DECISION STIPULATION ON NATIONAL AIR SPACE ZONE OF THE REPUBLIC OF INDONESIA

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ABSTRACT

The designation of airspace areas is very important and strategic for the integrity and sovereignty of a nation state. Also, understanding the airspace area of a country is beneficial to the interests of human beings living in the country's "demarcation of power", namely as a means of transportation and communication, a unifying media, and a media of defense and security. The results of this literature study are aimed at building public understanding throughout the world regarding the provisions for determining national airspace, especially Indonesia, that sovereign states over airspace over their territories in full and complete, even though space is recognized as an area to be able to enjoy for the common good in an effort towards peace and humanity. The national airspace of Indonesia as an archipelagic country has a focus and demarcation locus of public administration which includes: Airspace above... (1) Mainland area; (2) Inland waters; (3) Islands waters; (4) Territorial seas; (5) Additional zone waters; (6) Exclusive Economic Zone; (7) Continental Shelf.

Keywords: Airspace Area, Power Demarcation, Communication Facility, Unifying Media, Defense Media and Security.

INTRODUCTION

Airspace areas are the focus and locus of public administration studies (Zamor & Khator, 1994; Hamilton, 1994; Wise & Emerson, 1994; Kopardekar, 2015) that bring benefits to human or state interests, namely as a means of transportation (O'Reilly & Sweet, 1998) and communication (Frew & Brown, 2008; Zhang, 2012), a unifying medium and as a medium of defense and security (Button, 2009). The national airspace of Indonesia is a vast dimension of space, as well as describes the magnitude of opportunities for public use on the one hand and the amount of effort to organize, manage, or guard it on the other (Abdurrasyid, 2008; Kusumaningrum, 2016; Desker, 2016).

Geographically Indonesia's national airspace is above land and sea, extending from 95°00’ East Longitude (EL) to 141°00’ West Longitude (WL), and start from 6°00’ North Latitude (NL) to 11°00’ South Latitude (SL), with restrictions outlined in the laws and regulations (Hakim, 2010:2011). Based on geopolitical and geostrategic views, Indonesia's territory becomes vulnerable to the possibility of external threats by sea and airspace (Mahaztra, 2015), consequently the necessary strength of the Indonesian National Army (TNI) will depend
on air power capable of observing the arrival of various threats and at the same time also able to handle it quickly and precisely in the framework of national defense in the airspace (Kusmarwanto, 2004).

The development of science and high technology, especially technology related to space and air space, it has led to various problems that originate from the intersection of national interests among countries: (1) The utilization of space air space for military purposes, especially with a large force that can threaten the sovereignty of other countries; (2) There is a tendency that airspace is more used by technologically advanced countries, with less attention to international interests or other countries; (3) Frequent inter-state conflicts of interest in the airspace, about the legal status of the limits of sovereignty within the airspace itself; (4) The occurrence of violations of the national airspace of a country arbitrarily; (5) The use of satellite capabilities for certain purposes, through remote sensing activities whose purpose is to know the capabilities of a country, whether in the military or natural resources, even if this is justified under international law (Siboen, 1991; Utama & Idris, 2012).

Based on the background of these problems, this article aims to provide an overview to the public throughout the world about the concept of establishing Indonesia's national airspace as a sovereign nation. Specifically, it aims to explain: (1) Provisions governing the stipulation of the Indonesian National Air Territory; (2) Regions designated as Indonesian National Air Areas.

LITERATURE REVIEW

Under Roman law, it is known that there are two principles applicable to the air space at that time. First, that the airspace as a free area or res communis (common right of all humanity). This theory was introduced by Grotius who analogy that the space air space is free, as well as the sea area at that time. Secondly, there is the principle that whoever owns a piece of land thus also has everything that is above the soil up to the heavens and all that is on the ground. Later, this view of Grotius proved to be a stern challenge from other British scholars, such as Hazeltine, Westlake, Lycklama, Nijeholt with the support of lawyers around the world (English, 1931; Thomson, 1934; Cooper, 1965). The British scholars say that "the air space is not free." As a result of two opinions about the possession of air space at that time, there are two groups (Abdurrasyid, 1989:2003).

