OPTIMIZATION OF IMPLEMENTATION OF STANDARD OPERATING PROCEDURES (SOP) IN PERSONN AND VEHICLE CHECK PROCEDURES IN ACCESS CONTROL AT JUWATA TARAKAN MAIN CLASS AIRPORT

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ABSTRACT
Juwata Tarakan Main First Class Airport has implemented Minister of Transportation Regulation number 51 of 2020 concerning National Aviation Security, namely by providing flight security personnel, namely the Aviation Security Unit (AVSEC) which guarantees flight safety and security. However, currently security checks have not been carried out optimally so that it could pose a threat to the passage of dangerous goods into the restricted security area at the airport. In writing this Final Project, the researcher used descriptive qualitative methods by making observations in the field and by collecting data from people around using the Google form, as well as documentation to corroborate the data and observations made. The purpose of this study is to find out whether the inspection on access control has been carried out in accordance with standard operating procedures and to find out how to optimize checks on access control in accordance with standard operating procedures. During the research, it was found that Aviation Security (AVSEC) officers at Juwata Main First Class Airport, to be precise, at the Vehicle Post were negligent and did not apply procedures for inspecting people and vehicles. So that this can be a serious threat to flight security and safety at Juwata Tarakan Main First Class Airport. Based on the findings in the field, it is necessary to optimize the inspection by conducting a refreshing course for aviation security officers so that there is a need for good supervision of inspection of people and vehicles at access control at Juwata Tarakan Main First Class Airport.

Keywords: *Aviation Security, Standard Operating Procedures, Inspection, Access Control.*

1. INTRODUCTION

An airport is a specific area on land or water (including buildings, installations and equipment) designated either in whole or in part for the arrival, departure and movement of aircraf [1]

Airport is an area on land and / or waters with certain boundaries that is used as a place for aircraft to land and take off, get on and off passengers, loading and unloading goods, and places for intra and intermodal transportation transfers, which are equipped with aviation safety and security facilities, as well as basic facilities and other supporting facilities. [2]

Security activities at airports should not be doubted, because this security activity is also one of the efforts to maintain flight security and safety for passengers, officers, the airline itself, and also for the security of the surrounding environment, that's why there are so many security activities at airports. and diverse and will always be updated according to the development of threats to aviation safety. One way is to check people, goods, and vehicles that will enter the restricted security area. Before entering the restricted security area, of course, people, goods, and vehicles will be inspected in accordance with the applicable standard operating procedures, one of which is by checking goods through X-Ray and people through Walk Trough Metal Detectors and Hand Metal Detectors.

In supporting the security and flight safety of an airport, there are several requirements that must be met by airport managers. First, reliable human resources in terms of security and comfort. In this case all aviation security officers (AVSEC). Aviation Security (AVSEC) is an aviation security person who has (mandatory) has a license or

certificate of competence for an officer (STKP) who is given the task and responsibility in the field of aviation security . [3]

Aviation Security is personnel who have or are obliged duties and responsibilities towards aviation security and safety. [4]

Aviation Security (AVSEC) is formed in compliance with international and national regulations as a manager and provider of airport security services that must have the required licenses according to the position. Second, security equipment that is adequate and as needed with the intention that in addition to meeting the minimum amount that must be owned by the security equipment must also be in good condition and pass the test. Third, the procedures used must also refer to national and international aviation security regulations. Between the application of procedures in the field and those listed in existing rules must be appropriate. Both procedures regarding inspection and procedures regarding the operation of security equipment used.

Juwata Tarakan Main First Class Airport itself is an airport directly supervised by the Ministry of Transportation, so Juwata Tarakan Main First Class Airport has the status of UPBU (Airport Operator Unit) which has a number of passengers of around 3000 passengers every day and in 2021 the number of passengers reaches 355,395 passengers. Juwata Tarakan Main First Class Airport has also implemented regulations, namely by holding aviation security personnel, namely Aviation Security (AVSEC) which ensures flight safety and security. Aviation Security officers (AVSEC) themselves not only carry out checks on passengers and their luggage but also must check people and vehicles who will enter the restricted security area as well as limited security areas are areas to prevent the entry of people, vehicles, luggage, cargo and posts and animals that can endanger flight security and safety. [5]

