DETERMINATION OF AIR DEFENSE IDENTIFICATION ZONE (ADIZ) IN ORDER TO SUPPORT SOVEREIGNTY OF NATIONAL AIR REGION

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Abstract - One aspect of air spatial arrangement relating to national airspace sovereignty is to establish Air Defense Identification Zone (ADIZ) which established on the basis of security considerations, particularly for the purposes of foreign aircraft identification. ADIZ Indonesia that has been established at this time is not ideal because it is still above Java and surrounding areas, which is still not sufficient in the face of the vast territory of Indonesia. In order to do so, the purpose of this study is to analyze the current condition of ADIZ Indonesia, what efforts have been made to re-establish ADIZ Indonesia in order to support sovereign national airspace, and the ADIZ stipulation provision in accordance with international air law. This research using qualitative method, data collected by interview and literature review. The results show that ADIZ Indonesia currently resides in the airspace of a small portion of South Sumatra, Java and Madura, Bali, Lombok and a small portion of the western Sumbawa Island, not outside the territorial sea territory (ZEE). Attempts to reassign ADIZ Indonesian territory has been implemented through discussion forums or FGDs held at BNPP, and the appointment of ADIZ Indonesia is already based on international customary law at that time.

Keywords: ADIZ, aircraft identification, airspace sovereignty, air law

Introduction

The Unitary State of the Republic of Indonesia (NKRI) is an archipelagic state consisting of 17,508 large and small islands. The total area of the Republic of Indonesia includes ZEE is approximately 7.7 million km², a land area of 1.9 million km², and a sea of 5.5 million km².³ NKRI region geographically is a very strategic country, because it is in a cross position between two continents of Asia and the continent of Australia and two oceans namely the Pacific Ocean and Indian Ocean. The strategic location of the region makes Indonesia a very busy country because it becomes an area of crossing for other countries that want to go somewhere to another place by land, sea and air, so that there are often various violations both on the provisions of national law and international law in implementation of cross-rights from those

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foreign countries that require further settlement.

The Indonesian nation is part of the international community, so in the utilization of its territory including national airspace it is also obliged to use it for the benefit of other world community by taking into account the provisions according to international law. Spatial arrangement of Indonesia's airspace at this time can not be implemented optimally, so there are still air spaces that have not been managed optimally. There are spatial arrangements for Indonesian airspace that are not in accordance with the provisions of law, especially the provisions of international law. Furthermore, the spatial arrangement of the Indonesian airspace has not been entirely based on the aspect of state defense interests and only prioritizes aspects of aviation safety, so it has not been able to support the maximum national airspace sovereignty.

One aspect of air spatial arrangement that related to national airspace sovereignty is to establish an identification zone requiring civilian and military aircraft to report their flight plans; this zone is called Air Defense Identification Zone (ADIZ). Determination of a country's ADIZ is not intended to extend the sovereignty of the country of owner of ADIZ to the open sea covered by the country's ADIZ. ADIZ is established on the basis of security considerations, particularly for the purposes of aircraft identification expected to enter the airspace of the founding country of ADIZ. The legal basis for determining ADIZ is international practice which has become customary international law. ADIZ Indonesia that has been established at this time is not ideal because it is still above Java and surrounding areas, which is still not sufficient in the face of the vast territory of Indonesia. In addition, the implementation of ADIZ Indonesia is still considered inappropriate because it is not commonly done by other countries that already have ADIZ and has been recognized by the international community as a customary law. Based on that matters, it is necessary to do this research. This study was conducted to analyze more deeply about the condition of ADIZ Indonesia at this time. By knowing

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the condition of ADIZ Indonesia, it can be conveyed the thinking about the determination of ADIZ Indonesia in the future with the hope that the ideal ADIZ Indonesia can be realized along with the completeness and capability of the supporting parts of the main tool of weapon system (Alutsista) in accordance with the provisions of national and international law and state sovereignty aspect in the air. The realization of the ideal Indonesian ADIZ, is expected to identify the foreign aircraft entering the Indonesian national airspace.

