

SECURING ACCESS CONTROL TO SECURITY RESTRICTED AREAS AT THE CARGO SECURITY CHECK POINT (SSCP) STAFF AT SULTAN MAHMUD BADARUDDIN II PALEMBANG INTERNATIONAL AIRPORT

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Abstract:

Purpose - This research was conducted to meet the standards for implementing SSCP Cargo at Sultan Mahmud Badaruddin II Airport in Palembang. Security control activities for entrances to security areas are limited to SSCP Cargo and their implementation is still less than optimal.

Design/methodology/approach - The research methodology uses descriptive qualitative research methods, namely by explaining and describing phenomena to display data results scientifically or as they are without any manipulation process. The author obtained data based on the author's observations and documentation.

Findings - The author found that there were discrepancies in the implementation of standard operating procedures for Security Checks carried out by Aviation Security personnel, the ease with which people could enter restricted security areas without having an Airport PAS, and the presence of access control point doors that had inadequate security. This triggers a potential threat to aviation security.

Research limitation/implication - The limitation of this research is that the research method using direct observation is less accurate and requires people around SSCP Cargo to also be asked for information as well as a security survey.

Practical implication - Sultan Mahmud Badaruddin II Palembang Airport must improve flight security in the cargo area because of the potential for unlawful actions against people who carry out these activities in the cargo area.

Originality/value - This research has never been written by researchers from any university.

Keywords: Access control, Airport PAS, Security Restricted Area, Cargo Staf Security Check Point (SSCP), Airport.

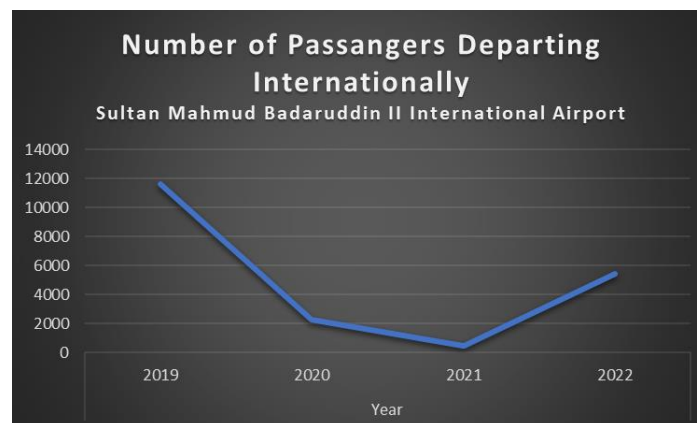


Introduction

Indonesia is essentially an archipelago with a total area of 1,904,569 km² with 17,504 islands (Azizah, 2023). With such a large area, safe and efficient transportation is needed to encourage the progress of the national economy. Air transportation has an important role to connect various regions located on different islands. The connecting place for air transportation is called an airport. Airports are identified as areas that have certain boundaries that function as areas for aircraft to land and take off (Amiwarti, Purwanto and Sulaiman, 2020). Sultan Mahmud Badaruddin II Airport Palembang is an airport with security system B, which has a total number of international departing passengers of more than 10,000 (ten thousand) people / year. This is based on the number of international departing passengers in 2019. The following is data on the number of international departing passengers in 2019-2022.

Picture 1

Graph of the number of international departing passengers year 2019-2022



The increase in the number of people's mobility using air transportation facilities that occurs at Sultan Mahmud Badaruddin II Airport Palembang has the potential for aviation disturbances and threats. The following is data on the total number of aircraft and cargo movements from 2021 to 2022.

Table 1. Data on the number of aircraft movements and cargo loads Year 2021 and Year 2022

Flight type	Year 2021		Year 2022	
	Movement Airplane	Cargo (Kg)	Movement Airplane	Cargo (Kg)
Domestic	13.238	5.219.618	17.260	5.496.816
International	60	0	113	0
Total	13.298	5.219.618	17.373	5.496.816

Along with the increase in flight activities, especially the need for people to ship cargo to and from Palembang City and between other islands of Sumatra, there is an increase in the activity of people coming and going at the cargo terminal. The cargo terminal area of Sultan Mahmud Badaruddin II International Airport Palembang is included in the security restricted area. Before entering the cargo terminal must go through security checks at the Cargo Security Check Point (SSCP) Staff. This Cargo Security Check Point (SSCP) Staff is an access control point where this area must be checked for security and control with a licensing system in the form of an entry permit and air transportation documents. Based on the Decree of the Minister of Transportation of the Republic of Indonesia Number KM 211 of 2020 concerning the National Aviation Security Program, it is explained that entry permit signs into limited security areas include Airport PAS for people, vehicle Airport PAS, flight and cabin personnel ID cards (crew ID cards), Directorate General inspector identification cards.



The implementation of security controls at the *access control point* at the Cargo Security Check Point (SSCP) Staff is currently not carried out according to the Security Check Standard Operating Procedure (SOP). This causes people who enter security restricted areas to not be carried out security checks and entry permits optimally by Aviation Security personnel, so that many people can move out and enter the cargo area without using Airport Passes. Access control doors in the cargo area are also often found open and unlocked when not in use. This facilitates the movement of people who do not have an interest in entering the limited security area, posing a threat to aviation security.

