

Socialization Related to the Dangers of Kites, Laser Beams, Hot Air Balloons, and Drones Around Silampari Lubuklinggau Airport

Herlina Febiyanti¹, Dwi Candra Yuniar¹, I Gusti Agung Ayu Mas Oka¹, Bambang Wijaya Putra¹, M. Syahrul Munir¹, Ricky Rizaldi¹, Muhammad Ali Khatami¹, Aisyah Piranti Amalia¹

¹Politeknik Penerbangan Palembang, South Sumatra, Indonesia

Corresponding author e-mail: febiyanti@poltekbangplg.ac.id

Article History: Received on 17 October 2023, Revised on 29 November 2023,
Published on 5 January 2024

Abstract: The implementation of socialization in the Tridharma of Higher Education framework is by conducting research and compiling Scientific Journals within the Palembang Aviation Polytechnic, South Sumatra. In addition, this activity aims to increase the knowledge and awareness of the general public around the Silampari – Lubuklinggau Class III Airport Operator Unit. This activity also informs about the dangers of kites, laser beams, hot air balloons, and drones around the air space in Silampari – Lubuklinggau as well as the safe distance of building construction, especially in the Flight Operation Safety Area, especially people who live close to the Flight Operation Safety Area (KKOP). The method used for socialization is a participatory Focus Group Discussion (FGD) by resource persons and discussions with communities living around the Silampari – Lubuklinggau Class III Airport Operator Unit that the results are expected so that participants know the results of socialization related to activities that can endanger flights. Then, the results of the socialization were published on the social media of the Palembang Poltekbang.

Keywords: Aviation Operation Safety Area, Dangerous Activities, Socialization

A. Introduction

Indonesia is a member of the International Civil Aviation Organization (ICAO), an International Civil Aviation Organization under the United Nations (UN) tasked with preparing international civil aviation regulations and distributing, monitoring, and evaluating their implementation. ICAO's main interests and objectives are Security and safety, Efficiency, and Regularity of civil aviation worldwide (Agustini et al., 2021). Each airport has a KKOP whose size is determined by the airport classification, dimensions, and runway configuration. In general, the KKOP of an airport is a relatively huge area, starting from the edge of the runway and stretching to a radius of 15,000 m with different heights up to 150 m relative to the Aerodrome Reference Point (ARP). Aviation Safety is essential for transportation, civil, and military aviation.

In addition, flight safety also has an essential role in fulfilling aviation safety requirements. Aviation safety aims at a unified system consisting of airspace, aircraft, airports, flight navigation, safety and security, the environment, supporting facilities, and other public facilities. Flight safety in the Flight Operation Safety Area (KKOP) is the land and water area and airspace around the airport used for flight operation activities to ensure flight safety (S. K. Putra, 2023). This KKOP is limited to height, distance (length) or radius, and angle of inclination or widening relative to the airport runway's location, dimensions, and height (Bagus et al., 2016).

Community activities around airports, such as flying kites, operating drones, lighting laser beams, and building towering structures, can endanger flight safety (Hirsan et al., 2023). One of the activities that became a culture is flying hot air balloons. This hot air balloon flight has been attached to the people of Ponorogo since long ago, even in the East Java area, which is massive in flying hot air balloons during Eid al-Fitr Ponorogo Regency. This annual community activity lasts seven days of Eid or, in Javanese tradition, is carried out until the day of "kupatan" (Bariyah & Boemiya, 2022). Flying hot air balloons on religious holidays has become a hereditary culture in several regions in Indonesia; besides that, kite flying is also part of the usual activities carried out by the people of Indonesia. With the advancement of technology, many people are interested in learning to fly drones so that these activities are no longer strange in the community (Octavianie et al., 2022).

According to Article 210 of Law Number 1 of 2009, it is unlawful for anyone to create obstacles or take other actions in the field of flight operation safety that can endanger flight safety (Yuniar et al., 2022). Thus, operating kites, laser beams, hot air balloons, and drones are restricted in aviation operational safety. Aviation traffic services aim to facilitate and maintain the regularity of flight traffic flow and provide helpful information for flight safety and efficiency to prevent accidents in aviation transportation (Rohman et al., 2022). Then, according to Article 421, violators face three years in prison or a fine of Rp1,000,000,000.00 (one billion rupiah) (Dapar, 2021). Based on these facts, this socialization is expected to provide knowledge to the general public, especially those living around the Operation Safety Area of the Silampari Lubuklinggau Airport Operator Unit, so that things that cause flight disruptions do not occur in the Operation Safety Area of Silampari Lubuklinggau Airport Operators.