Based on the things above, the research problem can be formulated as follows:

a. How is ADIZ Indonesia now?
b. What efforts have been made to reassign ADIZ Indonesia in order to support the national airspace sovereignty?
c. What is the provision of ADIZ in accordance with international air law?

In accordance with the research problem formulated above, the purpose of this research is to:

a. Analyze the current picture of ADIZ Indonesia.
b. Analyze what efforts have been made to redefine ADIZ Indonesia in order to achieve national airspace sovereignty.
c. Analyze ADIZ stipulation provision in accordance with international air law.

**Air Defence Identification Zone (ADIZ)**

Air Defense Identification Zone (ADIZ) is the designation of certain airspace specific dimensions in which all aircraft are required to comply with the specific identification and / or auxiliary procedures pertaining to air traffic. Each country will always try to carry out defense or self defense (self defense) and supervision of security conditions in the air region from various forms of threat. This is what lies behind many countries around the world including the United States to set up air defense guidance zones or ADIZ. The ADIZ area can be set extending far beyond hundreds of kilometers in free air territory according to the state's interest in detecting possible hazards from the air.

In the framework of the implementation of state sovereignty in air space often states establish in certain parts of its airspace as dangerous areas, restricted areas, and prohibited areas for

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all flights. Usually this area is a military or training area or areas of national vital objects, as well as flight restrictions on certain other areas.

ADIZ is a zone for identification purposes in air defense systems for a country, where the zone generally extends from the territorial areas of the country concerned to reach the airspace over the free sea adjacent to the country. However, the adoption of such ADIZ is not intended to extend the sovereignty of the country of owner of ADIZ to the free sea covered by the country's ADIZ, i.e. any aircraft flying into the United States or Canada within 200 miles shall state the identity of the aircraft. This is done for the security of the country from the dangers that come through the air space. ADIZ is an area in which all civilian or military aircraft passing by shall report themselves to the military flight supervisor.

The reporting system is different from the civil air traffic control system because of its purpose for air defense in the territory of the country, of course this system is supported by a radar system that is connected with the air defense weapon system. This air defense weapon system is the determining factor of ADIZ success.

**Airspace Sovereignty**

Airspace sovereignty is part of the country's sovereignty. Sovereignty can be defined as an exclusive right to rule over a territory of government, society, or on the self based on God's gift or society. In international law, the concept of sovereignty relates to a government which has full control in the affairs of its own country within a territory or geographical territorial boundaries, and in certain contexts related to organizations or institutions that have their own jurisdiction. The sovereignty of the state comes from the Latin word ‘superanus’ which means ‘top’. Mochtar Kusumatmadja said "The state is said to be sovereign because sovereignty is the nature or essential character of the state, and if it says it is sovereign, it means that the state has the highest authority."  

Airspace sovereignty is closely related to airspace boundaries either horizontally or vertically. The airspace is horizontally related to the territory of a country which includes land and sea...

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6 Muchtar Kusumatmadja, Introduction to International Law, (Bandung, Putra Bardin, 1999) p. 11.
including the Exclusive Economic Zone (ZEE). Referring to article 2 of the 1944 Chicago Convention explaining that for the purposes of the 1944 Chicago convention the territory is a state territory. Although not explicitly stated, all countries recognize that no country is sovereign in the high seas. 7 Thus, it can borrow the interpretation of the International Court of Justice in the case of the Eastern Greenland dispute. In that case it is interpreted "The natural meaning of the term is its geographical meaning" ie space where there is "air". The scope of territorial jurisdiction of a country recognized and accepted by member states of the Chicago Convention 1944 continues upward to infinity.

In relation to the territorial sea sovereignty, there are still many countries demanding the width of its territorial sea toward the high seas. They demanded the width of the territorial sea to 200 nautical miles toward the high seas like England. The wide demands of the territorial sea towards the high seas can thus be understood because of the demands of the coastal state to ZEE to obtain the right of sovereignty over biological and non-biological natural resources.