Literature Review

1. Security Screening

Based on ICAO's Aviation Security Manual (Doc 8973) Security Manual for Safeguarding International Civil Aviation Against the Act of Unlawful Interference, screening is the application of technical or other means which are intended to identify and/or detect weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference. Inspection is the application of technical or other methods intended to identify and/or detect weapons, explosives or other dangerous tools, goods or materials that can be used to commit unlawful acts.

2. Access Control

In Annex 17 regarding Security, it is stated that Each Contracting State shall ensure that the access to airside areas at airports serving civil aviation is controlled in order to prevent unauthorized entry. This means that states must ensure that access to airside areas at airports serving civil aviation is controlled to prevent the entry of unauthorized persons.

3. Security Restricted Area

Based on Annex 17 concerning Security, security restricted areas are areas of the airside of an airport which are identified as priority risk areas where in addition to access control, other security controls are applied. Such areas will normally include, inter alia, all commercial aviation passenger departure areas between the screening checkpoint and the aircraft, the ramp, baggage make-up areas, including those where aircraft are being brought into service and screened baggage and cargo are present, cargo sheds, mail centres, airside catering and aircraft cleaning premises.

4. Airport

According to Annex 14 of ICAO (International Civil Aviation Organization) airport is a certain area on land or water (including buildings, installations and equipment) provided either in whole or in part for the arrival, release and movement of aircraft. An airport is defined as a certain area on land or water (including buildings, installations and equipment) provided either in whole or in part for the arrival, release and movement of aircraft.

Method

In this study, the authors chose a qualitative research method. According to Sugiyono (2019) qualitative research methods are an approach based on philosophy and used to investigate scientific events (experiments). Qualitative data collection methods emphasize meaning. This qualitative research methodology aims to analyze and explain phenomena or research objects with a focus on attitudes, social activities and personal views of each and the whole group. The object of research studied was the Cargo Security Check Point (SSCP) Staff area at Sultan Mahmud Badaruddin II International Airport Palembang.

Results and Discussion

Problem Analysis

1. Condition of Cargo Security Check Point (SSCP) Staff to Security Restricted Area

Based on the author's observation, the access door located in the area of the Cargo Security Check Point (SSCP) Staff to Security restricted area. The Cargo Security Check Point (SSCP) was found unlocked and open when not in use. The access door is located between two X-Ray machines in the outgoing cargo area. The access door is also not equipped with an electronic security system. With



this condition, it can provide a gap for unauthorized people to enter the limited security area that goes directly to the airside. Conditions in the cargo warehouse area currently show significant obstacles in terms of supervision by Aviation Security personnel. The distance between the Aviation Security Guard Post and the access control point entrance is blocked by X-Ray machines and partitions. This causes supervision of the movement of people entering the cargo warehouse to be less than optimal.

Picture 2

Access control point door open and unlocked



Picture 3

Distance between the Aviation Security guard post and the door access control point



At the Cargo Security Check Point (SSCP) at Sultan Mahmud Badaruddin II Airport Palembang there is also no inspection path available. The absence of Walk Through Metal Detector (WTMD) makes the process of detecting metals carried by people passing through the inspection door cannot be done automatically. In addition, other facility deficiencies such as the absence of an inspection table and the condition of the damaged Hand Held Metal Detector (HHMD) tool, further complicate the task of Aviation Security personnel in carrying out security in the cargo area. The use of WTMD should facilitate the process of identifying suspicious metal objects on individuals passing through the lane. However, without this tool, aviation security personnel are forced to rely on manual body search methods.

b. Security Control on Staff Security Check Point (SSCP) Cargo to Security Restricted Area

Based on the author's observations, the author found that people entering the Security restricted area through the Cargo Security Check Point (SSCP) were not carried out according to the Standard Operating Procedure (SOP) of security screening by Aviation Security personnel. Aviation Security



personnel only supervise the movement of people from guard posts and often do not carry out security checks on people.

Picture 4
People entering a security restricted area



The majority of people who entered the security restricted area did not wear or even have an Airport Pass or entry permit. In addition, there are also people who wear Airport Passes, but not in accordance with the area, as well as people who have Airport Passes but are no longer valid. This situation creates the potential for intrusion by unauthorized people to enter areas that should be subject to special security, especially in the Cargo Security Check Point (SSCP) area. In this condition, the author found that some people who work as checkers and couriers of cargo and postal shipping companies can enter the area inside the cargo warehouse and cargo yard without using the Airport Pass to inspect the cargo goods to be sent.

Entry clearance checks by Aviation Security personnel are conducted inside the avsec guardhouse. Therefore, people who want to enter the area inside the cargo hold must show their Airport Pass from outside the avsec guard post. However, the majority of people, especially airside workers, do not show their entry permit and just pass through without being checked. At the Cargo Security Check Point (SSCP), there are two Aviation Security personnel on duty. One of them is tasked with conducting security checks and entry clearances, while the other is tasked as an x-ray operator.

