore, so that each country remains entrusted as an international person, it will always try to defend its sovereignty, including maintaining the security of its airspace. In relations with the international community, each country has accepted the principle of mutual respect for the sovereignty of a country (Ministry of Defense of the Republic of Indonesia, 2015). The country of Indonesia, with such a wide and large geographical location, is likely to be in contact with foreign elements, both neighboring countries and other countries. Threats from abroad that may arise in the national airspace may vary and will affect the overall security of the territory of the Republic of Indonesia, either directly or indirectly. One of the country’s efforts to regulate its airspace and detect early threats that will arise is to establish ADIZ (Bakrie, 2008).

The military, along with the rest of the country’s defense forces, has the responsibility of enforcing state sovereignty over its airspace and ensuring its integrity. A country’s air defense identification zone (ADIZ) serves as a means of identifying specific targets (Fauzi, 1983). A radar-detected aircraft can be identified by ADIZ, which is designated as a support facility for the national air defense system (Radar Hanud). This area typically extends from the country’s landmass to the airspace over the high seas that borders the sovereignty of other nearby countries (Hambali, 1994).

As an air defense identification zone, ADIZ is the responsibility of the Indonesian Air Force to enforce and secure it. One of the main components of defense is in charge of carrying out the duties of the TNI in the air force in the field of defense, enforcing the law and maintaining security in the airspace of national jurisdiction in accordance with the provisions of national law and ratified international law, carrying out the duties of the TNI in the development and development of air force forces, as well as implementing empowerment of air
defense areas (Ministry of Defense of the Republic of Indonesia, 2015). According to international law and statutory regulations as well as international agreements, a jurisdiction area is an area outside of a state’s territory that includes the Exclusive Economic Zone, Continental Shelf, and Additional Zone (Azhari, 2005).

ADIZ Indonesia can be found on the Indonesian Air Force flight map, the January 1977 edition of the Airborne Survey and Photography Service, at coordinates 04 00 00S, 104 00 00E, 04 00 00S, 117 00 00E, 10 00 00S, 117 00 00E, 10 00 00S, 104 00 00S. The total area of ADIZ Indonesia is rectangular in shape with a width from north to south of 180 Nm, and a length from west to east of 390 Nm. ADIZ Indonesia does not cover the entire territory of Indonesia and does not even reach the EEZ line, so that ADIZ Indonesia as a zone for identifying aircraft that will enter national airspace does not function optimally (Abdurrasyid, 2003). In connection with the condition of ADIZ Indonesia which is not yet optimal, efforts to control airspace will also be less than optimal. Control of airspace is absolutely necessary for the survival of the nation and state in order to achieve national goals. ADIZ Indonesia, which is only in the airspace of a small part of southern Sumatra, Java and Madura, Bali, Lombok, and a small part of the western part of Sumbawa Island at the beginning of its establishment, was an effort by the government to secure security in these areas for the sake of defense and security of vital national objects, the center of government, and TNI headquarters located on the island of Java.

The implementation of ADIZ in the practice of countries so far is intended for defense purposes, meaning that no country has established ADIZ for commercial purposes or for regulating aviation traffic in their country and other non-defense interests (Abdurrasyid, 2003). In general, it can be underlined that ADIZ is designated for national defense zones. Then the application of ADIZ has been recognized by other countries as binding law, the purpose of this statement is very technical, meaning that countries that are members of ICAO membership will comply with all standards and recommendations as procedures established by international aviation for aviation safety purposes. The operational procedures that must be obeyed by aircraft when entering the ADIZ are part of the standards and recommendations that have been set by ICAO, this means that the submission of other countries when passing through the ADIZ has been regulated in the Annexes of the Chicago Convention 1944. Likewise, ADIZ Indonesia which arrived currently not
included in national legislation. With the absence of ADIZ provisions in national regulations, there is legal uncertainty in taking action on all forms of threats and violations that may occur in order to maintain the security of the airspace of the national jurisdiction (Kusumaatmadja, 1990).