In the purpose of law enforcement of a country, it is necessary to know also how high the sovereignty of airspace vertically. This is a problem because the legal regime that applies in air law differs from the legal regime in force in space law. According to Article 1 of the Chicago Convention of 1944 "every sovereign state has full and complete sovereignty over airspace above its territory", whereas according to the provisions of the space law regime it states "no state has any right to claim sovereignty in space". 8 Until now there has been no agreement internationally where the law of air ends and where the law of space begins.

The problem of determining the limits of territorial sovereignty vertically was actually anticipated by the UN COPUOS initially, but at 49 Milde, UN Convention on the Law of the Sea: Possible implication for Air International Law, it was still considered not to require an urgent solution. 9 The problem of determining the boundary between air and space is increasingly urgent after

8 _The Outer Space Treaty of 1967 Annex 2._
equatorial states demand sovereignty in Geo Stationary Orbit (GSO). GSO is an area in outer space at an altitude of 36,000 km above the surface of the earth, has a specific nature, each satellite contained in the circle has the same speed with the speed of the earth's rotation. So, when viewed from the earth it seems that point is not moving. Technically at that time the satellite can only be placed at a distance of two degrees so that the entire surface of the earth there are only 180 satellites. Therefore, it is limited natural resources (limited resources).

**International Air Law**

There is no international standard agreement on the definition of air law. Among the terms used, such as air law or aviation law or air navigation law or air transport law or aerial law or aeronautical law law) or air-aeronautical law, alternating indistinguishable from one another.

Verschoor defines air law as the law and regulation that governs the use of airspace that benefits aviation, the public interest, and the nations of the world. His opinion that "Air Law is a body of rules governing the use of airspace and its benefit for aviation, the general public and the nations of the world". That opinion can be interpreted that air law is a law and regulation that regulate the use of air space that is beneficial to aviation, the public interest, and the nations of the world.

Meanwhile M. Le. Goff means that air law is a set of national and international provisions concerning aircraft, air navigation, commercial air transport and all legal, public or civil relations arising from domestic and international air navigation. While M. Lemoine means that air law is the branch of law that determines and studies the laws and regulations of air traffic and the use of aircraft as well as the relationships that arise from it. Air law sources can be originated from international law as well as national law. In accordance with Article 38 paragraph (1) of the Charter of the International Court of Justice stipulates that the source of international law is divided into International Conventions, International Customary Law, General

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11 Ibid.
The principles of international air law are contained in international air law conventions which from time to time develop. The conventions arise from international conferences conducted by countries in the world who consider the need for rules governing space. The principles of international air law include the principles of airspace sovereignty, the principles of airspace jurisdiction, and the principle of responsibility.

**Research methodology**

**Data Sources and Research Objects**

Primary data sources are determined informants/resource persons; Planning Assistant Commander of the TNI, Assistant Planning of Kohanudnas, and Director of Defense Areas Directorate General of Defense Strategy of Ministry of Defense. While the secondary data sources in the form of archives, reports of research results/studies, books, and scientific journals associated with the object of research.

The object of this research is the determination of Air Defense Identification Zone (ADIZ) Indonesia. Also examined is the impact of the determination of the Indonesian ADIZ on the national air defense system.

**Stages of Research**

This research is done in three stages namely planning stage, implementation stage, termination stage.

**Research Location**

The research was conducted at TNI Headquarters Cilangkap, Jakarta National Air Defense Command Headquarters, and Ministry of Defense Jakarta.

**Data Collection Technique**

Data collection in this research use interview technique, observation, and literature review. Interviews were conducted to informants/resource persons who have been determined. Observations were made on the dynamics of various national airspace violations so far. Meanwhile, documentation studies conducted on various documents related to the object of research.

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Data Validation

The data that has been successfully collected, then tested its validity by using triangulation technique. Triangulation used is triangulation of data sources and triangulation of data collection techniques.

Triangulation of data sources/information sources, to direct researchers to collect data using various data sources available. That is, the same or similar data will be more steady truth when extracted from the three available data sources. Data from all three sources are described, categorized (where views are the same, which are different and which are specific). The data that has been analyzed to produce a conclusion which subsequently sought agreement (member check) with three sources of data.