In a case study conducted by Handayani and Rahmawan At Juanda International Airport, an Ar-Ridlo mosque building in position 694565.066,9184268.87 with a height of 24,531 m is an obstacle from Juanda Airport (Handayani & Rahmawan, 2015). So it is necessary to reduce by 1,829m in the building as a follow-up to provide aircraft security in landing and taking off from Juanda Airport; besides that, Praherso and Martono also conducted research about the ban on kite games in the city of Tangerang, where in the Soekarno-Hatta Airport area of Tangerang on 28 July 2020. The thread and kite were wrapped and hampered in the plane's engine of one of the flight parties

at the airport. It happens when the plane wants to make a landing due to a lack of public awareness of the dangers caused by kites, and there has also been no firmness from the authorities to fix people who play kites (Praherso & Martono, 2021).

A national aviation safety culture awareness movement is needed to realize aviation safety. Through the aviation safety culture movement, it is hoped that it can provide comfort for the community. The increasing number of airlines has led to the opening of new routes that have more potential to intersect with the community's interests (Yuniar et al., 2021). The dangers of operating kites, drones, hot air balloons, and laser beams, as well as the rules for building construction around Airport operational safety areas, need to be socialized in all areas around airports in Indonesia, Lubuklinggau as a small city in Sumatra has begun to have a fixed pioneer flight schedule, so the safety of aviation areas in the area needs to be improved due to complaints from the head of Silampari Lubuklinggau Airport where many people still do not know about things that are dangerous in the airport operational safety area.

B. Methods

This service activity refers to participatory methods in community empowerment, which means that this activity requires active participation by the intended community to progress in a country's development (Muslim, 2007). The participatory method is the focus group discussion (FGD) method (Muslim, 2020). This method is expected to foster the ability of group members to understand and accept new ideas/ideas in depth, expanding knowledge, tolerance, and personal freedom from group members (Fardiah, 2005). This empowerment activity was carried out in the VIP Terminal Room of the Silampari Lubuklinggau Airport Operator Unit based on the desire of the Head of the Airport to socialize the knowledge to community leaders in the surrounding area that with this activity; it is hoped that Airport Operational Safety can be better maintained (Febiyanti, 2023).

This service activity targets several community leaders, such as sub-districts and RT and RW leaders around Silampari Lubuklinggau Airport. The stages of activities carried out include preparation, implementation, and evaluation. The preparatory stages carried out are: (1) a preparatory meeting to coordinate technically with partners will be held on 2 August 2023, which will be held online by the Palembang Aviation Polytechnic and Silampari Lubuklinggau Airport, (2) preparation of training presentations for community leaders in the area around Silampari Lubuklinggau Airport, (3) preparation of presentation and discussion rooms at Silampari Lubuklinggau Airport. It was determined from the results of this coordination meeting that this activity would be held on 4 August 2023 with a total of 20 participants.

The implementation stage was carried out for one day, starting with filling out the Pre-Test by the Palembang Poltekbang committee, followed by remarks by the chairman of the committee of this activity and the chairman of Lubuklinggau Silampari Airport. Then, the presentation related to the explanation of KKOP was carried out by representatives of the Palembang branch of the Indonesian Air Traffic Controllers Association and the Head of Silampari Lubuklinggau Airport. After the presentation of the material, the participants actively discussed and asked questions with the resource persons to solve problems related to KKOP that they usually face. Furthermore, in the third stage, namely, evaluation, to measure the results of achieving training objectives, at the end of the PkM activity, filling out the Post Test using a Google form filled in by the participants, and the results of this filling were evaluated by the Palembang Aviation Polytechnic PkM implementation team to determine the success rate of this activity.

