Analysis of the Implementation of Airport Rescue and Fire Fighting Unit Operations in Efforts to Improve Aviation Security and Safety at Adi Soemarmo Boyolali International Airport

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Abstract

ARFF is a work unit that must exist at an airport. ARFF has three main tasks, namely operation, maintenance and training. The training aims to maintain the quality of ARFF personnel in dealing with unexpected events that we don't expect, maintenance aims to prepare the ARFF operating vehicle so that it is always ready when needed for operations, while operation is the culmination of what we do in training and maintenance. The role of the ARFF officer unit is to be responsible for operating and carrying out maintenance or maintenance of ARFF vehicles and handling emergencies at the airport. The purpose of this research is to find out the role of ARFF unit officers in supporting flight security and safety at Adi Soemarmo Boyolali Airport. In this research or study, researchers used qualitative research methods to collect data using observation, interview, and documentation techniques. The research was conducted from 1 February 2023 to 1 March 2023. Observations in this study involved efforts to increase flight security and safety by the Airport Rescue and Fire Fighting Unit at Adi Soemarmo Boyolali International Airport. ARFF Unit personnel at Adi Soemarmo Boyolali International Airport are the informants or respondents to the research interview activities. Documentation in this study involves recording activities in the work area of the ARFF Unit including the performance of the ARFF Unit and the ARFF Unit's efforts to improve flight security and safety at Adi Soemarmo Boyolali International Airport. The results of the study show that the level of flight security and safety carried out by the ARFF Unit at Adi Soemarmo Boyolali International Airport is trying to improve its performance at Adi Soemarmo Boyolali International Airport in order to maintain the level of flight security and safety. Documentation in this study involves recording activities in the work area of the ARFF Unit including the performance of the ARFF Unit and the ARFF Unit's efforts to improve flight security and safety at Adi Soemarmo Boyolali International Airport. The results of the study show that the level of flight security and safety carried out by the ARFF Unit at Adi Soemarmo Boyolali International Airport is trying to improve its performance at Adi Soemarmo Boyolali International Airport in order to maintain the level of flight security and safety. Documentation in this study involves recording activities in the work area of the ARFF Unit including the performance of the ARFF Unit and the ARFF Unit's efforts to improve flight security and safety at Adi Soemarmo Boyolali International Airport. The results of the study show that the level of flight security and safety carried out by the ARFF Unit at Adi Soemarmo Boyolali International Airport is trying to improve its performance at Adi Soemarmo Boyolali International Airport in order to maintain the level of flight security and safety.

Keywords: ARFF, Aviation Security and Safety, Adi Soemarmo Boyolali International Airport.

INTRODUCTION

Transportation is an important part of people's lives. Transportation comes from the Latin word where trans means across or on the other side and portare means transporting or carrying. Transportation is the movement of people or goods from one place to another within a certain time using a vehicle driven by humans, animals or machines (Christian 2015). Transportation is growing with the times. In ancient times, transportation could only use

bicycles, rickshaws, motorbikes and others. We know that in its development, transportation has undergone increasingly modern changes, one of which is air transport. Air Transportation according to Law no. 1 of 2009 article 1 states that air transportation is any activity using an airplane to transport passengers, cargo and/or post for one trip or more from one airport to another airport or several airports.

An airport is a facility where aircraft such as airplanes and helicopters can take off and land. According to Annex 14 of ICAO (International Civil Aviation Organization) an airport is a certain area on land or water (including buildings, agencies and equipment) which is intended either in whole or in part for the arrival, departure and movement of aircraft. According to Law No. 1 of 2009 concerning Aviation Chapter I article 1 it is stated that an airport is an area on land and/or in waters with certain limits which is used as a place for aircraft to land and take off, take on and off passengers,

In the regulation of the director general of air transportation concerning the requirements for technical and operational standards of civil aviation safety regulations part 139 (manual of standard casr part 139) volume iv states that every airport is obliged to provide and provide Aviation Accident and Fire Fighting Assistance (ARFF) services according to the airport category. for the required ARFF. Aviation Accident Relief and Fire Fighting (ARFF) is a unit part of emergency management. Airport Category for ARFF is a level that is calculated or formulated based on the overall length and maximum width of the largest airframe and taking into account the number of movements.

