

## Analysis of the Role of Aviation Security and Safety Supervision of The Aviation Security Unit (AVSEC) at Sultan Babullah Airport, Ternate

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### Abstract

Security and safety are crucial factors in aviation activities, considering the sensitivity of air transportation that requires certainty of safety at all times. The success of the duties and responsibilities of the Aviation Security unit is measured by their ability to optimize their supervisory role, thus creating safe and secure conditions, in accordance with applicable regulations and free from unlawful acts at an airport. This study aims to determine the supervision of the Aviation Security unit on flight security and safety at Sultan Babullah Ternate Airport and the supporting equipment used in its supervision. This study uses a descriptive qualitative approach. The data used are primary and secondary data. Primary data is obtained from observation and interviews, while secondary data comes from SOP, literature studies and photographs related to the problems studied. The data analysis techniques used are data reduction, data presentation and drawing conclusions. The research time is in August - September 2023. The results of this study indicate that the role of the Aviation Security unit supervision at Sultan Babullah Ternate Airport has been carried out properly according to the Standard Operating Procedure (SOP) starting from checking passenger travel documents (identity), passenger body screening (body search), passenger baggage screening, monitoring the movement of everyone in the terminal, conducting routine patrols in all areas of the airport including the perimeter fence. Supervision with competent personnel who have been licensed. Avsec unit supervision aims to prevent unlawful acts and maintain the security and safety of flight activities. Supporting equipment in carrying out supervision is an X-Ray machine, HHMD (Hand Held Metal Detector), WTMD (Walk Through Metal Detector), EDS (Explosive Detection System), patrol vehicles and Closed Circuit Television (CCTV).

**Keywords:** Role of Supervision, Aviation Security Unit, Safety and Security



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### INTRODUCTION

Sultan Babullah Ternate Airport is an airport located in North Maluku province, near the city of Ternate. The airport is named after the Indonesian soldier Sultan Babullah of Ternate. The airport is managed by the Air Transportation Agency. The airport serves as the main access to the province, with high passenger and cargo flows. To support flight safety and security, one of the units that plays a very important role in this regard is the aviation security (avsec) unit. According to data obtained from (General Regulation of Air Transportation Number: SKEP/2765/XXII/2010 Chapter 1 point 9) Avsec (Aviation Security) is an aviation security personnel who has (must) have a license or certificate of competence of officers (STKP) who are given duties and responsibilities in the field of aviation security. In carrying out their duties, an Avsec always refers to ICAO (International Civil Aviation Organization) regulations. ICAO is an international civil aviation company whose members are the governments of countries under the UN by issuing operational flight regulations that apply internationally. This company has the function and task of making flight regulations and supervising these regulations which are complied with by all ICAO member countries including Indonesia. Based on the author's observations, cases that can disrupt flight safety and security at an airport have occurred

frequently, such as passengers carrying sharp objects, alcohol (labeled or unlabeled), smuggling goods, carrying firearms without following procedures, and the like. In ensuring flight safety and security, good and careful supervision by the Aviation Security unit is needed for passengers and their belongings as well as all operational activities at Sultan Babullah Ternate Airport. Controlling is a systematic effort by management to compare performance with predetermined standards, plans or objectives to see whether performance is in line with these standards and to take any necessary corrective action to see that human resources are used as effectively and efficiently as possible in achieving objectives (Terry, 2016). The purpose of the Aviation Security unit supervision is to create a safe, secure and efficient condition in aviation activities. Aviation security is a condition that provides protection to flights from unlawful acts through the integration of the use of human resources, facilities and procedures. Meanwhile, flight safety is a condition where safety requirements and utilization of airspace, aircraft, airfields, air forces, flight navigation, as well as supporting facilities and other public facilities are met (Government Regulation of the Republic of Indonesia Number 3 of 2001).

## **RESEARCH METHODS**

This study uses a descriptive qualitative approach. The data used are primary and secondary data. Primary data is obtained from observation and interviews, while secondary data comes from SOP, literature studies and photographs related to the problems studied. The data analysis techniques used are data reduction, data presentation and drawing conclusions. The research time is in August - September 2023.

## **RESEARCH RESULTS AND DISCUSSION**

The observation result shows that the supervision conducted by Avsec officers has been carried out properly according to SOP such as checking passenger travel documents (identity) at SCP 1, then screening passenger baggage at SCP 2, monitoring the movement of everyone in the terminal, conducting routine patrols in all areas of the airport including the perimeter fence. Supervision is supported by 30 Avsec officers, all of whom have basic Avsec, junior Avsec and senior Avsec licenses. Then supervision is also supported by adequate supporting equipment such as X-Ray Machines, Walk Through Metal Detectors, Hand Held Metal Detectors, Explosive Detection Systems, Closed Circuit Television (CCTV), and Handy Talky (HT). In carrying out the duties at SCP, Avsec officers number 4 personnel at SCP 1 and 6 personnel at SCP 2. Then 2 people carry out patrol duties throughout the airport area. The Avsec Unit at Sultan Babullah Ternate Airport uses a shift work system, namely the morning shift starting at 06.00 - 13.00, afternoon starting at 13.00 - 20.00, and night starting at 20.00 - 06.00. Obstacles were found related to supporting equipment often having trouble during operating hours so that manual checks were carried out and the accuracy of the checks could not be guaranteed 100%.