ADIZ as an identification zone outside the territorial line of a country is a zone where all foreign aircraft entering the area must report their flight plans and objectives (flight plan) before entering the sovereign territory, which is a supporting facility for the national air defense system. Each country will always try to carry out self-defense and supervision of security conditions in its airspace from various forms of threats (Nugroho, 2006). This is the background for many countries in the world to create/stipulate an Air Defense Identification Zone (ADIZ). The ADIZ area can be determined to stretch far out to hundreds of kilometers in free airspace according to the interests of the state in an effort to detect hazards that may come from the air. In the context of the implementation of maintaining the security of their airspace, countries often designate certain parts of their airspace as dangerous areas, restricted areas, and prohibited areas for all flights. Usually these areas are military areas or training areas or areas of national vital objects, as well as flight restrictions in certain other areas, including ADIZ. Supporting the development of ADIZ Indonesia requires an air defense system that is mutually integrated and works using certain methods and processes so that the existence of ADIZ Indonesia can be effective in securing the airspace of national jurisdictions (Kusumaningrum, 2018).

The implementation of ADIZ in the practice of countries so far is intended for defense purposes, meaning that no country has set ADIZ for commercial purposes or for regulating aviation traffic in their country and others that are not in defense interests. In general, it can be underlined that ADIZ is designated for national defense zones. Then the application of ADIZ has been recognized by other countries as binding law, the purpose of this statement is very technical, meaning that countries that are members of ICAO membership will comply with all standards and recommendations as procedures established by international aviation for aviation
safety purposes. The operational procedures that must be obeyed by aircraft when entering the ADIZ are part of the standards and recommendations that have been set by ICAO, this means that the submission of other countries when passing through the ADIZ has been regulated in the Annex of the Chicago Convention 1944. Likewise, Indonesia's ADIZ which arrived currently not included in national legislation. With the absence of ADIZ provisions in national regulations, there is legal uncertainty in taking action on all forms of threats and violations that may occur in order to maintain the security of the airspace of the national jurisdiction (Pranowo, 2010).

The implementation of ADIZ over Java, including Madura and Bali as a whole, has not yet accommodated the interests of the defense and security of the Unitary State of the Republic of Indonesia as a sovereign state over the area above its territory. The problem of implementing ADIZ in Indonesia is a problem related to various supporting elements, ADIZ will be effective if the area that will be used as the outer boundary for foreign civil and military aircraft to identify itself to the founder of ADIZ as it should be. Air Traffic Control (ATC) must really function as a destination for identifying foreign aircraft that will enter the territory of a country’s national air sovereignty, then air defense radar (Hanud) is also always on standby for 24 hours to be able to identify all movements that enter the airspace.

The main points of the Hanud operation are that the targets of the Hanud operation are air superiority in the national airspace and law enforcement in the national airspace. In the concept of the air defense title, it is explained that the deployment of the Hanud elements includes radar, ambush fighter aircraft, medium-range guided missiles and air attack repellants. However, in practice, the concept of a title that has been implemented and almost evenly protects the entire territory of Indonesia is the title of radar hanud, while for the title of attack fighter planes, missiles and air attack repelling weapons it has not been evenly and balanced (Singarimbun & Effendi, 1989).

In carrying out its duties to maintain security in the airspace of the national jurisdiction, the Indonesian Air Force is expected to deploy air defense forces in order
to be able to maintain security in the airspace of the national jurisdiction. However, this has not been able to prevent violations of state law and sovereignty by foreign aircraft, whether intentionally or not. For example, in December 2006 there was an ADIZ violation committed by an Australian PC-3 Orion aircraft where the aircraft flew from Christmas Island and maneuvered around Indonesia’s ADIZ. Kosekhanudnas 1 then carried out identification and interception actions because the direction of the plane was getting closer to the south of West Java Province, namely Satrad 216/Cibalimbing to a distance of 40 NM (Kusumaningrum, 2018). Even though the aircraft was successfully brought out of ADIZ Indonesia’s territory, the incident shows the fact that there are still airspace violations occurring in ADIZ Indonesia. From this phenomenon, the problems that then arise are the spatial planning of Indonesia’s airspace at this time, one of which is the ADIZ which is not optimal, the absence of national legal provisions regarding ADIZ, and of course the inadequate defense equipment capabilities. To overcome the various problems that arise, efforts are needed to develop ADIZ Indonesia, namely by establishing ADIZ Indonesia in all airspace of national jurisdictions, aligning software, and strengthening the capabilities of the Indonesian Air Force defense system so that it can support the task of the Indonesian Air Force in maintaining security in Indonesia’s airspace of national jurisdiction. To find out the extent to which ADIZ Indonesia can be developed, it is necessary to have a study on the Development of ADIZ Indonesia to Support the Tasks of the Indonesian Air Force in the Framework of Maintaining the Security of the Airspace of the National Jurisdiction (Supancana, 2003).