In the Regulation of the Minister of Transportation No. KM 8 of 2010 concerning the National Aviation Safety Program. Aviation safety is the responsibility of all stakeholders in the field of aviation, encouragement to comply with and follow safety level standards must start from the highest level of management in each organization. Aviation safety is the key for aviation service providers to be able to contribute to meeting the interests of the state. The standard states that the top priority in aviation is the achievement of a safe system. Actions to realize aviation safety must be supported by facts, data and public perceptions regarding the elements needed to achieve safety. The acceptable level of safety risk affects the flight safety system, which will decrease in the event of an accident. Serious incidents and accidents can damage the reputation of aviation service providers, the government and the country. In serious incidents and accidents, human error contributes the most. Weaknesses in management functions are closely related to the number of errors.

From the results of the researchers' initial observations from 1 August to 31 September 2022 at Adi Soemarmo International Airport Boyolali Unit ARFF, a problem was found, namely security that was still lacking where on 5 August 2022 at 09:00 the researchers found foreigners or farmers entering the airside area, of course this can disrupt aircraft landing and take-off activities. With these problems or incidents, supervision and appeals are needed by the ARFF Unit which assists the AMC Unit's supervision of the local community so that problems like the above do not occur again.

Theoretical Basis
Definition of Analysis
Analysis is the decomposition of a subject into its various parts and the study of the parts themselves and the relationships between the parts to obtain a proper understanding and understanding of the overall meaning "According to Sudjana (2016)" Analysis is an attempt to sort an integrity into elements or parts so that the hierarchy is clear and/or its composition "According to Abdul (2013)" Analysis is (the ability to describe) is to break down units into separate units, divide units into sub-subs or parts, distinguish between two that are the same,

select and regarding differences (between several in one unity)". Data analysis according to Sugiyono (2018) is the process of systematically searching and compiling data obtained from interviews, field notes and documentation, by organizing data into categories, breaking down into units, synthesizing, compiling into patterns, choosing what is important and what will be learned, and making conclusions so that it is easily understood by oneself and others. Meanwhile, according to Moleong (2017) data analysis is the process of organizing and sorting data into patterns, categories, and basic descriptive units so that themes can be found and working hypotheses can be formulated as suggested by the data.From some of the opinions above, it can be concluded that analysis is an activity to find new findings on objects to be studied or observed by researchers by finding accurate evidence on these objects. The term analysis is usually used when conducting an investigation or reviewing an essay, research, explanation, or an event that occurred. Analysis is an attempt made with a particular method to observe something in detail.

Definition of Role

The definition of role according to Robbins in Saraswati (2015) says that a role is a series of patterns of expected behavior associated with someone who occupies a certain position in a social unit. In addition, according to the definition of role according to Kreitner which is translated by the language bureau (Alchemist 2014), is the order of behavior that is expected of someone from a position. Role is a combination of various theories, orientations and disciplines used in the world of sociology, role is a term usually used in the world of theater where an actor must play as a certain character and carry out a certain behavior, in this case the position of an actor is equated with position of a community and both have the same position (Sarlito 2015). Based on the above understanding,

