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Analysis of Physical Workload and Situational Awareness at the Apron Movement Control (AMC) Unit at Husein Sastranegara International Airport Bandung

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Abstract
Efforts to develop human resources in line with the company's vision and mission are not an easy job, companies are required to be able to prepare a workforce that is able to carry out tasks in work effectively and efficiently. Obstacles that often occur in a company in efforts to develop human resources are high physical workload or workload and lack of situational awareness. This research uses a type of research with a qualitative descriptive method. To be able to get answers from the research, the researcher made a research design design. Qualitative research is research that is used to investigate, find, describe, and explain the quality of influences that cannot be explained, measured or described through a quantitative approach. The results of the study show that the physical workload of the AMC unit at Husein Sastranegara Airport in Bandung is very high due to the very wide coverage of the supervisory area, as well as the great responsibility in supervising and controlling all movements on the air side, with a large number of personnel. experienced a shortage of officers/executors as field workers, where the AMC unit only had 2 officers/executors, therefore with this great responsibility the workload on the AMC unit was also very high. Regarding the condition and form, the level of Situational awareness possessed by AMC officers is already at level 3, because officers can function themselves in the right conditions and at the right time in the surrounding environment in an effective way.
Keywords: Siuation Awareness, Workload, Apron Movement Control

INTRODUCTION

Indonesia is a country that has a unique character in the growth of its aviation industry. According to Boeing Vice President of Commercial Marketing Darren Huslt said that "Indonesia is also one of the markets with the fastest growth for the next 10 to 20 years". As one of the main transportation infrastructures, the airport is one of the places that provide services in flight operations. Airline service provider companies must meet international standards set by ICAO (International Civil Aviation Organization) which aims to be able to provide adequate services for users of air transportation services.

Husein Sastranegara Airport is an international airport located in the city of Bandung, West Java, Indonesia. In 1974 Husein Sastranegara Airport carried out operational civil commercial aviation services. Apart from serving civil aviation, this airport is also one of the Indonesian Air Force bases. Husein Sastranegara International Airport has a big role for the development of the West Java region, especially in providing convenience for tourists who want to visit the city of Bandung.

In the industrial era 4.0, the development of global industrialization is carrying out industrial competition to compete for the market. A company will progress and develop if the existing production factors can be managed wisely and follow the rules that are formed so that

they become a single unit that can be used to achieve company goals. Human resources (HR) have an important role because the quality of an organization is very dependent on the level of quality of human resources, Zeithaml (in Debora, 2018).

Efforts to develop human resources in line with the company's vision and mission are not an easy job, companies are required to be able to prepare a workforce that is able to carry out and carry out tasks in work effectively and efficiently. Obstacles that often occur in a company in efforts to develop human resources are high physical workload or workload and lack of situation awareness or situation awareness. Fisher, (in deborah, 2018). Situation Awareness is defined as the perception, understanding, and projection of several elements of the environment including the volume of time and space in the future that affect a person in making a decision. One factor that contributes to a person's situation awareness is workload. Workload is a difference between the capacity and ability of workers with the demands of work faced and completed within a certain period of time in a company (Endsley, 2015).

There is one unit within the airline that is responsible for carrying out flight operation services, namely Apron Movement Control (AMC). The Apron Movement Control (AMC) Unit is an implementing unit within PT (Persero) Angkasa Pura II which is under the Airport Operations Service division whose job is to provide services in the airside area, not only providing services but the Apron Movement Control (AMC) unit.) also has a supervisory function in the airside area of all traffic movements of vehicles, workers, and passengers who are in the airside airside area. (Herman and Widiastuti, 2021). Apron Movement Control (AMC) responsibilities in aviation safety management (Dewantari and Hasan, 2016), namely:

1. Implement procedures for apron safety management.
2. Carry out supervision and control of all operational activities on the apron in accordance with safety SOPs in accordance with the Airport Safety Management System (SMS).