C. Results and Discussion

The activity, which is located in the VIP Room of Silampari Lubuklinggau Airport Terminal, was officially opened by the Head of the Airport Management Study Program, who is also the head of the committee for this activity on 4 August 2023 at 09.00 WIB, which was attended by the Head of the Silampari Lubuklinggau Airport Airport Organizing Unit, the implementation team, resource persons, and all participants.



Figure 1. Opening of PKM Activities

They then opened the training activity, followed by delivery from 09.30 WIB to 10.30 WIB by two speakers, namely representatives of the IATCA Palembang branch and the Head of Silampari Lubuklinggau Airport. The training material covers several things, namely in the form of the Legal Basis for Control of Growing and Moving Objects at KKOP, which includes Law No.1 of 2009 concerning Aviation, Government Regulation Number: 40 of 2012 concerning the Development and Conservation of the Airport Environment, Decree of the Minister of Transportation Number: KM 44 of

2005 concerning the Application of Indonesian National Standards (SNI) 03 - 71112 - 2005 concerning Flight Operation Safety Areas as mandatory standards, Regulation of the Minister of Transportation Number PM 41 of 2011 concerning Organization and Work Procedures of Airport Authorities Understanding Flight Operation Safety Areas, Building Construction Provisions in the KKOP area, Obstacles and Sanctions for violations of KKOP. Regional Boundaries in the Flight Operation Safety Area are determined by an Airport Coordinate System, each of which is codified following the requirements issued by the Directorate General of Civil Aviation, Ministry of Transportation, Director General of Civil Aviation Number SKEP/110/VI/2000 (A. D. (Andius) Putra & Purba, 2009). Based on the Regulation of the Minister of Civil Aviation Number: KM 44 of 2005 dated 23 July 2005, concerning the Implementation of Indonesian National Standard 03-7112-2005 concerning the Flight Operation Safety Area (KKOP), it is stated that the Flight Operation Safety Area (KKOP) is the land area and waters and airspace around the airport used for flight operation activities to ensure flight safety.

KKOP is divided into: 1. Approach and Takeoff Area (KPLL) is an area of extension of both ends of the runway, under the trajectory of the aircraft after takeoff or about to land, which is limited by a certain length and width; 2. Possible Accident Hazard Area (KKBK) is an approach area directly adjacent to the ends of the runway and has a specific size, which can give rise to the possibility of accidents; 3. The Inner Horizontal Subsurface Area (KBHD) is a flat area above and around the airport, which is limited by a radius and height of a specific size for the benefit of aircraft flying low at the time of landing or after takeoff; 4. The Area Below the Outer Horizontal Surface (KBHL) is a flat area around the airport that is limited by a radius and height of a specific size for the benefit of safety and efficiency of flight operations, among others, when the aircraft approaches land and movement after takeoff or movement in the event of failure in landing; 5. The Subsurface Area of the Cone (KBPK) is the plane of a cone whose bottom is bounded by a line of intersection with the outer horizontal surface, each with a certain radius and height calculated from a specified reference point; 6. The Transition Subsurface Area (KBPT) is a plane with a particular slope parallel to and a certain distance from the runway axis; at the bottom, it is limited by the intersection point with flat lines drawn perpendicular to the runway axis, and at the top it is limited by the intersection line with the inner horizontal surface (Viradhea Gita et al., 2014) This socialization activity began with participants filling out the attendance list to take part in service activities