UnderstandingARFF

According to KP 14 of 2015, Aviation Accident Relief and Fire Fighting or abbreviated as ARFF is a unit part of handling emergencies at airports and ARFF Personnel are personnel responsible for operating and carrying out maintenance/maintenance of ARFF vehicles and carrying out emergency response at airports. Air and surroundings. ARFF (Aircraft Accident Relief and Fire Fighting) is a mandatory work unit at an airport. ARFF has three main tasks, namely operation, maintenance and training. The training aims to maintain the quality of ARFF personnel in dealing with unexpected events that we do not expect. Maintenance aims to prepare the ARFF operating vehicle so that it is always available when needed for operations, While the operation is the culmination of what we do in training and maintenance. In the ARFF unit, apart from the personnel assigned as flight accident rescue operations operators and firefighters, there are also technicians as personnel who maintain ARFF facilities, especially ARFF vehicles. In accordance with KP.002 of 2012 these personnel must have knowledge and skills in maintaining ARFF vehicles. The Palembang Aviation Education and Training Center organizes ARFF Vehicle Maintenance Training as part of its participation in the development of ARFF personnel at the airport. In addition to the personnel who serve as operators of flight accident rescue operations and firefighters, there are also technicians as personnel who maintain ARFF facilities, especially ARFF vehicles. In accordance with KP.002 of 2012 these personnel must have knowledge and skills in maintaining ARFF vehicles. The Palembang Aviation Education and Training Center organizes ARFF Vehicle Maintenance Training as part of its participation in the development of ARFF personnel at the airport. In addition to the personnel who serve as operators of flight accident rescue operations and firefighters, there are also technicians as personnel who maintain ARFF facilities, especially ARFF vehicles. In

accordance with KP.002 of 2012 these personnel must have knowledge and skills in maintaining ARFF vehicles. The Palembang Aviation Education and Training Center organizes ARFF Vehicle Maintenance Training as part of its participation in the development of ARFF personnel at the airport.

ARFF role

The role of the ARFF officer unit in KP 420 of 2011. It is stated that the role of the ARFF is to be responsible for operating and carrying out maintenance or maintenance of ARFF vehicles and handling emergencies at airports. There are also several top priorities for the ARFF unit including: Providing ARFF services to save lives and property and an aircraft that experiences an incident or accident at the airport. Prevent, rely on, extinguish fires, protect people and goods that are threatened by fire hazards at airport facilities.

Definition of Improvement

According to Adi (2016) Improvement is an increase derived from the word level. Which means layers or layers of something which then form an arrangement. Improvement is an attempt to make something better than before. An effort to achieve an increase usually requires good planning and execution. This planning and execution must be interconnected and not deviate from the stated goals. In general, improvement is an effort to increase the degree, level, and quality as well as quantity. Improvement can also mean adding skills and abilities to make it better. In addition, improvement also means achievement in process, size, nature, relationship and so on.

Aviation Security and Safety

According to the Law of the Republic of Indonesia No. 1 of 2009 concerning Aviation, it is stated that Aviation Security is a condition that provides protection to flights from unlawful acts through the integrated use of human resources, facilities and procedures. Security itself is a system of all that means something that makes us safe. Usually this term is used in connection with crime and all kinds of accidents. Security itself is something that is very important because it really maintains stability, for example national security which prevents high-level crimes such as terrorism, crackers or hackers and security for the national economy. While Aviation Safety According to the Law of the Republic of Indonesia No. 1 of 2009 concerning Aviation is, Aviation Safety is a condition of fulfilling safety requirements in the use of airspace, aircraft, airports, air transportation, flight navigation, as well as supporting facilities and other public facilities. According to PMHUB KM 8 2010 Aviation safety is the responsibility of all stakeholders in the field of aviation activities, encouragement to comply with and follow safety level standards must start from the highest level of management in each organization. Aviation safety is the key for aviation service providers to be able to contribute to meeting the interests of the state. The ICAO standard states that the top priority in aviation is the achievement of a safe system. Actions to realize aviation safety must be supported by facts,

Airport

An airport or often abbreviated as an airport is a facility where aircraft such as airplanes and helicopters can take off and land. According to Annex 14 of ICAO (International Civil Aviation Organization) Airport or airport is a certain area on land or water (including buildings, agencies and equipment) which is intended either in whole or in part for the arrival, departure and movement of aircraft. According to Law No. 1 of 2009 concerning Aviation Chapter I article 1 it is stated that an airport is an area on land and/or in waters with certain limits which is used as a place for aircraft to land and take off, take on and off passengers,

