Comparative Effectiveness of Airfields around Jakarta as Facility Supporters in Air Defense Territorial Empowerment Strategy

Jeffry D. Ritiau, Joni widjayanto, Afrizal Hendra, Sukma Wijaya Universe War Strategy Study Program, Faculty of Defense Strategy, Republic of Indonesia Defense University

Abstract: As the capital city of the country, Special Capitol Region of Jakarta has an important and strategic role in the implementation of the wheels of government both at the central level and at the local government level itself. By looking at the strategic value of the existence of Special Capitol Region of Jakarta as the capital city, it is considered important to rearrange the defense potential within the framework of empowering the defense territorial around the capital city of Jakarta. With this complexity, the existence of airports around the Special Capitol Region of Jakarta territorial is a national potential that has an impact on the economy, improving people's welfare and also supports aspects of national defense. However, nowadays, with the development of development and the level of community population as well as the development of technological advances, in the end, it has also led to changes in the level of threat to the integrity and sovereignty of the State. One indicator that can be seen related to airports in the Special Capitol Region of Jakarta territorial is the ineffectiveness of reoperating Halim Perdana Kusuma Airport as an active airport in order to reduce the density of Soekarno Hatta Airport in terms of air transport services. The limited supporting infrastructure, incoming outgoing access and the tqausers and overcapacity for incoming and outgoing vehicles, as well as the emergence of population and vehicle density in the territorial around Halim Perdanakusuma contributed to creating new problems. This study seeks to re-map the regional potential, especially Halim Perdanakusuma and Soekarno Hatta airports as well as airports as an effectiveness effort in the context of empowering air defense territorial, especially in Special Capitol Region of Jakarta. In this study using qualitative methods, where primary data in the form of interviews with competent sources and secondary data from literature studies and analysis based on supporting theories are the material in this study.

Keywords: ineffectiveness, over capacity, regional potential, empowerment of air defense territorial

I. INTRODUCTION

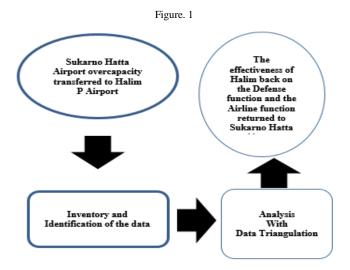
Empowerment of defense territorial is a strategy implemented in order to enth up with the Total War Deffence System by optimizing the function of national potential to be organized and managed into a defense force. In the context of this article the existence of an airport is to be

strategic as an element of the empowerment of the defense territorial to increase the ability of prevention power capability against all forms of threats to the integrity of state safety and sovereignty.

In the period of January 10, 2014 Halim Perdanakusuma Airport was officially made a commercial airport and activated again its operation in order to follow up the inability of soekarno-hatta airport due to overcapacity to accommodate all aircraft movements. Halim Airport is a subsystem of the main tools of the weapons system and becomes part of the national homebase with a system such as the concept of empowerment of defense territorial (Chappy Hakim 2015) in addition to the parking lot infrastructure of road traffic access infrastructure from Cawang to Halim Perdanakusuma airport is already impossible to experience development considering the population density of buildings along the VVIP track, While the busyness of airport operations in the framework of Incoming Outgoing aircraft and passengers is unstoppable and causes congestion, when on one side of the highway access is highway access in order to deliver VVIP from the presidential palace or from elsewhere to Halim Perdana Kusuma air base to depart inside and outside the country. The purpose of writing this Journal is to review and re-map according to the portion and effectiveness of a halim perdanakusuma infrastructure facility as an airport that has a strategic element of defense aspects faced with the current altlernatif where the development of Sukarno Hatta Airport Infrastructure which already has 3 runways and 3 supporting terminals, with the intention of as input for the government in taking strategic policies in order to Follow up national problems by looking at the critical aspects and considerations that need to be Balance.

Research methods

The mindset in the preparation of this journal study is starting from the identification of problems followed by data collection, and when the data has been fulfilled properly, the analysis is carried out to further draw a conclusion.



II. RESULTS AND DISCUSSION

Based on data sourced from Wikipedia, in the 17th century, the Cililitan territorial was a particle land owned by Pieter van der Velde. The land is called Tandjoeng Ost. Then around 1924, part of the rubber plantation land was used as the first airfield in the city of Batavia. The airport is called Vliegveld Tjililitan (Tjililitan Airport).

On June 20, 1950, the Dutch fully handed over this airfield to the Indonesian government when the airfield was directly held by AURI and used as a military air base. Then to coincide with August 17, 1952, the airfield was renamed Halim Perdanakusuma Air Base in memory of the late Abdul Halim Perdanakusuma who died in the line of duty.