The AMC Unit has the task of being in charge of airside operations, management of the apron and all interested persons in the airside area. The Apron Movement Control (AMC) task (Dewantari and Hasan, 2016), namely:

1. Monitoring the movement of aircraft on the apron.
2. Arrangement of aircraft parking position on the apron.
3. Aircraft, non-aircraft and passenger traffic control.
4. Supervision of apron cleanliness.

Based on the observations of researchers, Apron Movement Control Unit (AMC) workers in carrying out their duties and responsibilities use physical force and are assisted with supporting equipment. Therefore, based on the functions, duties and responsibilities of AMC above, researchers are curious to find out how the physical workload experienced by officers in the AMC unit, as well as how the condition of situational awareness is owned by officers in the AMC unit. Based on the writing above, the author is interested in researching how physical workload and situation awareness takes the form of the research title "Physical Workload and Situational Awareness Analysis in the Apron Movement Control (AMC) Unit at Husein Sastranegara International Airport Bandung".

Relevant Research

Table 1. Relevant Research

No	Researcher Name	Research Year	Research Title	Research result
1.	Dwi Riza Khaironi	2019	Analysis of the relationship between physical work and situational awareness at SPBU X Surabaya.	This study shows that there is no significant relationship between physical workload and situational awareness. Suggestions from the author, Companies need to do workload equalization by dividing consumers if there is excess queue to a quieter station.
2	Siska Debora	2018	The role of workload perception on employee turnover intention.	The results of this study indicate that there is a role for perceived workload and turnover intention for employees of 3.1%, while the remaining 96.9% is influenced by other variables that are not examined in this research.
3	Aditya Dewantari, Dita Meydina Hasan	2016	Analysis of the performance of implementing officers at the Apron Operations Service (AMC) in lombok international airport.	The results of the study show that the job description or job description has not been carried out properly yet in accordance with the existing SOP at the AMC service and the performance of the AMC Apron operational service officer is lacking in service and supervision on the air side so that it is coupled with a lack of AMC personnel are currently unable to accommodate personnel according to KEP 538/KP. 1014/AP I-2005 so that the current number of personnel has not been able to fully divide the tasks AMC.
4.	Lusi Nur Ardhiani, Galuh Rita Kumala, and Nur Makie Perdana	2019	Qualitative Analysis of Situation Awareness Application in Air Traffic Controller (ATC).	This study produced behavioral and situation description data which were identified as important aspects and indicators in the application of three levels of situation awareness in air traffic controller (ATC) work activities. These aspects and indicators are then grouped in a table which is divided into three Situation Awareness levels. The resulting data can used to design measurement tools, training, research, and evaluation to increase air traffic awareness controllers.

Source: Previous Researchers

RESEARCH METHODS

This research uses a type of research with a qualitative descriptive method. To be able to get answers from the research, the researcher made a research design design. As stated by Saryono (2010), qualitative research is research that is used to investigate, find, describe, and explain the quality of social influence that cannot be explained, measured or described through a quantitative approach.

Qualitative research according to Sugiyono (2017) qualitative research method is research that is based on the philosophy of postpositivism, which is to examine the condition of natural objects, (as opposed to experiments) where the researcher is the key instrument, sampling data sources is carried out purposively and snowball, data collection techniques with triangulation (combined), data analysis is inductive/qualitative, and the results of qualitative research emphasize meaning rather than generalization.

This type of qualitative descriptive research is used to obtain information and describe the actual situation based on facts or events and existing data in depth or comprehensively regarding physical workload analysis and Situational Awareness in the Apron Movement Control (AMC) unit. With this qualitative approach it is hoped that it can reveal the condition of physical workload and Situational Awareness of AMC employees in carrying out their duties at Husein Sastranegara International Airport, Bandung.

The subjects in this study were the Head of the AMC Unit and other AMC officers who worked at Bandung's Husein Sastranegara International Airport, while the object of this study was Bandung's Husein Sastranegara International Airport. The time and place for conducting the research was August 1-October 30 and the research location was at Husein Sastranegara International Airport, Bandung. This study uses Primary and Secondary data types and sources.