Adi Soemarmo Solo International Airport

Adi Soemarmo Airport is an international airport serving the city of Surakarta (Solo) 57108, Central Java operated PT (Persero) Angkasa Pura I. This airport serves flights Garuda, Sriwijaya Airlines, And Lion Airlinesfor round trip Jakarta-Solo flights, Indonesia Air Transportfor Solo-Pangkalanbun PP flights and connecting to Pontianak,Trigana Fluid Service for Solo-Banjarmasin PP flights and connecting to Balikpapan and Berau, Solo-PangkalanbunPP and connecting to Ketapang and Pontianak, Liquid Silkfor solo flights SingaporePP and Air Asia for Solo flightsKuala Lumpur, in addition to direct flights to Mecca or Jeddah, Saudi Arabia because Solo is the city of Hajj embarkation for the Central Java region and DIY Like other airports, Adisumarmo airport is located outside the city of Solo, to be preciseStupid, Boyolali.

Relevant Research

Table 1. Relevant Research

No	Name	Year	Research Title	Research Result
1.	Khodam Galih Sindu Permana & Raden Fatchul Hilal	2022	Performance Analysis of Aviation Accident Rescue Personnel and Firefighters (Pkp-Pk) to Overcome Fire Incidents at Adi Soemarmo Boyolali International Airport.	In carrying out their duties, PKP-PK personnel carry them out with full sincerity, responsibility, and in accordance with the applicable Standard Operational Procedures or SOPs. The efforts of PKP-PK personnel in preventing fire incidents at the airport are as follows: Conducting fire prevention and protection screening for other unit officers at the airport regarding the prevention and control of building fire hazards
2.	Mohamad Ca'nur Daud	2022	Analysis of Aviation Security and Safety Monitoring by the Aviation Security Unit at H. Hasan Aroeboesman Ende Airport.	It was concluded that the oversight of flight security and safety at H. Hasan Aroeboesman Ende Airport by the Aviation Security unit has carried out responsibility for the regularity and efficiency of flights in all areas of the airport by referring to standard operating procedures and national regulations. In supervising the Aviation Security Unit, it is also assisted by related units such as KKP, Bangland and Apron Movement Control so as to create a safe, comfortable and efficient flight situation.
3.	Hero Tama Sandi	2019	Analysis of Job Readiness and Career Development of Employees at the Aviation Accident Relief and Fire Fighting Unit (PKP-PK) at Yogyakarta Adisutjipto International Airport	Aviation Accident Relief Unit and Fire Extinguisher or abbreviated PKPPK located at the airport is a work unit that has the task of providing services to support Aviation Safety operations. In providing these services, the PKP-PK unit has the task of providing assistance for Aviation Accidents, especially aircraft accidents that occur on the ground. This study uses qualitative research, the data taken is standard documents from the PKP-PK office, the Aviation Law, data from interviews, and observation forms which will later be analyzed with the conditions that occur in the field. Research results from interviews, observation and documentation, It is known that the work readiness of PKP-PK employees at Yogyakarta Adisutjipto International Airport is in accordance with the standards that apply in the Aviation Law and even airports. PKP-PK Adisutjipto Airport as a reference for fire

				fighting from other agencies such as the TNI, POLRI, Basarnas and District level Fire Department in DIY