Each ICAO Member State shall ensure that measures designed to protect against unlawful acts are applied to prevalent domestic operations, based on security risk assessments carried out by relevant national authorities. Security Check means the application of a technique or other means to identify or detect prohibited items that may be used to commit Unlawful Actions. This security check is carried out at several points, namely, Security Check Point which is divided into 2, namely Security Check Point 1 for checking passenger baggage and Security Check Point 2 for checking people and goods to be carried on board [4] [5]

Standard Operating Procedure is a guideline or reference for carrying out work duties in accordance with the functions and performance assessment tools of government agencies based on technical, administrative and procedural indicators in accordance with work procedures, work procedures and work systems in the work unit concerned, Standard Operating Procedure is a guide that aims to ensure the work and operational activities of the organization or company run smoothly. [6] [7]

Standard Operating Procedures for inspecting people and vehicles at Access Control owned by Juwata Tarakan Main First Class Airport have referred to the Ministerial Regulation. In the Standard Operating Procedure for inspecting people and vehicles at Access Control owned by Juwata Tarakan Main First Class Airport, it is stated that Aviation Security (AVSEC) officers are required to inspect vehicles starting from the outside and bottom of the vehicle using mirror detectors and inspecting the inside of the vehicle. However, in the process, the Aviation Security (AVSEC) officers of Juwata Main First Class Airport, precisely at the Vehicle Post, were negligent and did not apply procedures for checking people and vehicles. So that this can be a serious threat to the security and safety of aviation at Juwata Tarakan Main First Class Airport, and the absence of female Aviation Security (AVSEC) officers causes the absence of women who want to enter the limited security area through access control at the Cargo and Vehicle Post. With his negligence in not implementing the procedures for checking people and vehicles, the most common case to date is the escape of matches to the air side which should not be allowed because on the air side there is a ban on smoking. The number of vehicles passing through access control to enter and exit the limited security area at Juwata Tarakan Main First Class Airport reaches an average of 57 vehicles per day which includes operational and non-operational vehicles (private vehicles), the number changes every day depending on the busy flights in one day, but until now vehicles in and out of the limited security area are only recorded 2 to 3 vehicles per day in the cargo post bookkeeping and Vehicles by the Aviation Security (AVSEC) unit of Juwata Tarakan Main First Class Airport. [8] [5] [9] [10]

For operational and non-operational vehicles, inspection must be carried out, in the inspection of the inspected vehicles, among others, namely:

1. Admission check.
2. vehicle safety check,
3. People and Goods His innateness.

[9] [5]

So security checks are one form of effort to ensure security and safety for passengers, airlines and officers on duty at the airport and the environment around the airport itself.

Restricted security areas are those areas of the air-side of airports that are identified as priority risk areas where in addition to access control, other security controls are applied. Such areas will typically include, among other things, all commercial passenger departure area flights between screening checkpoints and aircraft, road, baggage make-up areas, including where aircraft are being brought into service and screened baggage and cargo are present, cargo warehouses, mail centres, airside catering and aircraft cleaning grounds. [4]

Security Restricted Areas are certain areas within the airport and outside the airport that are identified as high-risk areas for use by Aviation Security, airport operators, and other interests for use by aviation interests where the area is monitored and for entry security checks are carried out [11]

Optimization is an effort to improve performance in a work unit or private related to the public interest, in order to achieve satisfaction and success from the implementation of these activities. . Optimization is a measure that causes the achievement of goals while when viewed from a business point of view, optimization is an effort to maximize activities so as to realize the desired or desired benefits. Optimization comes from the word optimal, meaning best or highest. To optimize means to make the best or the highest [12] [13] [14]

Based on the background explanation above, problems can be formulated for this Final Project. The formulation of the problem in this Final Project is as follows:

1.Has the access control inspection process been carried out in accordance with standard operating procedures?

2.How to optimize the inspection of access control in accordance with standard operating procedures?

2. METHOD

2.1. Research Design

Research design can be interpreted as a structured work plan in terms of relationships between variables comprehensively in such a way that the research results can provide answers to research questions. ***[15]***

Research design is a plan on how to collect, process, and analyze data systematically and purposefully so that research can be carried out efficiently and effectively in accordance with research objectives. [16]

In writing this Final Project, researchers use qualitative descriptive methods by making observations in the field by taking data from people around, as well as documentation to strengthen the data and observations made.