The first group, those who argue that the air is by its nature free, its adherents can be grouped as adherents of the free air theory, or the air freedom theory (Myers, 1912). The founding of the first group argues that:

1. Freedom of space without limit. The main point of this establishment is that the air space is free, no country has sovereign rights over the air space so that this air space can be used by anyone. As for the minds of the establishment of this group are: (1) Like the oceans, the air is also an element that becomes the common property of all beings in the world, and therefore there is no basis for any country to have it; (2) No country can exercise authority over the air because, in reality, they are unable to physically enter and hold air into its border area; (3) In essence, the air currents enter the territory of a country illegally, then leave it is independent of the will and state of a country because the nature of the air is moving by the laws of nature around it. Air is an element that cannot be possessed or sovereign. Therefore this kind of element is free to be used by every living creature.

2. The freedom of air space that is attached to some special rights of a country. The establishment of this school requires the freedom of the air space on the record that a country gets special rights, but these special rights are independent of altitude. In essence, this stance is based on the fact that physically air can not be the object of ownership because it can not constantly be occupied and occupied by anyone.
3. The freedom of the air space, but a kind of territorial territory in the area in which the specific rights of a country can be implemented. In contrast to the previous opinion which grants particular privileges to the interests of a country advocating for a path or a layer in which such privileges can be exercised without regard to limits and altitudes, here the rights of that state shall apply only to a territorial territory which is of a certain height, then above that layer the air space is completely free from the intervention of the country underneath.

The second group, those who argue that the state is sovereign over the air space above its territory, or the air sovereignty theory (Honig, 1956; Goodman & Jinks, 2003), which divides in:

1. The full sovereign state only to a certain height in the air space. Similarly, the opinion of the first group, which a country has full rights in the airspace over its territory so that here between the theory of free air space and the theory of air sovereignty agree, namely that above a certain height of air space is the same once free.
2. Full sovereign state, but limited by the freedom of innocent passage for navigation of foreign aircraft. The establishment of this school recognizes a sovereign "state" against its airspace, noting that in the interests of aviation advancement, every country must grant the right of peaceful passage in its airspace to foreign aircraft.
3. A full sovereign state without limit (up to the sky). The main view of this school is the recognition of the full sovereignty of a country against its airspace.

METHODOLOGY

As a form of library research, the method used is "normative legal research", namely by reviewing library materials or reconstructing the results of research and thinking of experts based on secondary data. According to Soekanto (1985), normative legal research or library research is a document study, using various secondary data, such as legislation, court decisions, legal theory, and also in the form of expert opinions.

RESULTS AND DISCUSSION

Provisions governing the Indonesian National Airspace

In the 1944 Chicago Convention, Article 1 again regulates the sovereignty of the state in the air space, which provides that: "The Contracting States recognize that every state has complete and exclusive sovereignty over the airspace above its territory" (Kernodle, 1944; Hogan, 1957; Cheng, 1962). Through the Chicago Convention of 1944, it has been recognized that every country has sovereignty over the air space, so it is not limited to the States parties to the convention only, however the article still seems vague about the meaning of "complete and exclusive", "territory" and "airspace". According to Wassenbergh (1991), the meaning of Article 1 of the Chicago Convention of 1944, that the state's sovereignty over its airspace is to include the entire airspace above the state (in an infinite height) and indivisible. The application of Article 1 shall be complete as long as there are no strict restrictions, either by special agreement to it, or the provisions of other conventions (Suherman, 1984; Air Force Headquarters, 1986).

Especially about the theory of state sovereignty in the airspace it has become a juridical provision, as Abdurassyid (2003) states: "Especially on the question of state sovereignty in the airspace of countries has agreed that this situation has been a provision of customary international law that has been reinforced in the convention". Based on the description, if observed then it has not appeared until where the air space limits of a country that, even until
now cannot be determined, to the height of how many countries can run its sovereignty in the air space above its territory. By Jessup and Taubenfeld suggested ways to measure state sovereignty in the air space vertically, in this case there are two ways, First; namely drawing a straight line from the center of the earth through the borders of the country on land and sea directly into space, Second; drawing lines parallel to a straight line drawn from the center of the earth to a central point in the territory of the state through the borders of the country on land and sea into space.

One thing to remember, that space above the earth in its development is divided into outer space and air space. The air space is a space in space that is closest to the earth where it finds gas elements called air, whereas the juridical region or interplanetary space is called space.