Triangulation of data collection techniques is done by checking the data to the same source with different techniques. For example, data obtained by interview, then checked with observation and literature review. If the three testing techniques validity/credibility of the data, resulting in different data, then researchers conduct further discussion to the relevant data source or the other to ensure which data are considered correct.

Data Analysis Technique

Data analysis technique is done using qualitative method. The data collected and tested its validity, then analyzed by steps: data reduction, data presentation, and conclusion/verification.\(^\text{13}\)

Data reduction is defined as the selection process, attention to simplification, abstraction, and rough data transformation arising from written records in the field.\(^\text{14}\) Data reduction is performed by researchers after the data are collected and then select relevant and meaningful data to be presented. Relevant and meaningful data, focusing on issues to solve problems, discoveries or to answer research questions, then simplify, systematically organize by highlighting important things about the results, findings and their meanings.

The data presentation basically consists of data analysis results in the form of detailed stories of the informants in accordance with their expression or view as it is (including the observation result) without comment, evaluation and translation by Dariyatno, et al, (Yogyakarta: Pustaka Pelajar, 2009), p. 591.\(^\text{14}\)
interpretation. Presentation of research data with qualitative approach in principle process in the form of inductive-interpretation-conceptualization. In this case the researchers collect and present the data as the initial stage, then prove the existence of perspectives in the presentation of the data need to quote directly the views of informants/resource persons in their language or sentence.

The conclusion/verification in this research is taken by interpreting the data of the research results presented, then concluded.

Research Results and Discussion

The Current Condition of ADIZ Indonesia

Indonesia Air Defense Identification Zone (ADIZ) was formed with the background of Indonesia's national airspace. Geographically, the national airspace lies above land and sea territory spread from 95 ° 00 'east to 141 ° 00'BB, and starting from 6 ° 00 LU to 11 ° 00' LS, with these limitations, airspace of territory is depicted as a very large space dimension (5,193,252 km²). Within the territory of Indonesia's air sovereignty has been established ADIZ Indonesia. ADIZ Indonesia based on Aeronautical Information Publication (AIP) Volume 1 dated September 17, 2006 is at coordinates 04 0000S 104 00 00E 04 00 00S. 117 00 00E 10 00 00S 117 00 00E 10 00 00S 104 00 00E 04 00 00S 104 00 00S. Means ADIZ Indonesia is currently in the airspace of a small portion of South Sumatra, Java and Madura, Bali, Lombok and a small part of West Sumbawa Island. ADIZ Indonesia is not outside the territorial sea territory (ZEE). Under these conditions, ADIZ Indonesia which is a zone to identify the aircraft that will enter the national airspace becomes less functioning optimally.

There are several elements related to the current condition of ADIZ Indonesia, among others, the strength of the Air Force, the development of radar technology, satellite and communications, the concept of the title of ADIZ, and the effectiveness of the current state defense budget usage. The condition of each element is as follows:

1. The strength of the Indonesian Air Force to maintain ADIZ is:
   a. Ambush Aircraft;
   b. Satellite;
   c. Military Radar and Civil Radar covering ADIZ area;
   d. Surface to Air Missile.
2. Development of Radar, Satellite and Communications Technology. Currently, Transmission Data Air Situation (TDAS) has been developed that incorporates Military Radar with Civil Radar to monitor the Indonesian airspace, including ADIZ Indonesia.

3. ADIZ Title Concept. The concept of deploying ADIZ is to protect the national vital objects on the island of Java and Bali.

4. Effectiveness of Use of the State Defense Budget. With the current budgetary conditions, it is necessary to consider the priority system of using state budgets in the field of defense against priority threats in peacetime.

In addition to the above elements, there are still some issues related to ADIZ Indonesia's current condition of command and control, information needed, air defense system, law and publication and other strengths. The conditions of each of these are as follows:

1. Command and Control.

2. Needed Information. Required information in ADIZ, namely: aircraft call sign, number and type of aircraft, altitude (within ADIZ), true airspeed, time of departure, point of departure, Destination and transponder code and the estimated point when entering ADIZ which can show the position with latitude/longitude or fix-radial-distance.