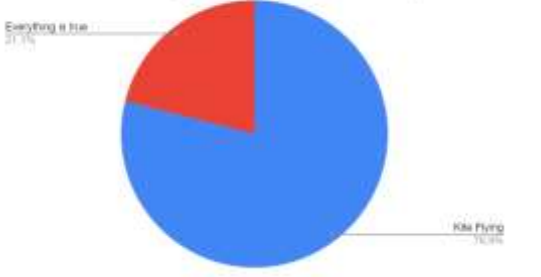
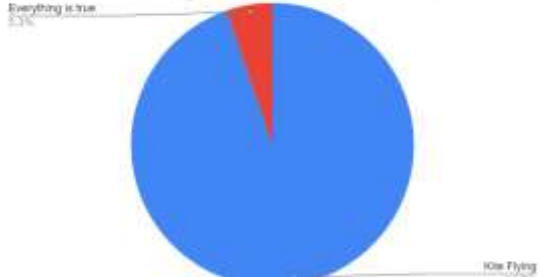
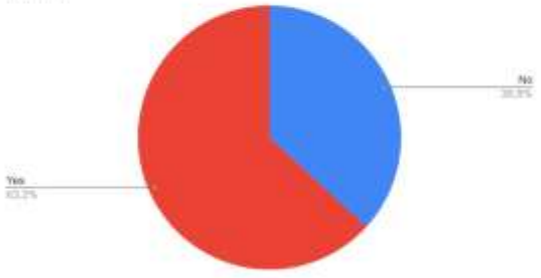
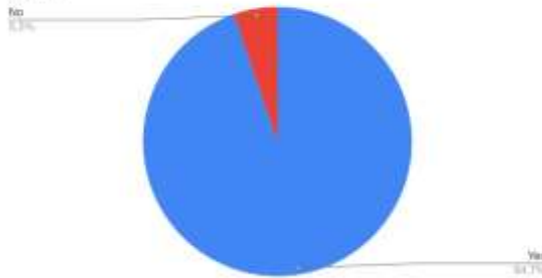
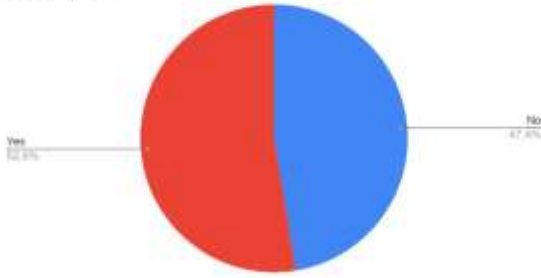
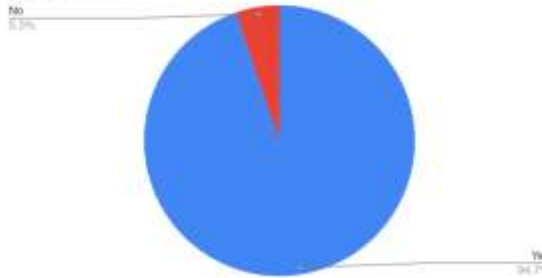
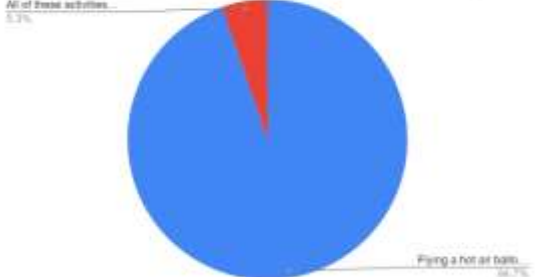
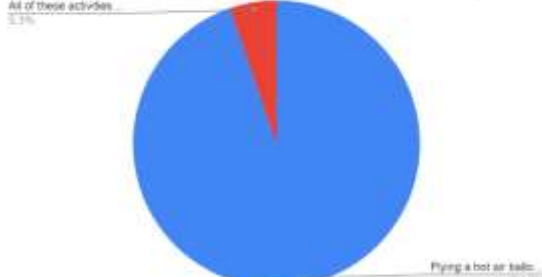
Figure 2. Material Submission