Observing the current development of international air law, when it is associated with the issue of the boundaries between space and space, there remains a sharp disparity of views and attitudes among developed countries. This can be seen in the provisions set out in the legislation, national invitations, such as: At the UN Security Council's subcommittee on the Peaceful Uses of Outer Space (UNCOPUOS) in 2002, the Australian delegation presented information on the draft law being submitted to parliament to supplement the existing Australian Space Activity Act (1988) set a height of 100 km above sea level as a benchmark for practical purposes and that objects that are above the height are considered space objects.

Later in the UNCOPUOS meeting, the United States delegation always stated that there is no urgent need to define the definition and delimitation of space, since such determination will only hinder the progress of technological development, but the United States Space Command secretly assumes that space begins from a height 100 Nm, meanwhile the South Korean delegation at the same session invited countries to discuss air and space limits ranging from 100 to 110 km. Unlike the Soviet/Russian state, however, since the UNCOPUOS subcommittee subcommittee from 1980 to 1992 the former Soviet Union has always proposed that the space limit is set 100-120 km calculated from sea level (Abdurrasyid, 2005; Hanafi, 2011; Chania, 2012).

When considered from the legislation of developed countries, there is generally no rule material that expressly states the limits of state sovereignty in the air space, this is based on the development of discussion in international forums, especially in the sessions UNCOPUOS reflected the indication that the problem the determination of the boundary between air space and space internationally will not be resolved in the near future (Hosenball, 1979; Brachet, 2012; Schrogl, 2014), because in general countries according to the tendency of attitude and views can be grouped into:

The viewing country, that the Spatial Approach determines the setting of the boundary between air space and space (Oduntan, 2003; Rockström et al., 2009). This approach is legal, scientific and technical during the discussion at the UNCOPUOS trial. There are several theories/criteria proposed to define the boundary between air space and space, among others: (1) The limit of state sovereignty by atmospheric layers, and the limits considered most appropriate are 80 Km; (2) The limits of aircraft flying capability which currently reaches a height of about 60-80 Km; (3) The lowest perigee of the satellite orbit is at an altitude of 80-120 km above the earth's surface and it is concluded that the ideal lower space boundary is at an altitude of 100 Km; (4) Theory of effective control which emphasizes the ability of the state to perform effective oversight of zones over the territory of a country.

The various spatial approaches presented, have some advantages in their application, namely: (1) Can guarantee freedom of application and exploitation in space remain concerned
the needs/interests of international civil aviation, because this limit remains above the maximum capability of the aircraft; (2) By the actual practice that lasted for this not one country that protested the satellite trajectory over territorial territory at an altitude of more than 100-110 km; (3) Ensure legal certainty in the framework of enforcement of state sovereignty in air space; (4) By the fact that the movement of aircraft and spacecraft are subject to different physical principles thereby facilitating identification efforts.

However, this spatial approach also contains several disadvantages, including: (1) The application of this approach denied the fact that the physical boundary between air space and space is so thin; (2) Every rocket and satellite launch of a country crossing the air space of another country requires permission from that country; (3) It is inconsistent with the creation of aviation equipment that has characteristics both as an aircraft and a spacecraft so that it is unable to resolve practical issues about the right of passage for the activity of the space.

The viewing state that the setting of the boundary between air space and space is determined by the “Functional Approach” (Rosenfield, 1979; Hosenball & Hofgard, 1985). With this approach, the boundary problem between space and space is emphasized regarding the "nature" and "function" of its activities, namely by distinguishing between "aeronautical" activities and "astronautical" activities in which each activity is subject to different legal regimes. What if the activity is to the airspace, then the activity is subject to the air law regime (Chicago Convention), but what if the activity has the nature of the space, then the activity is subject to the Outer Space Treaty 1967.

There are advantages if this functional approach is applied, among others: (1) Launching of satellites by and from other countries shall not be deemed to violate the sovereignty of other countries at launch; (2) Consistent with the fact that the ongoing activities of the immobilization have not faced any obstacles even in their passage through the airspace of other countries. Besides the advantages also present, the disadvantages of this functional approach are: (1) Can cause problems regarding the absence of agreement on the limits and terms "space activity" and "space flight", as well as the debate between "air craft" and "space craft"; (2) Does not solve the problem for equipment that can fly in the air space such as aircraft, and launch in a space rocket and as a consequence required a special legal regime of objects that have such properties; (3) The meaning of state sovereignty in air space that is "complete and exclusive" can be blurred (Abdurrasyid, 2005; Hanafi, 2011; Chania, 2012).