2. Literature review

2.1 Cooper’s Control Theory

In 1951 Cooper had put forward his stance that the country’s sovereignty was determined by the ability of the countries concerned to control the space above their territory. Cooper states:
Cooper’s theory has been used by the United States and Canada with ADIZ and CADIZ. The efforts of the United States and Canada to designate some parts of the Pacific Ocean and Atlantic Ocean as security areas called ADIZ and CADIZ are actually starting from protecting their countries from security disturbances that may suddenly occur. The ability to control its air space through technology owned by Indonesia will support the enforcement of Indonesia’s ADIZ which functions as an identification zone, where foreign aircraft report flight plans. The effectiveness of ADIZ can be achieved if it is supported by the "Air Traffic Control" (ATC) system, which is able to act in correlation with the national air defense system. Air defense capabilities are always faced with modern weapons owned by the Indonesian Air Force. The existing defense equipment capabilities are faced with the dynamics and conditions of the strategic environment, the nature of the threats that will come, and the size of the area. Therefore, by optimizing ADIZ Indonesia, it can be projected to ensure the territorial integrity of the Unitary State of the Republic of Indonesia. Thus, it is necessary to develop aircraft capabilities, reliable radar and missile systems so that airspace control can be carried out as referred to in Cooper’s mastery theory.

2.2 The Evolution of State Sovereignty in Air Space

Aviation, which is the main object of international air law, has only been born since the beginning of the 18th century. Aviation technology continues to develop over time, especially after World War II. The evolution of state sovereignty over the airspace (space) into three time periods, namely the early period of the emergence of the doctrine (early doctrine) of state sovereignty over the airspace, the Pre-World War II period consisting of the Paris Conference 1910, the Versailles Agreement 1918, Paris Convention 1919, Madrid Convention 1926, Havana Convention 1928, and the post-World War II period consisting of the 1944 Chicago Convention and multilateral
open sky policy era agreements.

Sovereignty over the air area (space) in Roman law was divided into three distinct concepts: air space as private property, air space as res communes or res nullius, and air space as belonging to the state. Rights in the air can be assumed in a variety of ways because the landowner owns the airspace. As part of their effort to safeguard citizens' private rights, the Romans formulated the proposition "cujus est solum, ejus est usque ad coelum". If you own a piece of land, then you own everything above and below the surface of the land, as well as anything buried therein.

2.3 Air Law Theory

Air law is all kinds of laws, regulations and customs regarding aviation as well as all human rights and obligations as their implementation which is based on agreements, customs and laws that apply between countries in matters of aviation (Conventions, Treaties, Customary Law etc.) (Abdurrasyid, 2003). In accordance with the above understanding, air law is the entire legal norms governing the use of air space, especially regarding aviation, the use of aircraft in its role as a necessary element for aviation. Therefore, every country must comply with air laws that apply both at the international level and in a particular country that is passed through.

2.4 Principles of Self Defense

Article 51 of the United Nations Charter recognizes the principle of self-defense as the legal basis for ADIZ's establishment. Customary international law states that a state's right to use weapons to defend itself from outside forces (i.e., other countries) is legitimate (Shwa, 2005). Self-defense is a fundamental human right. According to the principles of International Law, the right to self-defense is explicitly recognized in Article 51 of the United Nations Charter. In Article 51 of the United Nations Charter, the right to self-defense is outlined in detail. According to the article:

"Nothing in the present Charter shall impair the inherent right of individual or collective self defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take anytime such action as it deems necessary in order to maintain or restore international peace and security."
This right to self-defense is not specifically stated in the article but is implicitly stated in the preparatory work. It is not mentioned in Article 51 how to use the right of self-defense. This article is frequently linked to the limited use of armed force. Individual and collective self-defense have been granted limited permission for armed violence in accordance with the UN charter, according to John Higgins (1999). The United Nations also believes that the measure could be used to secure legal rights and promote social and political equality. Self-defense has been interpreted by international law scholars and state practices to include the concept of self-preservation. According to Clark Mitchell Bowett (1989), the right to self-defense is not limited by Article 51. A state cannot wait until an armed attack occurs before exercising its right to self-defense, in his view, because the two are unrelated (UN Charter, 1990).

3. Research methods

Qualitative research is the method employed in this study.