2.2. Research Setting

Qualitative research is research that intends to understand the phenomenon of what is experienced by the research subject such as behavior, perception, motivation, action and others holistically and by means of description in the form of words and language, in a special natural context by utilizing various natural methods. Qualitative research is a process of naturalistic inquiry that seeks a deep understanding of social phenomena naturally. Qualitative research emphasizes quality, not quantity, and the data collected does not come from questionnaires but comes from interviews, direct observations and other related official documents. Qualitative research is also more concerned with the process than the results obtained. This is because the relationship of the parts under study will be much clearer if observed in the process. [17] [18] [19]

2.3. Population and Sample

Population is needed in the writing of this final project entitled "Optimization of the Application of Standard Operating Procedures (SOP) on Procedures for Inspecting People and Vehicles in Access Control at Juwata Tarakan Main First Class Airport". The population is the entire subject to be studied while the sample is representative of the population that is the subject.

In the final project research entitled "Optimization of the Application of Standard Operating Procedures (SOP) on Procedures for Inspecting People and Vehicles at Access Control at

Juwata Tarakan Main First Class Airport" the author took samples from people and vehicles through operational vehicle post access control as respondent criteria with a total of 30 samples, namely from the Aviation Accident Relief and Fire Suppression Unit (PKP-PK), Pertamina DPPU Juwata Unit, Building Unit, Platform Unit, Mechanical and Electrical Unit, and Ground Handling

2.4. Data Collection Techniques

The object of research is as follows "The object of research is a variable or what is the point of attention of a study, while the subject of research is a place where variables are attached". In this final project research, the object that the author targets to be researched is the application of Standard Operating Procedures for inspecting people and vehicles on access control. [20]

2.4.1 Observation

Observation in the Big Dictionary Indonesian means careful observation or review. Observation is a data collection method used to collect research data through observation and sensing. The purpose of observation is to describe the setting being studied, the activities taking place, the people involved in the activity, and the meaning of the event from the perspective of those involved in the observed event. The observations made are direct observations from the scene of the incident which will be used as the object of research, regarding "Optimization of the Application of Standard Operating Procedures (SOP) on Procedures for Inspecting People and Vehicles in Access Control at Juwata Tarakan Main First Class Airport" during the implementation of On the Job Training (OJT) activities of the Aviation Security unit on January 9, 2023 – March 31, 2023. [21]

2.4.2 Questionnaire

Questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to the respond to answer. This questionnaire is a list that contains a series of statements about a problem or field to be studied, to obtain data in the form of opinions from research subjects outlined in a questionnaire to obtain results that can be assessed. The questionnaire used is a statement regarding the application of standard operating procedures for inspecting people and vehicles on Access Control at the operational and private vehicle posts of Juwata Tarakan Main First Class Airport. [22]

2.4.3 Literature Study

Literature study can be interpreted as a series of activities related to library data collection methods, reading and recording and processing research materials. The literature study was conducted by researchers to obtain references from the Ministerial Decree and Standard Operating Procedures of Juwata Tarakan Main First Class Airport which was used as a reference for this study. [23] [9] [24]

2.4.4 Documentation

Documentation is a method of collecting data and information in the form of books, archives, documents, writing numbers and images in the form of reports and information that supports research. [25]

Documentation is looking for data about things or variables in the form of notes, transcripts, books, newspapers, magazines, inscriptions, meeting minutes, lengger, agendas, and so on [26]

This documentation is required to collect data that will then be analyzed. With this method, researchers will collect data from existing documents, so that records related to this study are obtained such as an overview of people and vehicle inspection activities at the access control of Juwata Tarakan Main First Class Airport.

2.5. Data Analysis Technique

The writing method in this final project is qualitative descriptive analysis. Qualitative research methods are research methods used to examine natural object conditions, where researchers are the key instruments, data collection techniques are triangulated (combined), data analysis is inductive, and qualitative research results emphasize meaning rather than generalization This qualitative research method is used for projects whose objects are natural and researchers are key instruments of the research. The qualitative research method will produce descriptive data in the form of Standard Operating Procedure files from the resource persons observed by the researcher. After getting data related to research, the next step is to analyze the

data obtained from the resource person. Based on the results of research, researchers are types of research that prioritize solving a problem that tends to conduct descriptive analysis or called qualitative research. [22]

With data collection techniques in the form of observation, document studies, documentation and questionnaires. The data obtained will later be combined with the results of literature studies based on existing regulations. The stages of analytical techniques that will be used in qualitative analysis are:

1. Data Reduction

That is the stage of simplification, grouping, and elimination of data that is not needed so that the data produces quality and useful information, so that conclusions can be drawn easily.