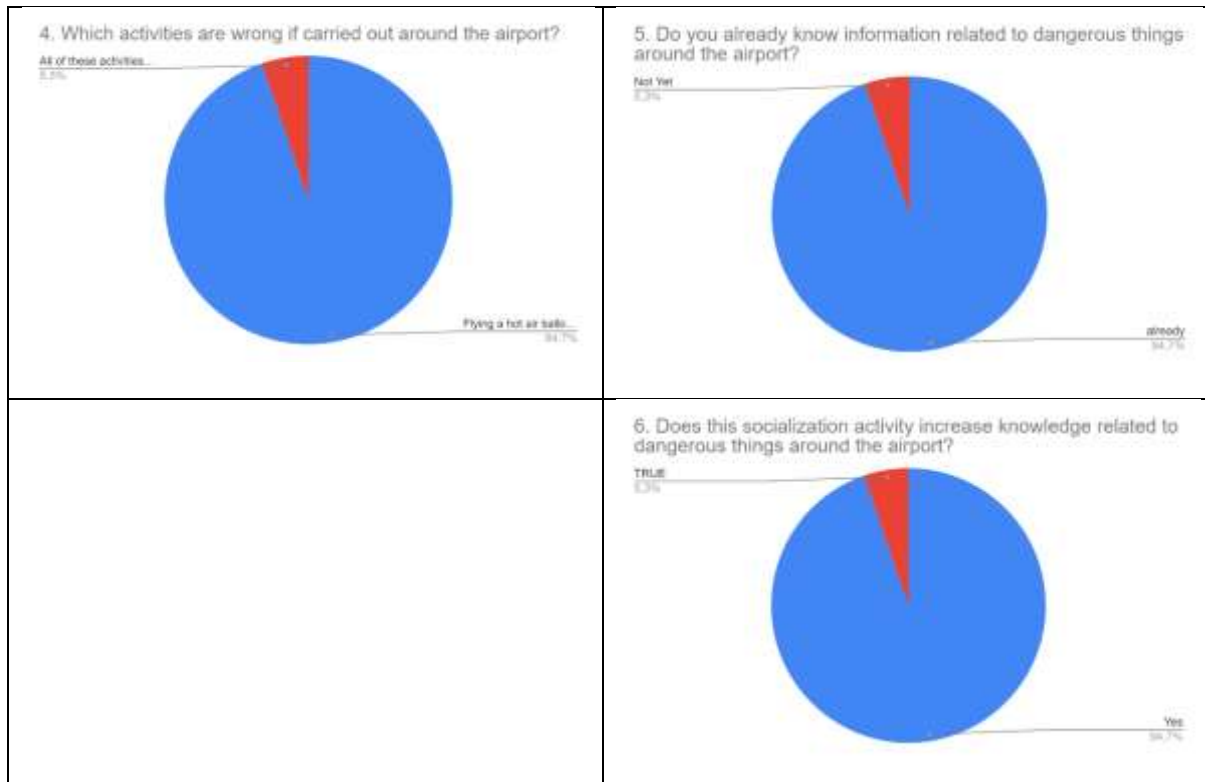
In the last session, participants held discussions and questions and answers related to KKOP to know better the dangers of kites, laser beams, hot air balloons, and drones around the airport area; many also shared about how to remind their citizens to obey regulations, many of the residents felt that these activities were not dangerous so residents continued to do it. However, sources and airport chiefs advised going individually and explaining the regulations and sanctions that would be received if they continued such activities.



Figure 3. Trainees Conduct Q&A

At the end of this PkM activity, activities were evaluated by distributing the Pre-Test and Post-Test to all participants using Google Forms. In the learning process, teachers often conduct evaluation activities, both when the learning process is in progress and when the learning process has been completed. Suppose the evaluation is carried out while the learning is in progress. In that case, the teacher wants to know the effectiveness and suitability of the learning strategy with the objectives to be achieved. Suppose the evaluation is carried out after the learning process is complete. In that case, it means that the teacher wants to know the results or learning achievements obtained by students. Evaluate the assessment of the success rate of students achieving the goals set in a program. That evaluation is an assessment process carried out to obtain an overview of the success of an action (Anwar, 2021). The result is as follows :

Pre Test	Post Test
<p>1. Which are the dangerous activities around the airport?</p>  <p>Everything is true 31.1%</p> <p>Kite Flying 68.9%</p>	<p>1. Which are the dangerous activities around the airport?</p>  <p>Everything is true 3.3%</p> <p>Kite Flying 96.7%</p>
<p>2. Do high-rise buildings around the airport cause a danger to flights?</p>  <p>Yes 63.2%</p> <p>No 36.8%</p>	<p>2. Do high-rise buildings around the airport cause a danger to flights?</p>  <p>No 3.3%</p> <p>Yes 96.7%</p>
<p>3. Is one's activity in the use of laser light around the airport dangerous?</p>  <p>Yes 52.5%</p> <p>No 47.5%</p>	<p>3. Is one's activity in the use of laser light around the airport dangerous?</p>  <p>No 3.3%</p> <p>Yes 96.7%</p>
<p>4. Which activities are wrong if carried out around the airport?</p>  <p>All of these activities 3.3%</p> <p>Flying a hot air balloon 96.7%</p>	<p>4. Which activities are wrong if carried out around the airport?</p>  <p>All of these activities 3.3%</p> <p>Flying a hot air balloon 96.7%</p>