In addition to its duties as a Military Base, in addition to being a military base, Halim is also used as the main civilian airport in the city of Jakarta along with Kemayoran. In 1974, the airport had to share international flights with Kemayoran due to the busy flight schedule there. Halim was also appointed to replace the increasingly crowded role of Kemayoran.

After Kemayoran closed, Halim Perdanakusuma Airport began reducing the schedule of civilian flights to focus on military interests. But in 2013, Halim provided 60 slots per hour for domestic and international scheduled flights. This is because to reduce the busy flight schedule at Soekarno Hatta Airport. (wikpedia, 2022).

The capacity of Halim Perdanaukusuma Airport. With reference to the results of research from previous researchers related to the Capacity Analysis of Halim Perdana Kusuma Airport as a Commercial Airport, it was concluded that from the aspect of the amount of air traffic during rush hour, the number of gates needed, the area of Apron needed, runway capacity, taxiway capacity, existing Apron capacity, still meets the minimum capacity standards needed for commercial and military flights. (Wibowo et al., 2015). But in looking at the current feasibility of Halim as a Commercial Airport can not be reviewed only from one side related to the

feasibility of Air Side capacity only in the framework of flight operations but other supporting aspects and effectiveness and efficiency on a global and strategic scale need to be considered holistically.

Commercial losses on delays. Based on the rules issued by the Indonesian Air Force related to the priority of defense interests, the use of air space is to become the First Priority for military operations. This means that the use of air space will prioritize the movement of incoming and outgoing military aircraft and VVIP state aircraft for President, Vice President and other state officials. Of course, this has an impact on the smooth air traffic of commercial aircraft that have an impact on delays or delays. From the commercial side, this has its own number count, the general way it will make passengers or commercial airlines will experience the impact of material and immateril losses that cannot be interpreted.

The overcapacity of Sukarno Hatta Airport was faced with the construction of Runway #3 and the planned construction of 4thTerminal.

Soekarno-Hatta has an territorial of 18 km², has 3 parallel runways separated by 2 taxiways along 2.4 km. There are three main terminal buildings: 1st Terminal for all Lion Air domestic flights, 2nd Terminal for all domestic flights except Lion Air, Garuda Indonesia and Citilink Indonesia flights as well as low-cost airline international flights. Terminal 3 is a dedicated domestic and international flight terminal for Garuda Indonesia and Citilink Indonesia, as well as all other full-service international flights. (Wikipedia, 2022)

Based on the statement of Vice President of Corporate Communication of Angkasa Pura II Inc. Yado Yarismano, until January 6, 2020, the number of flights that have been served on the third runway of Soekarno-Hatta Airport reached 864 flight movements. He said of the total, there were 587 domestic flight movements and 277 international flight movements. With the development stages carried out by Angkasa Pura II (The Institution wihich conduct the operational of Aerodrome) and Airnav Indonesia, flight capacity in Soekarno-Hatta is targeted to increase to 114 flight movements per hour. Thus flight safety is improved because Soekarno-Hatta clearly has more space on the air side. Efficiency also increases along with the reduced number of aircraft queues on taxiways and in the air. (Nurhayat, 2018)

Construction of Terminal 4 of Sukarno Hatta Airport. Angkasa Pura II Inc. plans to build Terminal 4 of Soekarno Hatta (Soetta) International Airport. The planned concept of Terminal 4 of Soetta Airport will be built on the land of Soewarna Golf. Design targeted Terminal 4 Soetta Airport will be able to accommodate 75 aircraft where the parking area in terminal 4 is planned to be 40 thousand m2. In its projection in the future, it is planned that Terminal 4 with an area of 400 thousand m2 will be able to serve up to 40 million passengers in a year, on the other side of 1st Terminal and 2nd Terminal in the future after the revitalization of each

terminal can accommodate up to 20 million passengers per year, on the other side of 3rd Terminal with a capacity of 25 million passengers per year. Thus terminals 1, 2, 3 and 4 in the future Soekarno-Hatta International Airport will have a capacity of up to 105 million passengers per year. (Nurhayat, 2018)

The concept of Halim Perdanakusuma in the framework of the construction of defense territorial. With reference to Government Regulation The Republic Of Indonesia 2014 No. 68, article 5 mentioned that, the defense territorial is determined by the government to provide certainty guarantees against the existence of the defense territorial. Furthermore, in article 6 it is mentioned that the defense territorial consists of 2 classifications, namely static defense territorial and dynamic defense territorials. The static defense territorial includes:

- 1. Military Base
- 2. Military training territorial Military Instalation
- 3. Military equipment and weapons testing area.
- 4. Ammunition Disposal area and other dangerous defense Equipments
- 5. Strategic national vital objects.
- 6. Air Defense Interests.