Picture 5
People not wearing Airport Passes



Problem Solving

In the previous discussion, this research discussed securing access control to security areas limited to the Cargo Security Check Point (SSCP) Staff area based on conditions and control activities. Researchers create a problem solving description to solve the problems found that have the potential to threaten aviation security in Indonesia and especially at the Cargo Security Check Point (SSCP) Staff at Sultan Mahmud Badaruddin II International Airport Palembang.

a. Short-term Solution

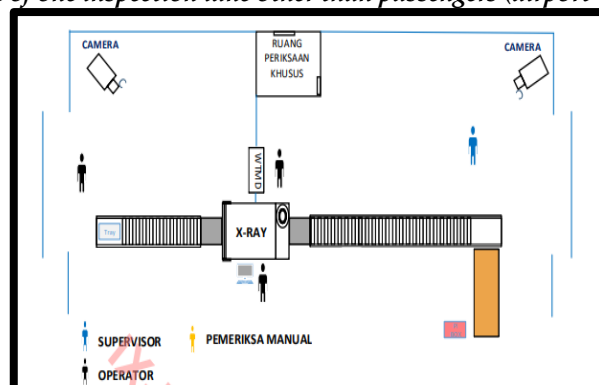
For the short term, enforcement of the Security Check SOP and entry permits will be carried out. This can be done by periodically socializing security checks and entry permits to all Aviation Security personnel. Increased intense supervision by supervisors is also needed to avoid negligence of Aviation Security personnel members in carrying out SOP checks.

b. Medium-term Solution

This can be done by re-planning the plan of the Cargo Security Check Point (SSCP) Staff by making one security check lane at the access control door, so that Aviation Security personnel can monitor and supervise the movement of people entering the cargo warehouse. The addition of Walk Through Metal Detector (WTMD), improvement of Hand Held Metal Detector (HHMD) and placement of personnel duties can increase the security of the Cargo Security Check Point (SSCP) area. Referring to KM 211 In 2020, here is the layout of one inspection lane in addition to passengers.

Picture 6

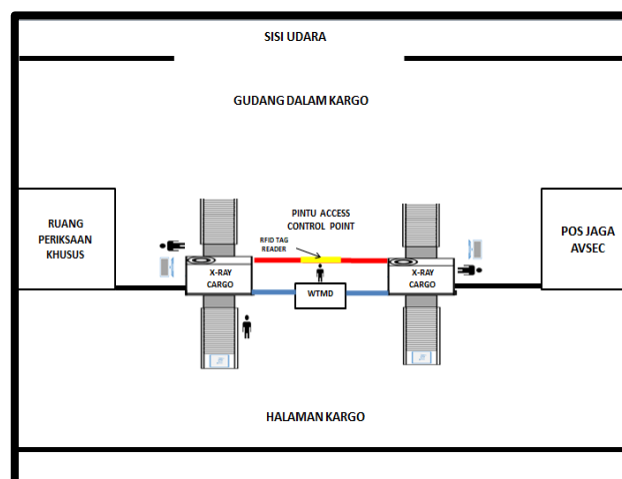
Layout of one inspection lane other than passengers (airport workers)



The layout can be a reference material to be applied to the Security Check Point (SSCP) Cargo area of Sultan Mahmud Badaruddin II Airport Palembang.

Picture 7

Recommended layout of the Cargo Security Check Point (SSCP) area



Based on the recommendation of the cargo plan, one inspection lane for people other than passengers (airport workers) is made by placing the Walk Through Metal Detector (WTMD) at the access control door, changing the avsec guard post into a special examination room, and increasing the assignment of aviation security personnel. The luggage of people who will enter the cargo is checked by x-ray.

c. Long-term Solution

This is done by increasing security at the cargo area access control point door by utilizing Radio Frequency Identification (RFID) which is integrated with the Airport PAS . It can also be tightened by using biometrics so that only people who have an Airport PAS or entry permit. Securing access control points with the utilization of Radio Frequency Identification (RFID) and biometric systems is relevant to Article 79 Paragraph 2 of PM 33 Year 2015 which states that one year after this regulation is enacted international airports require that the entrance and lock are required to use an electronic technology system whose integration is connected to the Airport PAS.

Picture 8

Radio Frequency Identification (RFID) technology and biometrics



Conclusion

1. The access control point door at the cargo terminal, especially in the Kargo Staff Security Check Point (SSCP) area, does not have standard security. When not in use this door is open and unlocked. Security checkpoints are not available in the Cargo Security Check Point (SSCP) Staff area. The distance between the Aviation Security Post and the access control point door is also obstructed by a partition and X-Ray machine so that supervision from Aviation Security personnel is less than optimal to monitor the movement of people.
2. Security control activities in the Cargo Security Check Point (SSCP) area have not been carried out optimally. The application of the Standard Operating Procedure (SOP) for security checks and entry permits by Aviation Security personnel has also not been carried out according to procedures. This results in people who do not have an interest can enter the area in the cargo without an entry permit.

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Conflict of Interest

No potential conflict of interest was reported by the authors.



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