Based on the results of the post-test that has been shared, it can be seen that there has been an increase in knowledge possessed by community leaders. With the increasing ability of community leaders, it is hoped that this knowledge can be conveyed to the entire community around UPBU Silampari Lubuklinggau. Based on similar activities carried out by Rinaldi in Banyuwangi, quite a significant impact on the potential adverse risks to the community; this memorandum of understanding (MOU) has also been reached by API and the community within Cluring Banyuwangi District represented by relevant stakeholders to be involved together to support the security and safety of the airspace (Rinaldi et al., 2021).

Besides the activity by Pramuraharjo and Prasetyo in Curug Tangerang, attended by cadets and our surrounding communities of Curug Aviation Polytechnic through this activity it is hoped that the public can understand the importance of maintaining safety in the flight operation safety area and have vigilance when doing activities around the airport area (Pamuraharjo et al., 2020; Prasetyo et al., 2021; Rohman et al., 2022). Based on Abdusshomad's research in Pondok Cabe, it was found that the results of the training were a significant increase related to the concern and awareness of the community around Pondok Cabe Airport so that when knowledge about human factors and flight safety increased, flight safety and security and excellent service were guaranteed, including their rights and obligations as aviation service users (Abdusshomad et al., 2023).

An obstacle is defined as Any object that is above or standing on the surface of a predetermined obstacle limitation area, which includes runway strips, runway end safety areas, clearways, and taxiway strips, and Any object that enters the Obstacle Limitation Surface (OLS), a series of surfaces that determine the object's height limit, around the airport. The need for obstacle data to design instrument flight procedures must be determined in coordination with the flight procedure designer.

The above provision states that the objectives of obstacle limitation surfaces are: 1. To determine the volume of airspace around the airport that must be kept free of obstacles so that the desired operation of the aircraft within the airport can be carried out safely, either during the visual approach as a whole or during the visual approach segment of the instrument approach); 2. Prevent the airport from being unusable due to the growth of obstacles around the airport, this can be achieved by applying a series of obstacle limitation surfaces that define the boundaries of what objects are in airspace (Bagus et al., 2016). Airport operators must determine the OLS that can be applied to the airport. Obstacle Limitation Surfaces (OLS) are conceptual (imaginary) surfaces that relate to runways and identify the lower limit of airport airspace above objects that become obstacles for aircraft operations (Praptiningsih et al., 2020).

The government, through management, supervises airports, namely the Airport Authority, which is responsible for the security and safety of passengers. The form of responsibility, among others, ensuring that the transportation facilities provided meet flight safety requirements consistently and continuously, consistently and continuously checking the fulfillment of applicable aviation safety laws and regulations, and law enforcement consistently against violations of administrative regulatory compliance in the form of certificate revocation (Aflah & Chairri, 2017).

All aviation stakeholders must work together effectively to create aviation safety. It means that every aviation stakeholder has responsibility for and contributes to the creation of aviation safety. Aviation safety is a matter and responsibility of all parties, not only in theory but also in practice through a continuous process of identifying hazards, managing risks, and meeting performance expectations (Faturachman et al., 2023). So, this activity also aims to help airport operators socialize the OLS that Silampari Lubuklinggau Airport has determined.

D. Conclusion

Some conclusions that can be drawn from the implementation of this socialization effort include: 1) increasing public knowledge of actions that threaten aircraft operations, including the operation of drones, kites, hot air balloons, and the use of laser light in the Flight Operation Safety Area (KKOP); and 2) the implementation of this socialization by the community can improve flight safety.