1. Primary Data. Primary data is a data source that directly provides data to data collectors. Primary data sources were obtained through interviews with research subjects and by observation or direct observation in the field. (Sugiyono, 2016).
2. Secondary Data. Secondary data is a data source that does not directly provide data to data collectors. For example through other people or through documents, for example such as graphic documents (tables, notes, SMS, etc.), photographs, films, video recordings, and objects that enrich primary data (Sugiyono, 2016).

This research was conducted directly at Bandung Husein Sastranegara International Airport in the AMC (Apron Movement Control) Unit. In this study, researchers collected data through primary and secondary data, where data collection was obtained by directly observing phenomena that occur in the field, as well as collecting existing data during the research process at the AMC Unit at Husein Sastranegara International Airport, Bandung.

The instruments used by the author in this study are the main instruments and supporting instruments. The main instrument is the man himself while the supporting instrument is an interview guide.

1. The main instrument in this research is the researcher himself. Researchers as instruments can deal directly with informants and are able to understand and evaluate various forms of interaction in the field. According to Prof. Dr. L. J. Moleong (Qualitative Research Methodology) the position of researcher in qualitative research is that he is also a planner, implementer, data collector, analyst, data interpreter, and in the end he becomes a reporter on the results of his research.
2. The second instrument in this study is the interview method. In general, the preparation of data collection instruments in the form of interview guidelines is carried out in the following stages:
   a. Conduct identification of all variables in the research title or listed in the research problems.
   b. Describing variables into sub or part of variables.
   c. Look for indicators from each sub or variable part.
   d. Line up descriptors into instrument details.
   e. Complete the instrument with guidelines or instructions and preface

Data Collection Method consists of:

1. Observation. Observations made in this study were directly on the operational work activities of the AMC (Apron Movement Control) unit at Husein Sastranegara International Airport Bandung, by first preparing writing instruments as a means of recording events that occurred at Husein Sastranegara International Airport Bandung.

2. Interview. Esterberg in Sugiyono (2015) interview is a meeting conducted by two people to exchange information by way of question and answer, to become a conclusion on a particular topic. The interviews conducted by the researchers used a semi-structured interview technique in which the informants in this study were the unit heads and AMC officers at Husein Sastranegara International Airport, Bandung. The interview questions in this study are in the appendix on page 35.
3. Documentation. According to Sugiyono (2013) documentation is a record of past events. Documents can be in the form of writing, pictures, or monumental works of a person.

RESEARCH RESULTS AND DISCUSSION

Characteristics of Informants and Triangulation

Respondents in this study amounted to 6 respondents, consisting of 3 main informants and 3 triangulation people. The triangulation in this study was the Unit Head, Coordinator and Apron Movement Control (AMC) Supervisor at Husein Sastranegara International Airport, Bandung. Triangulation in this study was used to strengthen arguments from informants, and collect data on physical workload and how Situational Awareness forms officers at the Apron Movement Control (AMC) unit at Husein Sastranegara International Airport, Bandung. Based on the description in the characteristics of the informants, the characteristics of the informants are arranged as follows:

Table 2. Characteristics of Informants

No	Source Name	Age	Years of Service	Position
1	Aslansyah Prawiranegara	31 years	10 years	Supervisor
2	Maulana Ibrahim	29 years	6 years	Officer
3	Ahmad Hasan Syadzielie	30 years	9 years	Officer

Source: Researcher (2022)

Based on the description in the triangulation characteristics, the triangulation characteristics are arranged as follows:

Table 3. Characteristics of Triangulation

No	Source Name	Age	Years of Service	Position
1	Wisnu Nur Hidayat	42 years	18 years	Unit Head
2	Ulung Bayu Yudistira	33 years	8 years	Coordinator
3	Jumarnis Habikal	31 years	9 years	Supervisor