Territories Designated as Indonesia National Airspace

International recognition of a country is usually based on the fulfillment or absence of the conditions of the establishment of a state, which among other things concerns the territory of the state, especially in the sense of land territory and therefore no state is recognized without the territory of the state. Given this reality, a country always has a territory with certain limits internationally even though the boundaries may still be undetermined or still in dispute (Anwar, 1989; Hamdi, 2002; Zuhir, 2004).

According to international law, that state territory has a three dimensional form that is; the land area as the first dimension, the ocean region as the second dimension, and the airspace as the third dimension (Mann, 1984; Castellino & Allen, 2003; Cox, 2008; Brenner & Elden, 2009; Anderson, 2013), in which the latter dimension is in principle a projection upward from
the surface area of the state both land and sea, so that the nature and legal position of the surface area the state affects the nature and legal standing of the airspace above it.

Without delineating ideas about the form of sovereignty, differences in perspective, and dimensions of boundary setting between airspace and space, it is understood that Indonesia as an archipelagic country (Rositasari, 2001; Basri & Rahardja, 2009; Cribb & Ford, 2009; Frederick & Worden, 2011) flanked by two large oceans, the Indian and Pacific oceans and by two continents, the Asian continent and the Australian continent have airspace areas, whose nature moreover, legal status is influenced by the nature and legal status of terrestrial and oceanic terrain (Frederick & Worden, 2011). The sovereign territory of the Republic of Indonesia as an archipelagic country includes land territory, inland waters, archipelagic waters, and territorial sea. Whereas, the area under the jurisdiction of the Republic of Indonesia is the contiguous zone, the exclusive economic zone, and the continent shelf, to the land area. The territory of each of the waters of the Republic of Indonesia applies the nature and legal status of different airspace based on international legal provisions governing it (in the case of international marine law). Thus, the demarcation of Indonesia's national airspace that is currently understood is:

**Air space above mainland area**

The Republic of Indonesia has land borders with neighboring countries in its vicinity. Thus, Indonesia has complete and exclusive sovereignty over the territory of airspace over the sovereign territory. The fully and complete sovereignty of the Republic of Indonesia over its airspace territory is of an absolute nature and does not recognize exceptions. Its mean that the Republic of Indonesia has the right to fully control the air space above its sovereignty and no aircraft, whether civil aircraft or foreign military aircraft, is permitted to pass through the air space unless it has been licensed or otherwise set in a bilateral agreement and/or multilaterally between the Indonesian government and the country concerned (Air Force Headquarters, 1986).

**Air space above the inland waters**

In the inland waters of a country have absolute sovereignty, as well as the legal status of the air space over the land area. The inland waters are also called inland waters which include the mouth of the river, the mouth of the canal, the lake, rivers, canals, waters between clusters of islands and waters on the inner side of the archipelago (Air Force Headquarters, 1986). The State of the Republic of Indonesia also has absolute sovereignty over airspace territories above inland waters which in principle without any restriction.

**Air space above the waters of the islands**

The archipelagic waters are seas surrounded by basins connecting the outer points of the Indonesian islands. Although these archipelagic waters are under the sovereignty of the Republic of Indonesia, foreign vessels have the right to make international shipping in these archipelagic waters by the principle of innocent passage (Jalal, 2003). Also, under article 53 of the 1982 Sea Law Convention, all foreign ships and aircraft may also enjoy the right of archipelagic sea lanes passage through the Indonesian archipelagic sea lanes established under Government Regulation No. 37 of 2002 (in 2008). The existence of a right regime of cross-sea furrows the archipelago that entitles passage to ships and all types of foreign aircraft to pass through the routes mentioned.
above of the Indonesian archipelagic sea lanes, the airspace above the Indonesian archipelagic sea lanes becomes open to foreign aircraft, especially for military aircraft (Adikara, 1999). This means that the principle of complete and exclusive sovereignty in the air space above the Archipelagic sea Lanes of Indonesia (ALKI) is not absolute because it contains an exception, but in the air space above the archipelagic waters of the Republic of Indonesia which is not a part of ALKI remains closed, because the principle of complete and complete sovereignty applies in absolute terms (Buntoro, 2012).