A case study will be used as the research design. In the social sciences, case study is one of the methods used to conduct research. A case study is a long-term investigation of a specific situation or event that is studied using systematic methods of observation, data collection, analysis, and reporting. As a result, you'll have a better grasp on the underlying causes of events and be better prepared to conduct further research. Hypotheses can be generated and tested through the use of case studies (Creswell, 2016).

The implementation of this research will be focused on the Ministry of Defense and Koopsudnas (National Air Operations Command), which is an institution that reviews ADIZ policy and development. A structured and neat technique is needed to obtain the necessary data and information. The process of collecting data and information related to this research uses several technical considerations. The technique used is interactive and non-interactive. Sources and types of data in this study used primary and secondary data.

Primary data is information and data obtained by the author directly from the
research site or research object. Words and actions are sources of data obtained from the field according to the results of interviews and observations. Secondary data is data that is already available and obtained by the author by reading, viewing or listening to it. Literature analysis is used as secondary research data. Secondary data obtained can be in the form of magazines, bulletins, publications from various organizations, attachments from official bodies such as ministries, study results, theses, survey results, historical studies, and so on. The researcher used this secondary data to strengthen the findings and complement the information that had been collected through interviews, documentation and questionnaires. Data collection methods are techniques or methods used by researchers in collecting data (Riduan, 2010).

4. **Results and Discussion**

Based on the results of interviews with sources from the Ministry of Defense and Koophudnas, it can be analyzed the implementation of Indonesia's ADIZ development as a national air defense. The explanation of the implementation of ADIZ Indonesia is explained as follows.

4.1 **ADIZ Components**

The Directorate General of Defense Strategy of the Ministry of Defense as an organization that responds to global strategic developments carries out policies and standardization of the implementation of national defense strategies. As the formulator of strategic policy, the strategic analysis of the defense area has a sub-directorate, one of which is the directorate of the defense area. Indonesian territory, both land, sea and air, has an urgency to be protected in accordance with the mandate of the 1945 Constitution.

In carrying out national defense, it is carried out through efforts to build and foster the capability, deterrence of the state and the nation as well as overcoming any threats. This is related to the main task of the TNI in the Law of the Republic of Indonesia Number 34 of 2004 concerning the TNI that the main task of the TNI is to
uphold the sovereignty of the state, maintain the territorial integrity of the Unitary State of the Republic of Indonesia based on Pancasila and the 1945 Constitution of the Republic of Indonesia, and protect the entire nation and the entire homeland of Indonesia from threats and disturbances to the integrity of the nation and state. The Air Force is tasked with, among others, carrying out the duties of the TNI in the field of defense, enforcing the law and maintaining security in the airspace of national jurisdiction in accordance with the provisions of national law and ratified international law. The enforcement of airspace state sovereignty is held within the ADIZ identification zone.

The results of the interview found that ADIZ Indonesia needs to be repositioned so that ADIZ can cover all Indonesian airspace, namely the entire Exclusive Economic Zone. Several elements supporting ADIZ’s performance are also influenced by developments in military technology including air defense radar systems, satellite frequency coverage and communication tools, technology transfer of weapons systems and allocation of the state defense budget. These elements include the strength of the main equipment of the TNI AU weapon system such as types of fighter aircraft, satellites and communication tools, military radar in reaching the ADIZ area, air defense artillery, air bases, Sector Operational Center (SOC), information and communication systems that such as Transmission Data Air Situation (TDAS), and military ships that have air defense capabilities and sail within the ADIZ area and are integrated with the air defense system of the National Air Defense Command.

The placement of the Koophudnas radar unit is still largely concentrated in the western part of Indonesia, while there are still many parts of eastern Indonesia that have not been reached by the Indonesian Air Force radar. Areas that have not been detected by radar units include: the western part of West Sumatra, Bengkulu, the border of West Kalimantan with Sarawak, Malaysia, the northern part of the Maluku Islands, the northern part of West Papua and the islands of East Nusa Tenggara. The new radar must be able to support various information needed by
Koophudnas in managing ADIZ such as calling and communicating with foreign aircraft, aircraft number and type information, aircraft altitude, aircraft speed, estimated time of aircraft while in ADIZ and showing coordinate positions according to latitude/ longitude. The control of air space by the Indonesian Air Force will work with Cooper's control theory in which the sovereignty of a country is determined by the country's ability to maintain and control the air space above its land and sea areas.