Source: Researcher (2022)

Physical Workload on Officers of the Apron Movement Control (AMC) Unit of Husein Sastranegara International Airport Bandung

According to Puspa (in Firdanis, 2020), physical workload is workload that requires the physical energy of human muscles as a source of energy and energy consumption is the main factor that is used as a benchmark for determining the weight or lightness of a job. Physical work will result in changes in the function of the body's organs, which can be detected through oxygen consumption, heart rate, air circulation in the lungs, and body temperature. The results of the study found that the physical workload experienced by the Apron Movement Control Unit (AMC) officers at Bandung Husein Sastranegara International Airport was caused by two factors according to Manuaba's theory (2000), namely:

1. External Factors. External factors are loads that come from outside the worker's body, such as from assignments, work organization, and work environment. Physical tasks, physical

tasks, such as workplaces, work tools and facilities, working conditions, work attitudes, and psychological tasks, such as job complexity, level of difficulty, and job responsibilities.
   a. Work organization. Work organization, length of working time, rest time, work shifts, wage system, model of organizational structure, delegation of tasks and authority.
   b. Work environment. Work environment, physical work environment, chemical environment, biological work environment and psychological work environment.
2. Internal Factors. Internal factors are factors originating from within the worker's body itself which occur due to reactions from external workloads. Internal factors include somatic factors (gender, age, body size, nutritional status, and health conditions) and psychological factors (motivation, perceptions, beliefs, desires and satisfaction).

The Condition and Form of the Situational Awareness Level of the Workers of the Apron Movement Control (AMC) Unit at Husein Sastranegara International Airport Bandung

1. Spatial Ability. Spatial Ability (spatial view) Is the ability of individuals to visualize their direction/orientation and manipulate objects. Especially in the aviation environment, it demands the ability to understand spatial relationships between objects that move dynamically in three-dimensional space.
2. Attention. Attention in obtaining SA requires direct attention to see and process information from a dynamic flight environment, to choose the right action and simultaneously execute it.
3. Memory (Memory). Memory (memory) Endsley (1994) suggests that SA is related to working memory capacity which plays a role in decision-making activities and the implementation of dynamic and continuous flight tasks. Under these conditions, long-term memory can help or substantively reduce the load on working memory.
4. Cognitive Functions. High-level cognitive function has a function in assisting information search in pairing or integrating the information obtained into the form of SA Levels 2 and 3. Cognitive complexity is closely related to an individual's ability to overcome mental workload by solving problems in general.

Discussion

Physical Workload on Apron Movement Control (AMC) Unit Officers at Husein Sastranegara International Airport Bandung

According to Manuaba (2000), the factors that affect workload consist of two factors, namely external factors and internal factors. external factors consist of physical tasks, work organization, and work environment. While internal factors consist of somatic factors (gender, age, body size, nutritional status, and health conditions) and psychological factors (motivation, perceptions, beliefs, desires and satisfaction).

1. External Factors. Based on the results of interviews with Apron Movement Control (AMC) officers at Husein Sastranegara International Airport, Bandung, the factors that influence the high level of physical workload on AMC officers are external factors. The most influential external factors during the research process were physical assignments. The length of time worked and the shift process undertaken by officers were 3 working days and 2 days off, with the division of working time in a day, namely 8 hours of work with 2 division of shifts, for the first shift namely the morning shift starting at 06.00 WIB until 14.00 WIB, then the afternoon shift starting from 11.00 WIB until 19.00 WIB (Informant I, Informant 2, Informant 3, Triangulation 1, Triangulation 2, Triangulation 3). AMC officers are workers whose work environment is very high risk because their scope of work is on the air side. (Informant 2, Informant 3, Triangulation 2). AMC officers at Husein Sastranegara Bandung Airport have a