**Air space above the territorial sea**

The territorial sea is a sea lane located along the coast and on the outside (on the sea side) of the base line and is bounded by the territorial sea outline, where the coastal state has sovereignty limited by the right of peace for foreign ships. Law of the Republic of Indonesia Number 6 of 1996 concerning Indonesian Waters determines that Indonesia's territorial sea is a sea lane width of 12 (twelve) miles measured from the base line of the Indonesian archipelago (Undang-undang, 1996; Republic of Indonesia, 1983). The Republic of Indonesia has sovereignty over the territorial sea, the airspace above it, the seabed and the soil beneath it. Inside the territorial sea there is a right of peaceful passage for foreign ships, but there is no right of peace passage for foreign aircraft in air space over the territorial sea. Thus, the Republic of Indonesia has absolute sovereignty in the air space over the territorial sea.

**Air space above the marine of additional zones**

The auxiliary zone referred to here is a sea area of a width not exceeding 24 (twenty four) nautical miles measured from the base line from which the territorial sea width is measured (Undang-undang, 1996; Republic of Indonesia, 1983). In principle, the territorial waters are part of the free sea, so the coastal state (Indonesia) has no sovereignty over these territorial waters, but has only sovereign rights and certain powers to control violations of the rules in the field of customs (customs), finance (fiscal), sanitation, and immigration control and ensure the enforcement of laws in the region. Therefore, the air space above the additional zone is free for use by foreign aircraft as long as it does not violate the sovereign rights and authority of the Republic of Indonesia. Forms of airspace violations above additional zones may be smuggling or fraud, immigration and sanitation activities perpetrated by foreign aircraft.

**Air space above exclusive economic zone**

In principle, this region equals an additional zone that is a part of a free ocean that does not extend beyond 200 (two hundred) nautical miles measured from the base line from which the territorial sea width is. Within this zone the Republic of Indonesia has sovereign rights for exploration, exploitation, conservation and management of natural resources. Similarly, jurisdiction in the manufacture and use of artificial islands, marine scientific research and the granting of licenses to the laying of cables and pipelines on the seabed and the obligation to respect the freedom of international shipping and flights (Republic of Indonesia, 1983; Jalal, 2003). Thus, the nature and status of the air space within the Indonesian Exclusive Economic Zone (EEZ) is free to use by foreign aircraft, provided that the flight not violate the sovereign rights of the Republic of Indonesia in the exclusive economic zone. Violations in airspace areas
over exclusive economic zones may be in the form of surveys and mapping of natural resources by foreign aircraft.

**Air space above the continental shelf**

This continental shelf, although not a national sovereign territory of Indonesia, but Indonesia has sovereign rights to the natural resources found in the seabed and below soils that include oil and gas and other hard minerals. Therefore, the sovereign rights of the Republic of Indonesia over its continental shelf shall not affect the legal status of the airspace over the continental shelf waters, whereby the airspace on the continental shelf outside the territorial sea is freely used by foreign aircraft provided that the flight not be violating the sovereign rights contained in the continental shelf of The Republic Of Indonesia (Republic of Indonesia, 1983; Air Force Headquarters, 1986).

**CONCLUSION AND RECOMMENDATIONS**

The provisions governing the Indonesian airspace tend only to state that the sovereign state over airspace over territorial territory complete and exclusive, while in space still recognized as a region to be enjoyed for the common good in efforts towards peace and humanity. The regulation governing the national airspace of Indonesia is as follows: (1) Airspace above the Mainland Region; (2) Airspace above the Inland Waters; (3) Airspace above the Waters of the Islands; (4) Air Space Above the Territorial Sea; (5) Air Space Above the Marine of Additional Zones; (6) Air Space Above the Exclusive Economic Zone; (7) Air Space Above the Continental Shelf. Based on these conclusions, it is suggested that soon to be enacted provisions regulating the boundaries of National Airspace, both horizontally and vertically to be mutually shared by all parties concerned with Indonesian national air space.

**REFERENCES**


Chania, M.J. (2012). Recent developments in the discussion of space definition and delimitation issues at the uncopuos session (current discussion the issue of the definition and delimitation of outer space on uncopoouos). Aerospace Analysis and Information Journal, 9(1), 52-79.