RESEARCH METHODS
Research Design

This study uses a descriptive qualitative approach. Qualitative research according to Moleong (2018) is research that intends to understand the phenomenon of what is experienced by participants such as behavior, perception, motivation, actions and others. So that in this study the data collected was qualitative data with qualitative data collection instruments. As according to Sugiyono (2019) qualitative research is research that is used to examine the condition of natural objects and the data obtained tends to be qualitative data with qualitative data analysis techniques. In addition, according to Cresswell (2014), a qualitative research approach is research that aims to explore or understand social problems. Qualitative research according to Hendryadi (2019) is a naturalistic inquiry process that seeks an in-depth understanding of natural social phenomena. Qualitative research emphasizes quality not quantity and the data collected does not come from questionnaires but comes from interviews, direct observation and other related official documents. Qualitative research is also more concerned with the process aspect than the results obtained. This is because the relationship between the parts being studied will be much clearer if observed in the process. Meanwhile, according to Moleong (2017) qualitative research is research that intends to understand phenomena about what is experienced by research subjects such as behavior, perceptions, motivation, actions and others holistically and by means of descriptions in the form of words and language, in a special natural context by utilizing various natural methods. Qualitative research according to Hendryadi, (2019) is a naturalistic inquiry process that seeks an in-depth understanding of natural social phenomena. Qualitative research emphasizes quality not quantity and the data collected does not come from questionnaires but comes from interviews, direct observation and other related official documents. Qualitative research is also more concerned with the process aspect than the results obtained. This is because the relationship between the parts being studied will be much clearer if observed in the process. in a special natural context by utilizing various natural methods. Qualitative research according to Hendryadi, (2019) is a naturalistic inquiry process that seeks an in-depth understanding of natural social phenomena. Qualitative research emphasizes quality not quantity and the data collected does not come from questionnaires but comes from interviews, direct observation and other related official documents. Qualitative research is also more concerned with the process aspect than the results obtained. This is because the relationship between the parts being studied will be much clearer if observed in the process. in a special natural context by utilizing various natural methods. Qualitative research according to Hendryadi, (2019) is a naturalistic inquiry process that seeks an in-depth understanding of natural social phenomena. Qualitative research emphasizes quality not quantity and the data collected does not come from questionnaires but comes from interviews, direct observation and other related official documents. Qualitative research is also more concerned with the process aspect than the results obtained. This is because the relationship between the parts being studied will be much clearer if observed in the process. Qualitative research emphasizes quality not quantity and the data collected does not come from questionnaires but comes from interviews, direct observation and other related official documents. Qualitative research is also more concerned with the process aspect than the results obtained. This is because the relationship between the parts being studied will be much clearer if observed in the process. Qualitative research

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Time and Place of Research

Research time is the time used by researchers to conduct research on objects that are the center of attention or research. This research was conducted for 2 (two) months, starting from January 1, 2023 to March 1, 2023. The research location is a place to obtain data that is in accordance with the problem being studied. The place for conducting this research is at Angkasa Pura I unit ARFF Adi Soemarmo Boyolali International Airport.

Research Objects and Subjects

The object of research is the problem to be studied. The object of research is an attribute of an object or activity that has certain variations that have been determined by the researcher to be studied after which conclusions are drawn. The object of this study is the role of the Aviation Accident Relief Unit and the Fire Fighting Unit. The subject is a subject that is often seen in a study. Humans, objects, or organizations whose circumstances will be studied are something that is inherent in or contains the object of research. With this the research subject in this study is the Aiport Rescue And Fire Fighting Unit at Adi Soemarmo Boyolali International Airport.

Method of collecting data

1. Observation Techniques. According to Sugiyono (2015) explaining observation is an activity of loading research on an object. The observation method is a data collection technique by making direct observations using observation sheets on research objects at Adi Soemarmo Boyolali Airport in order to get an overview in providing information. This observation stage is carried out in order to collect the required data materials, the observation is carried out by observing and recording the phenomena found in the object of observation. This method was used by researchers to obtain data regarding the performance of the ARFF unit and also to observe the level of flight security and safety at Adi Soemarmo Boyolali international airport.
2. Interview Techniques. According to Moleong (2017) states that an interview is a conversation with a specific purpose. The conversation is carried out by two parties, namely the interviewer who asks the question and the interviewee who gives the answer to the question. The purpose of conducting interviews, Moleong (2017), "among other things: constructing about people, events, organizations, feelings, motivations, demands, concerns and other rounds reconstructing such rounds as experienced in the past projecting rounds as expected to experienced in the future, verifying changing and expanding the information obtained from other people, both human and non-human (triangulation) and verifying, changing and expanding the constructs developed by researchers as checking members. In this study all interview questions were conducted in the division and the person was the Supervisor of the ARFF Unit. According to Sugiyono (2017) Interviews can be conducted in a structured, semi-structured and unstructured manner. The types of interviews that I used in this study are as follows: Semi-structured interviews According to Sugiyono (2017) is to find problems in a more open manner, where the parties invited to the interview are asked for their opinions and ideas. In conducting interviews, researchers need to listen carefully

and record what was stated by informants in this study, researchers as interviewers and ARFF unit officers who will be interviewed are 3 ARFF officers, namely 2 Supervisors and 1 Senior Basic. In this research,