From the results of the study, it was found that currently in terms of radar, it is still not entirely capable of monitoring and covering all of Indonesia's air space. This is because there are still blank spot areas in some Indonesian airspace and the potential for airspace violations by foreign aircraft, both civilian and military. This will certainly have an impact on the weakening of the deterrence and capability of Indonesia's air power in the international world.

The condition of the other TNI AU defense equipment is viewed from the ambush fighter aircraft as the main defense equipment for prosecution in the event of a violation of the national airspace. Koophudnas is currently not equipped with an attack fighter force. The current condition of the attack fighter aircraft is still limited and far from ideal when faced with the vast territory of Indonesia. The Indonesian Air Force's ambush fighter aircraft are not only used as operational aircraft but are also used for daily training. This condition is very vulnerable when faced with a situation where an aircraft is carrying out a routine exercise and suddenly has to conduct an interception against a foreign aircraft, because during the exercise it is not equipped with temporary weapons to carry out the interception process, it must be equipped with weapons. In addition, the deployment of Indonesian Air Force attack aircraft is currently still concentrated in the Western and Central regions of Indonesia and the radius of action of the fighter aircraft has not been able to reach all parts of Indonesia. It is hoped that the ambush force will be evenly distributed throughout the territory of Indonesia, namely in the western, central and eastern regions of Indonesia, so that in the event of an air violation, they are able to carry out the
identification, interception and \textit{force down} process in a relatively short time. Regarding defense equipment, the condition of the Indonesian Air Force's aircraft has an average level of readiness of 44%. For air ammunition, currently it is still very limited and will not be able to carry out war in the event of a conflict. Communication and Electronic Warfare (Komnika) currently attached to aircraft, radar, missiles, and communication systems are qualitatively and quantitatively inadequate, so they need to be improved.

The problem of implementing ADIZ in Indonesia is a problem related to various supporting elements, problems related to air traffic guidance are the lack of understanding of air defense operations. Limited quality and quantity of human resources such as personnel handling radar including radar operators and radar technicians. Problems with radar operators who carry out monitoring generally come from enlisted personnel, operator regeneration that doesn't work because radar operator education doesn't run continuously.

The development of ADIZ Indonesia also has a procedure for entering Indonesia. One of the efforts to develop ADIZ Indonesia is the collaboration between AirNAv and the National Air Defense Command (Kohanudnas), which is related to coordinating the exchange of data and information as well as law enforcement and securing the airspace of the Republic of Indonesia. The cooperation that exists is related to data sharing surveillance and coordination of daily operations in the airspace of the Republic of Indonesia. This is evidenced by the cooperation in the form of \textit{Ground Control Interception} (GCI) training, coordination of aircraft interception training scenarios and testing of the National Military Command (Kohanudnas) equipment.

Apart from defense equipment, another obstacle is national law. The results of interviews with informants stated that one of the causes of the weakness of law enforcement against perpetrators of airspace violations is the absence of special investigators who handle issues of state sovereignty in airspace. The investigation authority currently rests with the Ministry of Transportation through the Civil
Servant Investigator (PPNS), while the Indonesian Air Force through the National Air Defense Command (Koophudnas) is only authorized to arrest aircraft crossing Indonesian airspace. Other problems related to territorial violations often do not reach the court process. This is because the legal basis is not yet strong, so that the post-forced down handling procedure as an effort to derive from the legal basis is not perfect.

Efforts that can be made to strengthen the mechanism of law enforcement in the air in the territory of the Republic of Indonesia are a series of efforts to grant authority to the Indonesian Air Force as investigators, particularly with regard to territorial violations. If the authority has been given, the Indonesian Air Force will follow up with the preparation of personnel and all its equipment and be followed by other related parties. The absence of national legislation that underlies the existence of ADIZ is a separate obstacle in law enforcement and maintaining the security of national jurisdictions.