3. Air Defense System, consisting of:
   a. Air Base (Lanud);
   b. Military Radar;
   c. Combat aircraft;
   d. Sector Operational Center (SOC);
   e. Satellite.
   f. Integrated Information and Communication System. The system is housed in a TDAS system and has a training ground at Pusdik Hanudnas in Surabaya.
   g. Military vessels capable of Hanud, who sailed around the ADIZ region and integrated in the Hanud Kohanudnas system.

4. Law and Publication:
   a. In the Law of the Republic of Indonesia Number 1 Year 2009 on Flight Chapter IV (Sovereignty over Airspace) only discusses the territory of sovereignty, restricted airspace, restricted airspace, and has not discussed about Indonesia air defense identification zones.
   b. Regulation of Pangkohanudnas Perpang/04/IX/2010 Article 21 concerning the National Air Defense Fixed Procedures governing the Air Condition Provisions and Sub-Article a on ADIZ. ADIZ in Indonesia covers
airspace around the islands of Java, Bali and the surrounding islands.

c. The publication of this regulation has not been widely disseminated in the national and international aviation world.

5. Other strengths include: Air Traffic Control (ATC) civil, Immigration, and Civil Airport. The current condition of ADIZ Indonesia can be seen in Figure 1.

In addition to the various problems above, there are still some problems related to the current condition of ADIZ Indonesia. Some of these issues include the problem of determining the location and extent of ADIZ Indonesia, the limited quality and quantity of human resources (HR), the limitations of the main weapon system (alutsista) tools to support ADIZ enforcement, and the inconsistency of the rule of law.

Based on the research findings show that ADIZ Indonesia is currently in the airspace of a small portion of South Sumatra, Java and Madura, Bali, Lombok and a small part of West Sumbawa Island. Under the condition of the Indonesian ADIZ region, it means that a new detectable air space is only about $1/8$ (one-eighth) of the total sovereignty of Indonesia's national airspace. Though the air space Indonesia should be detectable as wide as $5,193,252 \text{ km}^2$. It also means that ADIZ protection in Indonesia does not

Figure 1. The Current ADIZ Indonesia Region
Source: http://defense-studies.blogspot.co.id
yet cover the entire territory of Indonesian sovereignty. ADIZ protection in Indonesia is only used to protect the capital city of Jakarta as well as vital objects in Java and surrounding areas. While the vital objects of other countries that are in other areas such as in Papua, Kalimantan and Sulawesi cannot be protected.

This condition resulted in air control in the airspace of Indonesia has not been optimal. Whereas the control of airspace is absolutely necessary for the survival of the nation and the country especially from the threats that come through the air. This is very worrying, considering that airspace violations are still happening from year to year. According to data from the end of 2009 to the beginning of 2011, it was recorded there were 14 violations of national airspace. This violation of the airspace, especially by foreign military aircraft can cause vulnerability, primarily will be a threat to the national vital object.

The current condition of ADIZ Indonesia is related to land and sea border issues with neighboring countries. RI boundary issue with Malaysia, covering sea boundary problem in Malacca Strait. The two sides have not agreed, the Malaysian side wants a boundary line that unites the Exclusive Economic Zone Line (ZEE) with Continental Lane (LK), while Indonesia wants the two boundaries not in line because the legal regime is different. Then the issue of the territorial sea boundary, LK and ZEE in the waters of Sebatik Island has not yet been negotiated or still in progress, so is the boundary of ZEE in the South China Sea.