3. Documentation Method. Data Collection with Documentation Sugiyono (2019) argues that documents are records of past events. Documents can be in the form of writing, pictures, or monumental works of a person. From this session, researchers searched for documentation data such as pictures and SOP documents from Adi Soemarmo Boyolali International Airport for further input into research conducted by researchers at Adi Soemarmo Boyolali International Airport. In this study the researcher collected some documentation from related units such as documentation, SOPs, and ARFF monthly reports.

RESEARCH RESULTS AND DISCUSSION
Efforts to increase the security and safety of the ARFF unit at Adi Soemarmo Boyolali International Airport

Security is a system of all that means something that makes us safe. Usually this term is used in connection with crime and all kinds of accidents. Security itself is something that is very important because it really maintains stability, for example national security which prevents high-level crimes such as terrorism, crackers or hackers and security for the national economy. While Aviation Safety According to the Law of the Republic of Indonesia No. 1 of 2009 concerning Aviation is, Aviation Safety is a condition of fulfilling safety requirements in the use of airspace, aircraft, airports, air transportation, flight navigation, as well as supporting facilities and other public facilities . Aviation safety and security at Adi Soemarmo Boyolali International Airport is one of the responsibilities of the ARFF Unit's work at the airport. The operation of the ARFF Unit greatly influences the status of aviation safety and security at the airport because the ARFF Unit is required to be responsible and always on standby for all incidents and incidents that will occur. In minimizing the accident rate at an airport, the ARFF Unit carries out several routine activities every day as below: The operation of the ARFF Unit greatly influences the status of aviation safety and security at the airport because the ARFF Unit is required to be responsible and always on standby for all incidents and incidents that will occur. In minimizing the accident rate at an airport, the ARFF Unit carries out several routine activities every day as below: The operation of the ARFF Unit greatly influences the status of aviation safety and security at the airport because the ARFF Unit is required to be responsible and always on standby for all incidents and incidents that will occur. In minimizing the accident rate at an airport, the ARFF Unit carries out several routine activities every day as below:

1. Carry out routine work programs that have been prepared for all activities that must be carried out by the ARFF Unit within 1 year. Then this work program apart from having been planned and approved for its preparation at the beginning of each year, its implementation is also monitored to ensure that each program listed in it is implemented properly. Monitoring is one of the efforts made by ARFF to ensure that all activities are carried out according to the existing plan.
2. *Fire Building Exercise* namely fire fighting training to prevent handling if there is a fire incident at the airport. So once every 1 (one) month the ARFF Unit conducts this exercise at the terminal or at the administration building.
3. Physical training is carried out approximately 4 (four) times a week and this exercise aims to make ARFF personnel always physically, mentally and experientially ready. Previously there were constraints or restrictions so that physical training was carried out only once every 2 (two) weeks. This is what causes activities and training to be limited.

ARFF unit constraints and solutions in dealing with increasing flight security and safety

Obstacle is a condition where symptoms or obstacles and difficulties become obstacles to achieving a desire. Obstacles often occur in the world of aviation, ranging from technical problems to non-technical problems. Some of the obstacles that often occur in the world of aviation (airports) are from fires to airplane accidents. A certain obstacle can occur in dealing with all things, especially in the world of aviation or going to the airport. An obstacle that can interfere with aviation safety and security that is currently occurring within the scope of the ARFF Unit at Adi Soemarmo Boyolali International Airport is the finding of FOD where the presence of this FOD if left unchecked can result in an accident or incident for an aircraft.