4.2 The Development of ADIZ Indonesia to Support the Tasks of the Indonesian Air Force in the Framework of Maintaining the Security of the Airspace of the National Jurisdiction

With national defense, Indonesians seek to safeguard their country’s sovereignty, territorial integrity, and overall security from any and all external threats. As part of national defense, the state and nation’s capability, deterrence, and ability to overcome any threats are built and fostered. With the arrangement in place, the ALKI has three branches in the south, with three sub-ALKI forming ALKI III a, b, and c as a result of the three main alkis running north to south. For ALKI I, the Java Sea, Sunda Strait, Karimata Strait, the Natuna Sea, and the South China Sea connect maritime traffic and international trade from Africa, West Australia, and Japan to the South China Sea, and vice versa. International shipping and trade can travel from Africa to Southeast Asia and Japan via the Sulawesi Sea and Makassar Strait, the Lombok Strait, and the Flores Strait, all of which are connected by ALKI II. For now, the ALKI III A includes the Ceram crossing (in the eastern part of Mongole Island),
Banda Sea (in Buru Island’s western part), Ombai Strait, and Sawu Sea, which link the Maluku Sea, Seram Sea, Banda Sea, and Sawu Strait international shipping and trade routes. Arufur, Banda Sea, ALKI III A (Seram Sea, Maluku Sea, and so on), and so on. ALIKI III C connects international shipping and trade routes from the Torres Strait to New Zealand and the Pacific Ocean, or from the Torres Strait to the Maluku Sea, Banda Sea and Arufuru Sea. As a practical matter, it connects the Indian and Pacific oceans. One aspect that needs to be considered in the use of air space and the natural resources in it is the juridical problem. The principles in jurisdiction are the principles of territorial, national, passive personality, protection or security, universality and crime according to applicable legal criteria. Regarding the juridical aspect, as a consequence of the ratification of UNCLOS, Indonesia is obliged to provide Sea Lane for foreign ships (Sea lane) and aircraft (Air Route) both civilian and military to traverse Indonesian territory. That line, later known as ALKI.

Foreign Aircraft and Foreign Civilian Aircraft flying over the air route over the Archipelagic Sea Lane not in accordance with the provisions constitute a violation. For this violation action, visual recognition, shadowing, visual dispelling, shadowing, dispelling and/or forced landing by TNI Aircraft are carried out. Law enforcement here is one of the efforts to maintain state sovereignty. As a sovereign country, Indonesia needs to implement a set of legal rules that regulate, control, and enforce air law in the airspace above ALKI by referring to the interests of the Indonesian nation and state and paying attention to the rules regulated in international law.

With the development of technology, information and communication, it is necessary to increase regional security, especially Indonesian airspace. Air Defense Identification Zone (ADIZ) is a certain air space above land and/or waters that is designated for aircraft identification purposes for the interest of state defense and security. Airspace is the sovereign territory above the land area and the sovereign territory over the land area and waters of Indonesia. This states that jurisdictional airspace is airspace outside the territory of the state which consists of the exclusive
economic zone, continental shelf and additional zone where the state has sovereign rights and certain other authorities in accordance with the provisions of laws and regulations and international law (Hambali, 1994).

This confirms that ADIZ in Indonesia has been assigned an EEZ area. The determination of ADIZ which covers the entire EEZ area is expected to be a means of early identification for foreign aircraft that will enter Indonesian airspace and at the same time as securing the Indonesian Archipelagic Sea Lane (ALKI). This is because every aircraft that uses ALKI's right of passage is only required to comply with the air regulations set by the International Civil Aviation Organization (ICAO) regarding flight safety and at all times monitor the radio frequency designated by the air traffic control supervisory authority.

The determination of ADIZ is related to state sovereignty. Where every country has the right to form an ADIZ in the airspace under its sovereignty and jurisdiction. This is done by preventing violations of airspace related to the defense and security of a country. Airspace violation is a condition where an aircraft of a civil or military country enters the airspace of another country without prior permission from the country it enters. The determination of ADIZ Indonesia as an air space formed for identification purposes in the national air defense system has an important role in law enforcement and sovereignty in the airspace. By knowing in advance the aircraft entering the ADIZ, it will be able to detect threats that enter Indonesian airspace early. Therefore, ADIZ can also be used as an "intelligence gathering" in dealing with potential threats to the security of a country's airspace.

Foreign aircraft flying to and from or through airspace must have diplomatic clearance (diplomatic clearance) and security clearance (security clearance). For non-scheduled foreign civil aircraft flying to and from or through airspace, according to this PP, it must have diplomatic clearance (diplomatic clearance), security clearance (security clearance) and flight approval.

Therefore, it is understood that the determination of ADIZ in the territorial area to the Indonesian EEZ is a necessary and important matter as a means of early
identification for foreign aircraft that will enter Indonesian airspace and at the same time as safeguarding the Indonesian Archipelagic Sea Lane (ALKI). in accordance with applicable international law and national law. This is in order to maintain the defense and security of the Indonesian state.