very high level of workload because officers supervise all movements on the air side, starting from the movement of passengers, goods and other vehicles that are directly facing the aircraft. The AMC unit officers have very difficult duties and responsibilities because the officers must carry out their work in accordance with the applicable SOP so that incidents or accidents do not occur in the airside area because Husein Airport itself is an airport that has the highest hazard because it does not have (service) road) barrier facilities between the movement of passengers and other vehicles by aircraft. Then the Husein Sastranegara Airport AMC unit itself experienced a shortage of human resources or manpower, which should have had 6 executors but this unit only had 2 executors or commonly called officers. And the scope of work in this unit is not only to carry out supervision but also to do work related to administration, namely in the form of printing services for driving licenses for Pertamina car drivers and GSE facility drivers who also operate on the air side. Then the scope of the officer's supervision is not only limited to supervision on the apron or aircraft parking lot, but the scope of the officer's supervision area also extends to the hangar, Air Force Base area (because Husein airport is a type of Civil-Military airport), and the scope of supervision extends to the area PT. Indonesian Aerospace which is right in front of the air space or beside the Husein Airport runway. Therefore, with the condition of lacking human resources and high hazard and with quite extensive supervisory responsibilities, the existing AMC officers must be intense and extra in carrying out the work so that unwanted incidents or accidents do not occur. (Informant 1, Informant 2, Informant 3, Triangulation 1, Triangulation 2, Triangulation 3). Based on the results of interviews with AMC officers at Husein Sastranegara Bandung Airport, work organization factors did not have a greater influence on the physical workload experienced by officers. The organizational condition of work in the AMC unit has been running quite well and the level of kinship within this unit is also very high. Likewise with the income or salary earned, officers are given a salary, and several benefits such as license allowances and meal allowances as well as insurance by the company which is sufficient in accordance with the workload that is the responsibility of these officers (Informant 1, Informant 2 Triangulation 1, Triangulation 3). Asmen (Assistant Manager), Coordinator, Supervisor and Officer (Executor), always maintain good coordination, friendship, togetherness, and cohesiveness, so that the organizational atmosphere in this unit is very solid and harmonious, therefore the work organization in the AMC unit does not affect the high physical workload experienced by officers, because in this organization it can create a safe and comfortable atmosphere for the officers themselves so that officers do not experience stress in carrying out their duties and responsibilities as Airside Operations officers (Informant 1, Informant 2, Triangulation 1, Triangulation 2, Triangulation 3). Based on the results of interviews with Apron Movement Control (AMC) officers at Husein Sastra Negara Bandung Airport, environmental factors also have a considerable influence on the physical workload experienced by officers. The work environment of the AMC unit which is in an Airside environment and high work responsibilities, makes officers experience physical fatigue after carrying out work. The position of the officer who has to be in the field conducting surveillance does not recognize hot or rainy weather, and the sense of hearing which always hears the noise from aircraft engines, as well as the emission of sunlight or UV light from the computer makes the officer's eyes become dazzled, tense, so that the condition is quite tiring. officers (Informant 2, Informant 3, Triangulation 2, Triangulation 3).

2. Internal Factors. Based on the results of research on Apron Movement Control officers at Husein Sastranegara Airport, Bandung, that internal factors also have a fairly high influence

on the physical workload carried out by officers. The results of interviews related to internal factors that affect the physical condition of officers are age, psychological condition and decreased physical health such as eyes, ears, nutrition and nutrition. The decline in the physical health of officers is influenced by age conditions and the duties and responsibilities of officers, where officers are always dealing directly with aircraft so that officers experience directly the noise and jet blazz from aircraft. Officers also consume coffee more often than water, this also greatly affects the physicality of officers in carrying out their workload, because consuming coffee continuously can also interfere with the physical health of officers (Informant 1, Informant 2, Informant 3, Triangulation 2, Triangulation 3) . Based on the results of interviews related to the motivation of officers in carrying out the workload is to meet family needs (Informant 1, Informant 2, Triangulation 1, Triangulation 3).