While the Dynamic defense territorial is not specifically specified but can be guided by article 3 of the Government Regulation The Republic Of Indonesia 2014 No. 68in which it is stated that some or all of the territory of the Republic of Indonesia can be used for the purpose of maintaining defense both in peacetime and in a state of war. (Ministry of Deffence, 2014) There are several aspects that can be reviewed from the Halim side as a defense territorial (Military Base) that can be conveyed here including:

- 1. Very Very Important Person (VVIP) and Very Important Person (VIP) Movement. Perdanakusuma as a military base where the military is the main force in the implementation of defense or war. Therefore, it must be ascertained that the existence of the Alutsista and its supporters are in a conducive and safe defense territorial from all forms of potential threats. In addition to this, the movement of the President, Vice President and other state officials and state guests uses the facilities of Halim Perdanukusuma Air Base as a departure point by using VVIP / VIP aircraft. Where in accordance with the rules applicable to airspace security in the VVIP security standard as a Vital Object, is a safe radius within 3 Nm horizontal distance or 5.6 Km and 2000 ft vertical radius distance Aerodrome Halim clear of any form of potential safety threat to the air space used. (Ministry of Transportation, 2020)
- 2. **Military installations are Prohibited Teritorial**. By referring to the two 2 points above Halim as a base for military heavy transport aircraft and as a means of resuffling the movement of VVIP and other state officials, also halim as a facility for military training and operations and the existence

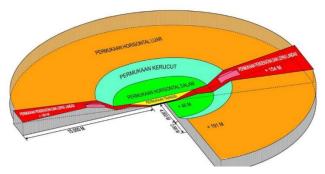
of the National Air Defense Command Headquarters and the Paskhas 1st Wing Command Headquarters and paskhas 461 battalion based in halim region make Halim a military installation that should be very closed..

- 3. Potential threats are Volatility, Uncertainty, Complexity and Ambiguity (VUCA). The international situation in today's global era, in addition to experiencing dynamic development, can also often change rapidly with the emergence of new things, which are often unexpected before. The development of such a world, volatile fast, full of uncertainty and sometimes confusing – requires all countries to be able to manage every actual strategic issue that develops, with the ability to analyze and anticipate precisely and quickly something that develops in response (Sumarlan, 2021). Vuca concept in the model of strategic environmental development where the world is volatile dynamics, uncertainty, complexity (complicated) and ambiguity (a situation where there is no clear causal relationship) should be the main consideration in developing a strategic policy related to the effectiveness of the activation of Halim Perdankusuma Commercial Airport. When associated with the rapid development of technology, it also contributes to the high level of technology used in the form of threats and sabotage that can occur at any time against defense interests and state interests along with its facilities located in Halim Perdanakusuma (Threat Data of VUCA nature: Bomb Attacks with Drone media at Aramco Oil Refinery in Arabia and the events of September 9, 2001 United Airlines Fight 93 aircraft attacked the Building The WTC in New York) is a major consideration to keep Halim Air Force Base territorial in conducive and viable condition as a military base.
- Consideration of Halim Perdanukusuma in the policy of the Aviation Operations Safety Area (AOSA or KKOP in Indonesian abreviation). Based on The Regulation of the Director General of Air Transportation No. 326 Th, 2019 on Technical and Operational Standards of Civil Transportation Safety Regulation section 139 (Manual of Standard Cask-Part 139) Volume 1 of the Airport / Aerodrome), where based on AOSA rules at a radius of 4 Km measured from the center axis point of the runway, then the maximum height of the building around AOSA is not allowed to exceed 46 meters or 150 Ft vertical distance. This rule applies internationally to all Aerodromes in order to ensure the operational safety of commercial aircraft that will carry out income and outgoing. AOSA in Figure 2, for lateral surface (transitional surface, inner horizontal surface, conical surface, outer horizontal surface) many tall buildings, for example Saidah Tower with a height of 94 meters. As for the approach / landing surface there is Tower 165, Trakindo Building. Thus the existence of obstacles that have the potential for Aviation Safety is also one of the considerations of the feasibility of a commercial airport. (Ministry of Transportation, 2016)

Figure 2. The position of Saidah Tower and rakindo Building is below a radius of $4\ \mathrm{km}$.