### **Discussion**

#### **Aviation Security unit supervision of flight safety and security at Sultan Babullah Ternate Airport**

Supervision of the Aviation Security unit through competent personnel who have licenses and use the help of supporting equipment to control all operational activities at Sultan Babullah Ternate Airport. Avsec officers carry out their duties and responsibilities in accordance with the Standard Operational Procedure (SOP) so that the placement of personnel in each place is also based on the specified procedures. The Avsec unit currently has qualified Human Resources (HR), namely 30 Avsec personnel and for personnel who are X-Ray machine operators, they must have junior Avsec and senior Avsec licenses, if for basic Avsec only other

than X-Ray machine operators, this is based on the Standard Operational Procedure (SOP) in the Aviation Security unit of Sultan Babullah Ternate Airport. Passenger checks at Security Check Point (SCP 1) are 4 personnel, namely 1 ticket checker, KTP (passenger identity), then 1 passenger checker, 1 X-Ray machine operator and 1 passenger baggage checker if suspected. Then, at Security Check Point (SCP 2) there are 6 personnel with the duties in the points above and an additional 1 passenger baggage handler who will be screened at the X-Ray machine and 1 passenger distance control officer who will enter the gate (Walk Through Metal Detector). This regulation refers to SKEP/2765/XII/2010 concerning Procedures for Security Checks of Passengers, Aircraft Personnel, and Luggage Transported by Aircraft and Individuals. The procedure for checking passengers using the Hand Held Metal Detector (HHMD) equipment, this method is called a body search, carried out manually and if the handheld metal detector (Hand Held Metal Detector/(HHMD) sounds, the Avsec officer who checks must:

1. Ensure the source of the sound is from the passenger's body part
2. Ask the passenger to remove all metal objects from the sound source
3. Check and ensure that the object causing the sound is not a prohibited item
4. If the sound source cannot be found, a manual inspection must be carried out
5. After the sound source has been checked and confirmed, the inspection is continued and started from the sound source
6. Continue the inspection procedure until the passenger has been checked as a whole and the sound source has been identified and checked.

Avsec officers conduct screening of passenger goods using an X-Ray machine and monitored via a monitor screen, if dangerous goods are detected then a manual inspection is carried out or the goods are opened. Every item that enters the X-Ray machine will all be visible on the monitor, if prohibited dangerous goods are found then the monitor operator will notify to conduct an inspection of the contents of the passenger's luggage, so that it is ensured that all goods transported by plane have been screened and declared safe to be transported. Avsec officers have the right and obligation to refuse or remove passengers who are unwilling to undergo inspection, because this has the potential to commit unlawful acts and disrupt the security and safety of flight operations. Avsec officers check the identity of every passenger without exception at the Security Check Point (SCP 1) entrance to ensure that no passengers enter without clear identification so that they have the potential to commit unlawful acts. Passenger identity checks (KTP, SIM, KTA, Passport, Biometrics that have been validated), then match the identity with the passenger's face, check the departure schedule (airline name, flight route, flight number, flight date and departure time) and airport passes for officers working at Sultan Babullah Ternate Airport. Aviation Security unit supervision is also carried out throughout the Sultan Babullah Ternate Airport area using patrol vehicles. The supervision aims to ensure that there is no potential for unlawful acts such as smuggling goods through various places and also the airport perimeter fence. Patrols are carried out every 2 hours with 2 personnel using four-wheeled vehicles. The Avsec unit is tasked with preventing unauthorized access to sensitive areas at Sultan Babullah Ternate Airport, such as the runway, departure and arrival terminals, and other zones that require strict supervision. This ensures that all procedures are carried out correctly and consistently.

#### **Supporting equipment for the Aviation Security unit in carrying out surveillance at Sultan Babullah Ternate Airport**

1. X-Ray Machine. To screen all passenger luggage that will be brought into the aircraft cabin. Every item that enters the x-ray machine will be visible on the monitor.

2. Walk Through Metal Detector (WTMD). To detect the presence of metal objects carried by passengers, such as weapons, knives, or explosives that may contain metal. This device checks the entire body of the passenger by detecting changes in the magnetic field caused by metal objects. This device is useful for fast and efficient inspection without having to do manual or invasive physical inspections, thus speeding up the security process and reducing passenger waiting time.
3. Hand Held Metal Detector (HHMD). To detect the presence of metal objects carried by passengers, such as weapons, knives, or explosives that may contain metal manually using hands and then screening the passenger's body.
4. Explosive Detection System (EDS). To detect the presence of explosives in passengers' luggage and belongings. EDS uses advanced technology such as X-rays to analyze the contents of luggage and detect explosive threats.
5. Handy Talky (HT). To communicate between fellow Avsec officers and with other units. Communication is carried out from a maximum distance (2 km) on the move (mobile).
6. Closed Circuit Television (CCTV). To monitor critical areas at Sultan Babullah Ternate Airport such as check-in areas, security checks (SCP 1&2), departure gates and public areas. These CCTV cameras help monitor activities in various locations to ensure security and prevent criminal acts and make it easier for officers to investigate incidents because there are video recordings from CCTV.

## CONCLUSION

The role of Aviation Security unit supervision at Sultan Babullah Airport Ternate has been carried out properly according to Standard Operating Procedure (SOP) starting from checking passenger travel documents (identity), passenger body screening (body search), passenger baggage screening, monitoring the movement of everyone in the terminal, conducting routine patrols in all areas of the airport including the perimeter fence. Supervision with competent personnel who have been licensed. Avsec unit supervision aims to prevent unlawful acts and maintain the security and safety of flight activities. Supporting equipment in carrying out surveillance includes X-Ray machines, HHMD (Hand Held Metal Detector), WTMD (Walk Through Metal Detector), EDS (Explosive Detection System), patrol vehicles and CCTV. The Avsec unit support equipment at Sultan Babullah Ternate Airport is very important to ensure operational security and efficiency. Here are some reasons why this equipment is crucial: Increased Security Effectiveness, Threat Prevention and Control, Faster and More Accurate Inspection, Improved Emergency Response, Improved Regulatory Compliance and Operational Efficiency.

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