The impact of ADIZ’s determination is that every civilian or military aircraft entering the territory of the ADIZ country will report to the flight inspector. In general, ADIZ is managed by the military (Air Force) of the country that sets it. Although the ADIZ reporting system is different from civil air traffic arrangements. ADIZ will be more optimal in preventing the incoming hazards from airspace when the ADIZ system is integrated with a radar system connected to the air defense weapon system. Adoption of ADIZ is in line with Cooper's Control theory (Cooper's Control Theory), namely the sovereignty of a country is determined by the ability of the country to maintain and control the existing space.
above its territory or also called the airspace.\textsuperscript{15}

\textbf{Efforts to Reassign ADIZ Indonesia}

Considering the condition of ADIZ Indonesia with other existing problems, the relevant ministries / agencies include Kohanudnas, Ministry of Transportation (Kemhub), Ministry of Defense (Kemhan), National Border Management Agency (BNPP) and other stakeholders strive to redefine ADIZ Indonesia. The efforts that have been implemented are by conducting Focus Group Discussion (FGD) 3 (three) times held in BNPP, and even the fourth (fourth) FGD will be held in November 2017.\textsuperscript{16}

Experts and observers on aerospace such as from Kemhub and Kohanudnas became resource persons in the FGD. Through this activity are discussed two important things related to ADIZ Indonesia redefining efforts is to propose the established ADIZ region and preparation of procedures for aircraft entering the area of ADIZ Indonesia. In addition, the regulation discussed in this case is the Government Regulation which became the legal umbrella in the establishment of ADIZ Indonesia. The Government Regulation on National Airspace Security (PP Pamwiludnas) that is planned to serve as a legal umbrella in the establishment of ADIZ Indonesia. PP Pamwiludnas itself is still in the process of ratification.\textsuperscript{17}

The FGD participants proposed the ideal area of ADIZ Indonesia which is a circle covering all the territory of the Unitary State of the Republic of Indonesia to the boundary of ZEE. Thus, any foreign aircraft entering Indonesian airspace, from airspace over ZEE Indonesia can already be identified. Meanwhile, the FGD participants discussed the aircraft procedures entering ADIZ Indonesia by arranging procedures and measures of identification of foreign aircraft entering Indonesian airspace from the airspace above the ZEE. The proposed forms of identification include identifying correlations (about flight permissions), electronics identification (using radar), and visual identification (using an aircraft).

The proposed procedure that foreign aircraft entering airspace over ZEE Indonesia must have contacted ATC, then ATC forward it to MCC which is then

\textsuperscript{15} Abdurrasyid Priyatna, \textit{Pengantar Hukum Ruang Angkasa dan Space Treaty 1967}, (Bandung: Binacipta, 2013,), p. 103,

\textsuperscript{16} Interview with the Head of Law National Air Defense Command on October 27th 2017.

\textsuperscript{17} Ibid.
forwarded to the nearest Kosekhanudnas. Through the identification procedure, if there are any foreign aircraft entering Indonesian airspace and identified does not meet the determined requirements or violating Indonesia's national airspace, there may be even force down measures at the nearest airbase by aircraft under the command of Kosekhanudnas.

Based on the research findings that efforts to redefine ADIZ Indonesia have been conducted through FGD activities in which the proposed deliberations related to the determination of ADIZ Indonesia region and the procedures of foreign aircraft entering the national airspace of Indonesia. These efforts are a step forward in order to re-establish a more adequate ADIZ Indonesia in the sense that it is in line with Indonesia's national airspace.

ADIZ Indonesia's determination should be linked to Indonesia's national airspace sovereignty. This is important to consider, given that the establishment of ADIZ is one of the efforts of a country in maintaining its airspace sovereignty. Therefore, if the proposals related to the area of ADIZ Indonesia cover all the national airspace of Indonesia, the proposal is in accordance with the efforts of the Indonesian state to maintain the sovereignty of the airspace. The total area of ADIZ Indonesia covering the entire national airspace of Indonesia as shown in the Figure 2.

![Figure 2. Ideal region of ADIZ Indonesia](Source: http://jurnaljakarta.com)
Another thing that is also important to be fulfilled related to the re-determination of ADIZ Indonesia is about the completeness of the equipment needed to implement the specified ADIZ. In addition, capacity building and fulfillment of the quantity of personnel man of the ATC, MCC, Kosekhanudnas, Kohanudnas must also continue to be done. Alutsista and such personnel are urgently needed in implementing ADIZ Indonesia and in implementing the national air defense system (Sishanudnas) fore that is more adequate and optimized.