2. Display Data

That is the stage of presenting data where a set of data will be arranged in an orderly, structured and easy to understand, so that the resulting conclusions will be in the form of narrative in the form of records of field observations, matrices, graphs, networks or charts. So that the data will be organized and arranged and interrelated.

3. Conclusion and Verification

That is the final stage used to ensure that data reduction refers to the objectives of the analysis that will be required. At this stage will produce conclusions from the collected data by looking for relationships, similarities, and differences that can be drawn conclusions and answers to existing problems. Conclusions at the initial stage will be convincing and valid if supported by strong evidence. Verification carried out to assess the suitability of data on the basic concepts of the analysis is more precise and objective

3. RESULT AND DISCUSSION

In this chapter, we will present a presentation of the results of research and discussions that have been carried out by researchers. This research is qualitative research so that the data obtained will be described and then elaborated to obtain problem solving.

3.1. Result

3.1.1. Observation

Observations in this study were only carried out in the *access control* area of people and vehicle inspection at Juwata Tarakan Main First Class Airport. This *access control* area is fully controlled and supervised by *aviation security officers* (AVSEC). During the observation in the access control area, it was found that there were inspections that were not in accordance with standard operating procedures, inspections that did not comply with these standard operating procedures were operational and personal vehicle inspections.

Inspection of people and vehicles that want to go through *access control* is only carried out by checking people, in this case both private and operational vehicles are not checked by officers. Even in the process of carrying out the inspection, it was also found that many people were not examined because the *aviation security* officer knew the person so that no examination was carried out both *body screening* and vehicle inspection.

Table 1. Field Observation Recapitulation

No	Current Condition	Suitable conditions	Theoretical Foundation	Information
1.	No vehicle inspection is carried out	Vehicle inspection is carried out	[9], , [5] [8]	Not Compliant
2.	Missing Mirror Detector tool	Mirror Detector is mandatory to check the bottom	[24], , , [9] [5] [8]	Not Compliant

		of the vehicle		
3.	Not everyone and their luggage are checked using *a hand held metal detector* when passing through *access control*	Inspection of every person and their luggage that passes through *access control*	[24], , , [9] [5] [8]	Not Compliant
4.	The parimeter fence in the *access control is* not up to standard, which is 2.44 meters	The height of the Parimeter Fence according to the standard is 2.44 M	[8]	Not Compliant
5.	Examination is only carried out on Men	Checks should be made to everyone passing through *Access Control*	[24], , , [9] [5] [8]	Not Compliant
6.	No document checks are performed when passing through *access control*	Documents of goods carried should be checked to ensure goods enter Access *Control*	[24], , , [9] [5] [8]	Not Compliant
7.	No vehicle fitting check is carried out	Vehicle passes must be checked to ensure that vehicles passing	[9], , [5] [8]	Not Compliant

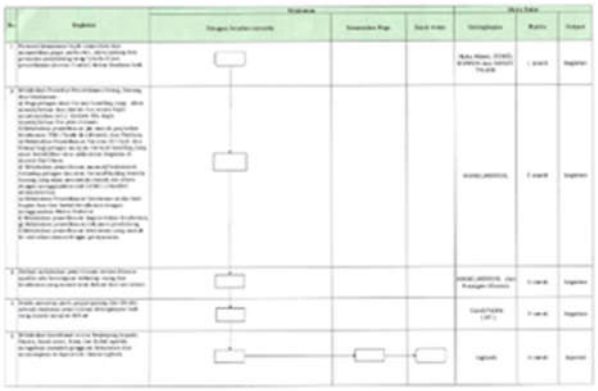
		through *access control have* been recognized and have been tested for vehicle safety		

3.1.2. Literature Study

Based on the results of the literature study conducted by researchers including regulations and requirements to review things that are considered to cause problems, guidelines and references to the understanding contained in the discussion of problems, including the elaboration of the title of the problem being raised accompanied by several opinions to experts that have been edited from various sources. This study will refer to the Decree of the Minister of Transportation and Standard Operating Procedures for Juwata Tarakan Main First Class Airport. [9] [24]

Based on the data sources mentioned above which are used as a reference and guide in this study, information is obtained, namely, in the Access Control door area should be able to carry out checks of people and vehicles in accordance with the Standard Operating Procedures of the Juwata Tarakan Main First Class Airport itself.