Figure 3. Aviation Operations Safety Area (AOSA) Halim Perdanakusuma.



Analysis

Clausewitz Theory of war: The Imposibility of calculating moral strenth in battle, in which case war can never be estimated; The opponent Intentions are very difficult to distinguish with any degree of accuracy.

As Clausewitz's theory in seeing and interpreting the intentions and desires of the enemy, the theory is relevant to the development of threats loaded with VUCA phenomena to be able to be referenced consideration in looking at Halim from the defense aspect. (Rachman, 2021). When associated with the rapid development of technology, it also contributes to the high level of technology used in the form of threats and sabotage that can occur at any time against the interests of defense and the interests of the country along with its facilities located in Halim Perdanakusuma. So in looking at Halim Perdanakusuma airport from the defense aspect, some important points from the results of the discussion above become factors that need to be considered in policy making. That the preferred use of runways in the operation of aviation is military operations in which case any Military aviation activity is to be first priority and the consequence is that civil aviation must succumb to both incoming and outgoing activities. Thus in accordance with the commercial interests of each airline in accordance with the Traffic Schedule cannot be fulfilled. In accordance with the procedure of observation of vital objects, Halim as a VIP Movement territorial should be clear of all forms of potential threats within a radius of 30 horizontal and vertical including the Halim Airport territorial. This is based on the vulnerability of potential threats that are still possible and grows with the development of technology where the sophistication of media, weapons and other technological tools that have the potential to be used as a means of sabotage when civilian airport activities are only possible. It is approximately 100 to 200 m from the location of the activity of consensus and the return of VVIP and other State officials from Apron Base Ops Halim Perdanakusuma jAir Force Base.

Based on the technical analysis of Halim's feasibility as a civilian airport has been carried out research that Halim Airport qualifies technically as an R site but in this case has not been analyzed related to sarpras and other supporting facilities where parking is limited access to Halim is still not optimal if Halim is fully empowered to serve civil aviation. In addition to this, in the requirements of the aviation operations safety Area in the Halim region there are still area that are categorized as Obstacles that have the potential to threaten the safety of flight operations in and out of Halim Airport. With the addition of facilities supporting Soekarno-Hatta airport which includes the addition of the third Runway the addition of terminal 3 and in the future the addition of terminal 4 thus the four terminals that have been and will be owned by Soekarno-Hatta Airport plus 3 runways, then the problems raised related to the overcapacity of Soekarno-Hatta airport should not be a problem anymore at this time even though terminal 4 is still in the process stage. building. But in general, overcapsity that appeared as the reason for the transfer of some civil disburses from Sukarno Hatta Airport to Halim Airport has been answered.

III. CONCLUSION

By referring to the results of the above analysis for the effectiveness and efficiency of Halim Perdanakusuma as a medium that can be used in the framework of economic and defense interests, and taking into account the development of facilities at Soekarno Hatta Airport that have been increasingly conducive, it should be considered the policy of activating Halim Perdanakusuma Airport as a commercial airport. Thus, commercial lines located at Halim Perdanakusuma Airport to be able to be diverted activities for the sake of efficiency and effectiveness return to Soekarno-Hatta Airport..

The existence of Halim Perdanakusuma Airport should be able to be transferred back to its use to Halim Perdanakusuma Air Force Base in an effort to optimize the empowerment of defense territorial, especially in anticipation of the development of defense forces in the form of the development of heavy and medium transport aircraft equipment. Of course, the consequences of the renewal, modernization and addition of new Alutsista forces in the future need to be followed by the addition of supporting infrastructure support capabilities, facilities and supporting

infrastructure facilities in order to maintain the readiness and feasibility of military flight operations that are expected to be optimized through the support of supporting facilities both new Apron facilities, aircraft shelters and aircraft maintenance facilities both escalation of maintenance levels. Light and medium levels that can be optimized at the current location of Halim Airport.

This paper is a reflection on the Government's policy in seeing Halim Perdanaksuma as a strategic potential in the context of structuring the defense territorial in the Special Capitol Region Of Jakarta region from which side should be prioritized when Halim is used as a solution to the problem of Over Capacity of Soekarno Hatta airport which can now be answered with the addition of new Terminals and Runways. There needs to be depth in the national strategic policymaking process where The Halim Perdanakusuma Air Force Base and Military Installations are part of the State Deffence System including territorial potential within the territorial of Halim Perdanakusuma Air Force Base, in order to achieve the national interest of maintaining the establishment of state sovereignty and ensuring the smooth development of the National for the realization of National goals. (Tri Legiono, 2021)

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