The process of identifying foreign aircraft entering ADIZ Indonesia will be maximized only if supported with adequate equipment and personnel. Similarly, in carrying out escort and landing action against foreign aircraft who violate Indonesia's national airspace, will run effectively and maximally if supported by adequate fighter aircraft in quality and quantity.

In light of the above, the re-establishment of Indonesia's ADIZ should be done by keeping in touch with efforts to safeguard Indonesia's national airspace sovereignty. In addition, in order to support the adoption of the ADIZ, the state of Indonesia should strive to meet the shortcomings of the armaments and personnel who manned it.

**ADIZ Determination Terms**

ADIZ Indonesia's current determination was conducted around the 1960s which was then in accordance with international air law following the international maritime law stating that the sea boundary of 3 (three) miles and Indonesia at that time has not been yet recognized as an archipelagic country. As a result, ADIZ Indonesia is established only on the island of Java and on the islands of Sumatera, Bali and West Nusa Tenggara.

In line with the times, the laws of the sea and air law have also changed, causing ADIZ Indonesia's territory is no longer compatible with the current laws of the sea and air law, and recognition that Indonesia is an archipelagic country. Determination of ADIZ Indonesia is no longer appropriate if it is still in its own territory as in the airspace above the Java Sea. Therefore, an effort to re-establish ADIZ Indonesia covering all Indonesian national airspace over ZEE proposed in FGD activities at BNPP as mentioned above.

In the provisions of international law other than known by the provisions of
written law is also known the existence of customary international law that is not written based on the practices of the state. The adoption of ADIZ by a country is based on the practice of customary international law and the self defense principles set forth in Article 51 of the UN Charter. The principle of self-defense recognized in Article 51 of the UN Charter is the right of a State to use weapons in defending against external powers (other countries) based on customary international law. The right to self-defense referred to in the UN Charter is essentially an inherent right.

Determination of ADIZ Indonesia is also stipulated based on customary international law by the state of Indonesia based on the principle of self-defense in order to safeguard Indonesia's national territory. The legal basis for determining ADIZ is:

“Nothing in the present Charter shall impair the inherent right of individual or collective self defence 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.”

Although the editorial of the right of self-defense is expressed in the preceding paragraph, but in travaux préparatoires it is stated that the right is inherent. The aforementioned Article 51 does not specify how it can be done to exercise the right of self-defense. This chapter is often associated with the right to use limited armed violence. Article 51 defines the right to self-defense rather than restricting it. It says there is no connection between armed attacks and self-defense rights. No country can wait until a new armed attack can defend itself. In addition, ADIZ is also set forth in Document 9426-AN / 924 First Edition 1984 ICAO, in chapter 3 on Airspace Organization paragraph 3.3.4 Special Designated Airspace which recognizes the existence of a State ADIZ.

In addition, the legal foundation of ADIZ is international practice which has become customary international law. Article 38 (1) of the Statute of the International Court of Justice stipulates that customary international law is one of the legal sources recognized by countries...
in general. Customary law comes from the practice of states through attitudes and actions taken on an issue. When a country takes a policy and the policy is followed by other countries and done repeatedly and without any protests or challenges from other parties then gradually formed a habit.

Based on research findings that the determination of ADIZ Indonesia is in accordance with the provisions of international air law at that time (1960s). However, if it is based on international air law it is no longer appropriate, because the outline of ADIZ Indonesia is still within the territory of the Indonesian archipelago.

The provisions or sources of law which are used as the basis for the determination of the ADIZ of a country so far are international customary law, especially international customs law. The country that has established the ADIZ under international customary law is the United States which then followed by Canada by determining the Canadian Air Defense Identification Zone (CADIZ). In its development, the establishment of ADIZ is followed by other countries in the world.

Article 1 The 1919 Paris Convention is one of the international customary laws of international air law. In technological development, the action of a country can be an international customary law without any period of time. This has been done by the United States and Canada as mentioned above.

As a country that seeks to maintain the sovereignty of its airspace, Indonesia should be able to follow the steps of the United States and Canada and a number of other countries in the world in setting ADIZ. Indonesia is time to re-establish the ADIZ whose territory covers the entire territory of NKRI as proposed in every FGD activity held in BNPP so far.