E. Acknowledgement

We thank the Silampari Lubuklinggau Airport Organizing Unit for permitting us to carry out this community service activity. Thank you to friends for carrying out service for lecturers in enriching knowledge

References

- Abdusshomad, A., Pamuraharjo, H., Soebagio, A., & Zaini, F. (2023). Human Factors and Aviation Safety Training for Communities Around Pondok Cabe Airport. *Jurnal.Penerbitdaarulhuda.My.Id*, 2(3), 105–113. <https://doi.org/10.5281/zenodo.10028019>
- Aflah, A., & Chairi, Z. (2017). Responsibilities of Air Navigation in Air Traffic Services for Aviation Security and Safety (Study of Air Navigation at Kualanamu Airport and Hang Nadim Airport). *Mimbar Hukum - Fakultas Hukum Universitas Gadjah Mada*, 29(1), 1–15. <https://doi.org/10.22146/JMH.16862>
- Agustini, E., Kareng, Y., & Victoria, O. A. (2021). The Role of ICAO (International Civil Aviation Organization) in Implementing International Flight Safety Standards. *KnE Social Sciences*. <https://doi.org/10.18502/KSS.V5I1.8273>
- Anwar, K. (2021). The Urgency of Evaluation in the Learning Process. *Rausyan Fikr : Jurnal Pemikiran Dan Pencerahan*, 17(1). <https://doi.org/10.31000/RF.V17I1.4183>
- Bagus, I., Winaya, G., & Tyesta, L. (2016). Regulation of Aviation Operation Safety Areas: Study of the Implementation of Regional Government Authority in Controlling Development and Growing Objects in the Aviation Operation Safety Area of Ahmad Yani Airport, Semarang. *LAW REFORM*, 12(1), 17–46. <https://doi.org/10.14710/LR.V12I1.15839>
- Bariyah, K., & Boemiya, H. (2022). Juridical Review of Hot Air Balloon Flights as a Community Cultural Tradition in Ponorogo Regency. *Yustisia Tirtayasa*, 2(2), 1–10. <https://doi.org/10.51825/YTA.V2I2.15715>
- Dapar, S. (2021). Application of Criminal Provisions in Operating Airports According to Law Number 1 of 2009 concerning Aviation. *LEX CRIMEN*, 10(4). <https://ejournal.unsrat.ac.id/v3/index.php/lexcrimen/article/view/33413>
- Fardiah, D. (2005). “Focus Group Discussion” in the Participatory Development Paradigm. *Mediator: Jurnal Komunikasi*, 6(1), 95–108. <https://doi.org/10.29313/MEDIATOR.V6I1.1180>
- Faturachman, A., Lestary, D., Agustono, & Satria, A. (2023). Safety Risk Management Bow-Tie Analysis and Safety Promotion in the Operations of Small Unmanned

- Aircraft Systems. *Journal of Theoretical and Applied Information Technology* , 15(21).
<http://www.jatit.org/volumes/Vol101No21/16Vol101No21.pdf>
- Handayani, H. H., & Rahmawan, R. (2015). Evaluation of Building Height in the Context of Efforts to Maintain the Juanda Airport KKOP Zone (Case Study: Ar-Ridlo Sedati Mosque, Sidoarjo). *Geoid*, 11(1), 17.
<https://doi.org/10.12962/J24423998.V11I1.1090>
- Hirsan, F. P., Kurniawan, A., Ridha, R., & Yuniarman, A. (2023). Dangers of Using Drones in the KKOP Area Around the Airport. *JMM (Jurnal Masyarakat Mandiri)*, 7(3), 2663. <https://doi.org/10.31764/JMM.V7I3.14968>
- Muslim, A. (2007). Participatory Approach in Community Empowerment. *Jurnal Aplikasi Ilmu-Ilmu Agama*, 8(2).
- Muslim, A. (2020). Implementation of Participatory Learning Through Focus Group Discussions in Improving Student Communication Skills. *Jurnal Paedagogy*, 4(1), 15–20. <https://doi.org/10.33394/JP.V4I1.3019>
- Octavianie, A., Louis Latif, H. J., & Biringkanaya, K. (2022). Socialization of the Aviation Operations Safety Area at Matahora Wakatobi Airport. *Jurnal Pengabdian Kepada Masyarakat Semangat Nyata Untuk Mengabdi (JKPM Senyum)*, 2(1), 21–24. <https://doi.org/10.52920/JKPMSENYUM.V2I1.57>
- Pamurahrjo, H., Utami, S., Mustofa, Saptono, & Rohman, T. (2020). Socialization of Aviation Operation Safety Areas (KKOP). *Jurnal Pengabdian Kepada Masyarakat (JPKM) Langit Biru*, 1(01), 18–22.
<https://journal.ppicurug.ac.id/index.php/jpkm/article/view/371>
- Praharso, R., & Martono, H. K. (2021). Implementation of Tangerang City Regional Regulation Number 7 of 2004 concerning Prohibition of Kite Flying Activities for Aviation Safety. *Jurnal Hukum Adigama*, 4(1), 1579–1599.
<https://doi.org/10.24912/ADIGAMA.V4I1.12030>
- Praptiningsih, N., Budi Kuntjoro, M., & Sinaga, T. A. M. (2020). Analysis of Aviation Safety Operations Safety Areas in the Context of Operation and Development of Fatmawati Soekarno Bengkulu Airport. *Langit Biru: Jurnal Ilmiah Aviasi*, 13(03), 50–57. <https://doi.org/10.54147/LANGITBIRU.V13I3.353>
- Prasetyo, B., Rohman, T., & Kalbuana, N. (2021). Socialization of Aviation Operation Safety Areas (KKOP). *Journal.Ppicurug.Ac.Id*, 2(1), 31–38.
<https://journal.ppicurug.ac.id/index.php/jpkm/article/view/451>
- Putra, A. D. (Andius), & Purba, A. (Alexander). (2009). Analysis of the Aviation Operations Safety Area (Kkop) of Pekon Serai Airport in West Lampung Regency.