Conditions and Forms of Situational Awareness Level of the Apron Movement Control (AMC) Unit Workers at Husein Sastranegara International Airport Bandung

The factors that influence Situation Awareness according to Endsley (in Mustopo, 2017), namely: Spatial Ability (spatial view), Attention (attention), Memory (Memory), and Cognitive Functions. Based on the results of interviews with Apron Movement Control (AMC) officers at Husein Sastranegara Airport, Bandung, one of the factors that influences Situational Awareness of officers is Spatial Factors. The way officers understand the tasks in the AMC unit according to their spatial abilities is by studying all AMC unit SOPs, reading the latest regulations, and asking superiors and seniors who have worked first (Informant 1, Informant 2, Informant 3, Triangulation 1, Triangulation 3). Previously the officers had been given an orientation regarding the main tasks and functions of the AMC unit before being assigned to the Angkasa Pura branch office so that officers could understand the situation and how to solve studies in the form of problems on the air side (Triangulation 2).

Based on the results of interviews regarding the Attention factor, it can also affect Situational Awareness of officers in recognizing or studying environmental situations and the actions of officers when they are in an impossible situation, namely by understanding the SOP of the AMC unit and going directly to the field to study field conditions directly in accordance with implementation of the SOP, the role of seniors is also inseparable in this regard, officers who experience confusion in making a decision must ask seniors who have worked longer in the AMC unit (Informant 1, Informant 2, Informant 3, Triangulation 1 , Triangulation 2, Triangulation 3). Furthermore, the form of action by the officer when he is in an impossible situation is calm, relax and try not to panic, then inform the superiors and related units of the incident to take further handling actions. In situations where this is not possible, coordination between officers in one unit or with other units or with superiors must be maintained and not interrupted until the problem is resolved and handled properly. was carried out when conditions were not possible (Informant 1, Informant 2, Informant 3, Triangulation 1, Triangulation 2, Triangulation 3).

Based on the results of interviews related to the Memory factor which also has an influence on situational awareness of officers in making decisions and carrying out dynamic flight tasks, memory can also help or substantively reduce the work memory load. Apron Movement Control (AMC) officers at Husein Sastranegara Airport, Bandung, had previously been given learning or courses, namely Short Courses to take licenses and Resreshing Courses which the company continues to hold once every year for workers to be able to update their knowledge in dealing with situations. which is not possible in a work environment. Some officers are also alumni of PPI Curug so that from the start these officers already have

knowledge in the application of handling a problem in the world of aviation (Informant 1, Informant 2, Informant 3, Triangulation 2, Triangulation 3). all officers prior to their placement at each airport have been provided with provisioning in the form of an orientation not only regarding technical matters but also given knowledge about human factors and awareness, so that the alertness of officers in small matters is highly scrutinized because these small things can have a big impact, therefore officers must work carefully and not underestimate or underestimate a small problem (Triangulation 2).

At Bandung's Husein Sastranegara Airport, there was once an airplane accident, namely a Malindo Air plane, which failed to take off and exited the runway to the sholder area. (Informant 1, Informant 3, Triangulation 3). The memory of AMC officers in handling incidents and accidents at Husein Airport must comply with the SOP and apply the handling knowledge that has been obtained during the short course or refreshing course, the steps taken by AMC officers in handling a problem, namely by going directly to the field, and ensure that no unauthorized parties are at the scene of the incident, then report or coordinate with superiors, namely the PTO (Operational Supervisor), the head of the AMC unit to the EGM (Executive General Manager) and related units such as the PK-PPK unit so that this incident can be resolved properly as a result of the results of cooperation between officers who have responsibility for monitoring and handling problems at Bandung Husein Sastranegara Airport. Because the officers always try to make it zero incident and zero accident at Husein Airport (Informant 1, Informant 2, Informant 3, Triangulation 2, Triangulation 3).