Conclusions
Based on the results of research and discussion, it can be concluded as follows:
1. ADIZ Indonesia is currently located in the airspace of a small portion of South Sumatra, Java and Madura, Bali, Lombok and a small part of western Sumbawa Island. ADIZ Indonesia is not outside the territorial sea territory (ZEE). Under these conditions, ADIZ Indonesia is not functioning optimally. This condition is also coupled with the limited / lack of
some elements / related elements such as the strength of the Air Force, the development of radar technology, satellites and communications, the concept of title or location setting and the area of ADIZ, the quality and quantity of human resources (HR) is limited, supports ADIZ enforcement and the effectiveness of current state defense budget use. The problems of command and control, information needed, air defense systems, law and publications and other strengths are also not optimal.

2. Efforts to redefine ADIZ Indonesia area have been implemented through discussion forums or FGDs held at BNPP. Experts and observers on aerospace include Kemhub and Kohanudnas as resource persons in the FGD. The matters discussed are the efforts to propose the designated ADIZ area and the preparation of procedures for aircraft entering the ADIZ Indonesia territory. Re-establishment of the ADIZ is an effort by the Indonesian state to maintain national airspace sovereignty.

3. The adoption of ADIZ Indonesia in the 1960s was in conformity with the international air law of the time (which follows the international law of the sea which states that the sea boundary is 3 (three) miles and Indonesia at that time has not been recognized as an archipelagic country). As a result, ADIZ Indonesia is set only on the island of Java and on the islands of Sumatra, Bali and West Nusa Tenggara. But in line with the times, the laws of the sea and the law of the air, the region of ADIZ Indonesia is now no longer in accordance with the law of the sea and air law let alone the existence of Indonesia has been recognized as an archipelagic country. Therefore, it is necessary to redefine ADIZ Indonesia which covers all Indonesian national airspace. Determination of ADIZ Indonesia is also determined based on customary international law by the state of Indonesia based on the principle of self-defense in order to safeguard Indonesia's national territory.

Suggestions
Based on the results of research, discussion and conclusion above, it can convey some suggestions include:

1. Determination of ADIZ area should be adjusted with Government Regulation Number 4 Year 2018 concerning the Security of Air Region of the Republic of Indonesia which became the legal
umbrella in the establishment of ADIZ Indonesia.

2. Determination of ADIZ Indonesia territory should ideally be carried out covering all territory of Unitary State of Republic of Indonesia to ZEE boundary, except on land and sea border directly with neighboring country. Thus, any foreign aircraft entering Indonesian airspace, from airspace over ZEE Indonesia can already be identified. The ideal ADIZ Indonesia region can be described as follows:

a. The procedure of foreign aircraft entering ADIZ Indonesia area should be accelerated in the preparation in line with ADIZ Indonesia re-establishment efforts.

b. In order to support the re-establishment of ADIZ Indonesia, the Indonesian government should do the following things:
   - Conducting endless publications for more and more countries in the world to recognize sovereignty over Indonesia's airspace, the easier it will be for the process of ratification of airspace regulation that we apply throughout the territory of the Unitary State of the Republic of Indonesia.
   - Takes firmly any violation of Indonesia's airspace without any selective reasons in any State in violation by maintaining peaceful means.
   - Increasing Indonesia's air defense strength, ranging from the ability of combat aircraft to missiles, *hanud* radar, short-range missile artillery, medium and long distances, *hanud-capable* vessels, airborne warning and control system-capable aircraft and other air defense capabilities as deterents for both intending and is heading for violation of Indonesian national airspace.
   - Equip a state defense system with an independent defense satellite and complement the country's defense system with broadband networking so that all components of the country's defense can be well integrated.
   - Increasing again the state defense budget gradually so that the fulfillment of the necessary defense equipment in ADIZ Indonesia enforcement can be achieved.
References


Regulations

Paris Convention 1919.

Tokyo Convention 1963.


Law Number 1 Year 2009 on Aviation.

Website