Basically ADIZ is a means of supporting the implementation of ADIZ with an understanding of defending the country but basically it is a representation of understanding the concept of ADIZ as the airspace control theory by Coopers (Coopers Control Theory) and ADIZ theory from Peter A. Dutoton because a country then implemented ADIZ in the region. its air space, the country certainly makes every effort to defend it from various threats and challenges and is believed by the country to be able to defend it because it is supported by its air defense power and capabilities to maintain sovereignty in the region, as well as its political, legal and diplomatic power.

ADIZ Indonesia as an identification zone for foreign aircraft that will enter Indonesia’s territorial airspace does not function optimally so that it has implications for the identification of foreign aircraft that intend to and/or will enter the airspace of national jurisdiction. The absence of legal provisions governing ADIZ can cause a legal vacuum so that airspace violations cannot be handled properly and the TNI AU’s duties are not supported where it is the TNI AU’s duty to handle any airspace violations that occur. The implications of supporting the TNI-AU’s Tasks in Maintaining the Security of the Airspace of the National Jurisdiction include:

1) Failure to properly identify foreign aircraft that intend and/or will enter the airspace of the national jurisdiction will create the potential for threats and disturbances in maintaining the security of the airspace of the national jurisdiction.

2) The existence of airspace violations that are not handled properly will have implications for the implementation of the TNI-AU’s duties in maintaining the security of the airspace of the national jurisdiction.

ADIZ is an area in the airspace over land or sea which generally extends from
the territorial area of the country concerned to reach the airspace above the open sea bordering that country. Within this identification zone, the location and control of all aircraft is necessary in the interest of national security. The main purpose of establishing an ADIZ is to identify all approaching aircraft for security purposes so that before entering the national airspace, they can meet the required requirements (Bakrie, 2008).

The implications of ADIZ on state sovereignty can be an early detection of threats that enter Indonesian airspace. Therefore, ADIZ can also be used as an "intelligence gathering" in dealing with potential threats to the security of a country's airspace. From the results of the study, it was obtained the permit procedure for foreign aircraft that would cross the airspace. Foreign civil aircraft must have diplomatic permits such as security clearances and flight approvals. It can be concluded that the determination of ADIZ in the territorial area to the EEZ is an important matter as a means of identification as a safeguard for the Indonesian Archipelago Sea Line (ALKI) which is of course in accordance with international law and applicable national law.

4.3 Optimizing the Implementation of ADIZ Indonesia to Support the Duties of the Indonesian Air Force in Maintaining the Security of the Airspace of the National Jurisdiction

Optimization of the implementation of ADIZ Indonesia in order to maintain the security of the airspace of national jurisdictions must be carried out considering the potential threat to airspace is quite large. Securing the airspace of national jurisdictions, especially when it is associated with obstacles and threats, requires efforts that include legal aspects, political aspects and defense aspects. The Indonesian government has the authority and responsibility to regulate Indonesia's airspace in accordance with the interests of aviation, the national economy, defense, and state security in the framework of the Unitary State of the Republic of Indonesia. ADIZ Indonesia was established by the Indonesian government. ADIZ is also based on countries' practice, which has become customary international law, in its
establishment (customary international law). The position of the ADIZ Indonesia area at this time is above the island of Java, it is not yet effective as an identification zone, because it is in the air sovereignty area. For this reason, concrete steps are needed to optimize the application of ADIZ Indonesia by increasing the area of ADIZ Indonesia, increasing the quality and quantity of human resources, increasing the quality and quantity of defense equipment, aligning the provisions of ADIZ, in order to secure the airspace of national jurisdictions. The steps taken are based on the right policies, strategies, and efforts to make it happen.

1) Policy. Having described above, regarding the current condition of ADIZ Indonesia, the expected conditions of ADIZ Indonesia and the opportunities and constraints faced, it is necessary to formulate a policy. The policies formulated are as follows: "The realization of optimizing the implementation of ADIZ Indonesia, through efforts to increase the area of ADIZ Indonesia, increase the quality and quantity of human resources, increase the quality and quantity of defense equipment, software alignment to support the duties of the Indonesian Air Force in order to maintain security in the country. airspace of national jurisdiction”.