Based on the results of interviews with Apron Movement Control (AMC) officers at Husein Sastranegara Airport, Bandung, the Cognitive Functions factor also has an influence on the Situatinonal Awareness possessed by officers. The thoughts of officers in dealing with an incident in the work environment certainly want to be resolved quickly and think about how to make sure that the problem can be handled properly. Officers must be able to remember and apply appropriate handling and mitigation measures in accordance with the SOP in the AMC unit, the AMC's duties when an incident occurs on the air side are in accordance with the existing SOP, namely coordinating, reporting and supervising all movements at the incident location.

This was done so that the situation or problem did not widen and enlarge (Informant 2, Informant 3, triangulation 1, Triangulation 3). The ability of AMC officers to resolve incidents and accidents that occurred at Husein Airport can always be resolved properly, all thanks to senior assistance and cooperation from each officer from the relevant units in dealing with the problem (Informant 1, Informant 2, Informant 3, Triangulation 1, Triangulation 2, Triangulation 3). The condition of the AMC officers after handling an incident is in a healthy condition, relieved and proud of their own ability to solve a problem, but after the incident was resolved, officers still had to stand by and monitor the location of the incident via CCTV, to ensure that the area or point of incident was completely safe (Informant 1, Informant 3, Triangulation 1, Triangulation 3).

CONCLUSION

Based on the results of research on Physical Workload Analysis and Situational Awareness of Unit Apron Movement Control (AMC) officers at Husein Sastranegara Bandung International Airport, it was concluded that: The physical workload on the AMC unit at Husein Sastranegara Bandung Airport is very high, high This work is due to the wide coverage area of supervision, not only in the apron area, but the supervision includes the hangar area, airfield area, and the area of P.T Dirgantara Indonesia. The working time for AMC officers is 8 hours with erratic rest periods. The number of AMC officers is 7 people consisting of 1 unit head, 1

coordinator, 3 supervisors, and 2 officers/executors, with very large officer responsibilities in supervising and controlling all aircraft and non-aircraft movements, the number of officers in the AMC unit is still low. experiencing a shortage of personnel on the part of the officer / executor because as a worker in the field. The high workload depends on the position of each officer in the AMC unit. The first highest workload is in the position of officer/executor because as a field worker, the two supervisors as supervisor officers, the third coordinator as supervisor supervisor, and the fourth unit head who is in charge of administration and coaching within the AMC unit and is fully responsible for making a decision. The results of the research related to the condition and form of the Situational awareness level owned by AMC officers from a level 1-3 scale are already at level 3, because officers can function themselves in the right conditions and at the right time in the surrounding environment in an effective way, therefore the Situational form Officer awareness is already at level 3. All Situational Awareness factors have a major influence on the condition and form of the Situational Awareness level that each AMC unit officer has.

Based on the conclusions from the research on Physical Workload Analysis and Situational Awareness in Apron Movement Control (AMC) Unit officers at Bandung Husein Sastranegara International Airport, the researcher realizes that there are still many deficiencies in the contents of this research discussion, however, the suggestions that the researcher conveys in this study are for the benefit of the development of writing in further research. The author's suggestions for this study are: For Apron Movement Control (AMC) officers, based on research conducted by researchers, AMC officers who have high duties and responsibilities and the condition of situational awareness of officers who are already very good, but there is a need to increase self-awareness and preparedness management in supporting situational awareness of officers in the work environment so that officers can supervise and control movements on the air side for flight security and safety. For PT. Angkasa pura II Husein Sastranegara Bandung Airport, based on the results of research that the AMC unit at Husein Sastranegara International Airport Bandung has a shortage of personnel, therefore according to researchers it is necessary to add personnel to the AMC unit because additional human resources can help with the existing work, so as to reduce the workload of existing officers. For future researchers, because the authors are aware that there are still many shortcomings in this study, it is hoped that future researchers who will conduct research on physical workload and situational awareness can dig deeper into the existing information by strengthening interviews and in-depth field observations so that they can support perfection in further research.

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