Jurnal Rekayasa Teknik Sipil Universitas Lampung, 13(2), 139520.
<https://www.neliti.com/publications/139520/>

Putra, S. K. (2023). The Importance of Supervision in the Flight Operations Safety Area at Halim Perdana Kusuma Airport-Jakarta. *Jurnal Cahaya Mandalika*, 4(2).
<https://www.ojs.cahayamandalika.com/index.php/JCM/article/view/1306>

Rinaldi, R., Iswahyudi, P., Arif, R., Hariri, A., & Qiram, I. (2021). Socialization of Aviation Operational Safety Areas in the Community of Cluring District, Banyuwangi. *TEKIBA : Jurnal Teknologi Dan Pengabdian Masyarakat*, 1(1), 7-9.
<https://doi.org/10.36526/TEKIBA.V1I1.1303>

Rohman, T., Pemurahardjo, H., Solihin, S., Sundoro, S., & Abdusshomad, A. (2022). Socialization of Flight Operations Safety Area Activities at the Tangerang Regency Transportation Service. *Pengmasku*, 2(1), 36-42.
<https://doi.org/10.54957/PENGMASKU.V2I1.140>

Viradhea Gita, R., Subiyanto, S., & Laila Nugraha, A. (2014). Overview of the Flight Operations Safety Area (KKOP) Map of Ahmad Yani Airport, Semarang. *Jurnal Geodesi Undip*, 3(1). <https://doi.org/10.14710/JGUNDIP.2014.4720>

Yuniar, D. C., Oka, I. G. A. A. M., Oka, I. G. A. A. M., Putra, B. W., Putra, B. W., Febiyanti, H., Febiyanti, H., Munir, M. S., Munir, M. S., Pratama, M. A. P., Pratama, M. A. P., Alhafidz, R. Y., Alhafidz, R. Y., Alaudin, A., & Alaudin, A. (2022). Educational Socialization of Dangerous to Aircraft Activities in the Aviation Operations Safety Area. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 7(2), 669-674. <https://doi.org/10.31851/JMKSP.V7I2.9299>

Yuniar, D. C., Putra, B. W., Febiyanti, H., Oka, I. G. A. A. M., Munir, M. S., Destyana, M. E., Al Hafied, M., Azzahra, V. N., & Azzahra, N. (2021). Educational outreach on activities that endanger aircraft in the flight operations safety area at SMB II Palembang Airport. *Darmabakti: Jurnal Inovasi Pengabdian Dalam Penerbangan*, 2(1), 8-13. <https://doi.org/10.52989/DARMABAKTI.V2I1.37>