Table 2. Flowchart Inspection in Access Control



3.1.3 Questionnaire

The distribution of this questionnaire was carried out through a google form addressed to employees working in the Aviation Accident Relief and Fire Suppression Unit (PKP-PK) 5 respondents, Pertamina DPPU Juwata Unit 3 respondents, Building Unit 2 respondents, Platform Unit 3 respondents, Mechanical and Electrical Unit 2 respondents, Ground Handling 15 respondents so that there were a total of 30 respondents using the Likert scale in several alternative responses (SS: strongly agree, S: agree, N: neutral, TS: disagree, STS: strongly disagree).

Based on the calculation results using the Likert scale instrument, it is known that from all respondents totaling 30 people consisting of the Aviation Accident Relief and Fire Suppression Unit (PKP-PK) 5 respondents, Pertamina DPPU Juwata Unit 3 respondents, Building Unit 2 respondents, Platform Unit 3 respondents, Mechanical and Electrical Unit 2 respondents, Ground Handling 15 respondents who stated respondents strongly agreed that the application of standard operating procedures is currently not yet Carried out optimally, both in the examination of the outside of the vehicle and the inside of the vehicle with a recapitulation of the results of the statement questionnaire as follows:

Table 3. Questionnaire Recapitulation

No	Statement	Index Score	Conclusion
1.	Standard Operating Procedures for Vehicle Inspection at the Access Control	90,66 %	Very Agree

	door are not optimal		
2.	Standard Operating Procedures for Vehicle Inspection of the exterior (Area around the wheels and Vehicle Bottom Area) are not optimal	87,33%	Very Agree
3.	Standard Operating Procedures for Inspection of the inner vehicle (door pocket area, dashboard drawer, underseat area) are not optimal	92%	Very Agree
4.	Vehicle Inspection is necessary to ensure Flight Safety	92%	Very Agree
5.	Vehicle inspection is required in green/safe conditions (at least 3 parts of the vehicle are checked) Vehicle at the Access Control Door	86,66%	Very Agree
6.	Inspection of yellow/vulnerable vehicles is required (all areas that can be infiltrated by goods are prohibited) at the Access Control Door	90,66%	Very Agree

So it can be concluded that if the standard operating procedures for inspecting people and vehicles are optimized properly, it will greatly affect the implementation of inspection of people and vehicles in access control which can improve flight security and safety assurance at Juwata Tarakan Main First Class Airport.

3.2. Discussion

1. The inspection process of people and vehicles in access control has not been carried out properly and it is necessary to optimize inspections, if standard operating procedures are optimized, the inspection of people and vehicles in access control will run well and can ensure flight safety where there is no danger of passing items that are prohibited from entering the airside area of Juwata Tarakan Main First Class Airport.

2. For now, the way to optimize the inspection at the access control of Juwata Tarakan Main First Class Airport that can be carried out is by carrying out a refreshing course for aviation security officers regarding the inspection of people and vehicles in access control.

4. CONCLUSION

Based on the conclusions above that have been described regarding the inspection of people and vehicles at the access control of Juwata Tarakan First Class Airport which can be said to be less than optimal, suggestions and input can be given, namely:

1. There needs to be a *Refreshing Course* for checking people and vehicles on *Access Control* .
2. There needs to be good supervision and evaluation, both from the commander *of the aviation security squad to the head of aviation security.*
3. It is necessary to procure *a mirror detector* device used by *aviation security officers* to carry out security checks on the bottom of the vehicle.
4. It is necessary to give responsibility *to the commander of the aviation security team to report and evaluate activities* to the head of the aviation security unit to the head of aviation security regularly.
5. It is necessary to standardize the parimeter fence on *access control*.

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