2) Strategy. In an effort to realize the above policy, the formulation of the strategy is as follows

a. Strategy 1

Increasing Indonesia’s ADIZ Territory. The current strategy is to increase Indonesia’s ADIZ area, namely from the airspace of a small part of South Sumatra, Java and Madura, Bali, Lombok and a small part of the western part of Sumbawa Island to the airspace above the exclusive economic zone as far as 200 miles from the normal baselines. The goal is to be able to carry out the identification of foreign aircraft before entering the air sovereignty area so that every threat using the air dimension can be anticipated. Supporting facilities consist of the Ministry of Transportation, Ministry of Foreign Affairs, TNI Headquarters, Indonesian Air Force Headquarters. The methods are in the
form of studies, revisions, diplomacy, coordination, and assignment of service personnel at MCC.

b. Strategy 2

Improve quality and quantity human Resources. The purpose of this second strategy is to form qualified and quantity human resources to carry out supervision of ADIZ Indonesia, operate radar devices effectively and efficiently, be able to understand the *rules of engagement* in ADIZ Indonesia to support the task of the Indonesian Air Force in order to maintain national jurisdiction airspace security. Supporting facilities include the Ministry of Transportation and the Indonesian Air Force Headquarters with methods of recruitment, education and training, specialization, courses, socialization, provision of allowances and compiling educational materials for the Air Traffic Control Diploma education.

c. Strategy 3. Improving the quality and quantity of defense equipment.

The strategy to improve the quality and quantity of defense equipment is needed as a coercive tool in order to maintain the security of the airspace of the national jurisdiction. The aim is to increase the capability of the Indonesian Air Force Alutsista and the appropriate deployment pattern adapted to the threat, so that it will create a *deterrent effect* for parties who will disrupt the security of the airspace of the national jurisdiction. The facilities needed are the Ministry of Defense and the Indonesian Air Force Headquarters. With a method consisting of *upgrading*, certification, prepare plans for needs, procurement, deployment, and coordination.

d. Strategy 4. Align the software. The strategy for aligning software is to harmonize the provisions governing ADIZ Indonesia and the provisions governing the Indonesian Archipelago Sea Lane so that they do not conflict with each other, so that aircraft entering ADIZ Indonesia
understand the applicable legal provisions. The aim is to provide clarity to foreign aircraft regarding procedures and rights and obligations when entering ADIZ Indonesia. The facilities are the Ministry of Defense, Ministry of Law and Human Rights, TNI Headquarters, and TNI AU Headquarters. With methods consisting of studies, drafting, legalization and socialization.

5. Conclusion

Based on the results of the research and discussion described in chapter four, conclusions can be drawn that answer the formulation of the research problem as follows:

a. ADIZ Indonesia currently located in the airspace of a small part of South Sumatra, Java and Madura, Bali, Lombok and the western part of Sumbawa Island is not yet appropriate as an identification zone, because it is still in the national airspace. The identification zone should ideally be outside the sovereignty of the national airspace, so that it can identify foreign aircraft that will enter the sovereignty of the national airspace.

b. To make ADIZ Indonesia effective as an identification zone, the area of ADIZ Indonesia must be increased from the airspace of a small part of South Sumatra, Java and Madura, Bali, Lombok and a small part of the western part of Sumbawa Island to the airspace above the exclusive economic zone as far as 200 miles from the coastline. normal baselines. By increasing the area of ADIZ Indonesia, foreign aircraft will identify before entering the sovereignty of the airspace, so that it can be detected early on whether there is a threat or not through the airspace. By increasing the area of Indonesia’s ADIZ, law and sovereignty in the airspace can be enforced in order to ensure the territorial integrity of the Unitary State of the Republic of Indonesia.
c. ADIZ Indonesia developed will be adhered to by countries if supported by adequate defense equipment. Efforts are needed to improve the quality and quantity of defense equipment and the appropriate deployment pattern adapted to the threat, so that it will provide a 
\textit{deterrent effect} for parties who will threaten Indonesia's sovereignty. Increased capability and an effective and efficient degree pattern can support the existence of ADIZ Indonesia as an air defense system to enforce law and sovereignty in the airspace.

ADIZ Indonesia, which is supported by adequate defense equipment, will be obeyed by other countries, if enforcement is carried out firmly and continuously accompanied by diplomatic efforts by the Minister of Foreign Affairs and software synchronization that regulates the airspace above the Indonesian Archipelagic Sea Lane.

**Bibliography**