1. Lack of understanding of the local community. There was smoke from burning straw by local residents in the Runway area. Of course this action has a very bad impact on aviation safety and security because the smoke produced from burning haystacks can interfere with the visibility or line of sight of aircraft pilots who will carry out flights or landings. The solution to this problem is that ARFF Unit officers carry out coaching or are given an appeal so that people don't do it again.

2. FOD is a problem for airplanes. During the operation of activities or activities at the airport, of course, it is very necessary that the surrounding conditions in the runway area must be neutral and there are no objects scattered in the runway area. The solution to this problem is that ARFF Unit officers check the runway every morning which aims to minimize aircraft accidents and prevent incidents at the airport. Related to problems at an airport, the ARFF Unit has compiled and designed all solutions that can be applied to problems that have occurred, or have not yet occurred. The solutions carried out by the ARFF Unit at Adi Soemarmo Boyolali International Airport to deal with obstacles that have occurred and have not occurred are as follows:

   a. Solution to Obstacles that have already occurred. Adi Soemarmo Boyolali Airport ARFF Unitcarry out a post-event evaluation process, the aim is to increase the level of handling in an incident which can then be applied to make it more optimal. So the conclusion is always to add socialization calls to the surrounding community or an appeal to make the words "no entry", they are also more alert to patrol every day and also service action from the previous obstacles to face the next obstacles.

   b. Anticipation of Obstacles that have not yet occurred.The anticipation process is an activity to predict potential hazards and risks in the workplace that come from all factors. Anticipatory efforts implemented by the ARFF Unit at Adi Soemarmo Boyolali International Airport to deal with several threats of aircraft incidents or accidents. The problem that is currently happening at the ARFF Unit at Adi Soemarmo Boyolali International Airport is the finding of FOD in the Airside area. The solution carried out by the ARFF Unit is to carry out routine work programs, controlling in the perimeter, provide socialization training in which this activity is always implementing the runway safety campaign socialization method in which this activity is aimed at ensuring the Runway is free from FOD (foreign matter) and this activity is carried out routinely every day before flight hours and carrying out the cleaning process area by ARFF personnel. This program aims to reduce the number of potential aircraft accidents during takeoff and landing as follows:

   1) Regularly carry out physical training. This activity aims to maintain the stamina and performance of ARFF personnel in order to stay awake in any situation and be ready to handle flight accident incidents. This activity is routinely carried out 4 (four) times a week.

2) Fire building exercise training. ARFF is a unit at an airport whose job is to carry out fire fighting rescue. As fire-fighting unit personnel, the ARFF Unit is always equipped with the science of extinguishing and taming fires such as the fire boarding exercise training program where this activity is carried out on a schedule with the aim of proficient all PKP-PK personnel in overcoming problems related to fire fighting.

CONCLUSION

Based on the results of the discussion of some of the descriptions above regarding the Operations of the Airport Rescue And Fire Fighting Unit in Efforts to Improve Aviation Security and Safety at Adi Soemarmo Boyolali International Airport, the results obtained are in the form of several conclusions as follows: Efforts to increase flight security and safety at Adi Soemarmo Boyolali Airport have been included in the good category, where several efforts made by the ARFF Unit succeeded in minimizing the number of incidents and incidents at Adi Soemarmo Boyolali International Airport. The minimal number of flight accidents is a form of effort from the ARFF Unit which always carries out the anticipatory process and is alert in carrying out tasks every day. Obstacles and Solutions for the ARFF unit in dealing with increasing flight security and safety at Adi Soemarmo Boyolali International Airport is already very good and has the potential for a will not fail status because the efforts made are not only for the obstacles that are being faced but for obstacles that have not yet occurred or will happened later. The process of anticipating this effort is carried out not only in context (discourse), but has entered into an obligation, which means that all anticipatory efforts have been scheduled in the work program and become the main function of the ARFF Unit. The conclusion from these obstacles and efforts is that there are obstacles in aviation safety and security and the ARFF Unit already has efforts to resolve and anticipate efforts so that they do not recur in the future.

Based on the description of the conclusions above, there are several suggestions aimed at avoiding incidents and incidents related to aviation safety and security at Adi Soemarmo Boyolali International Airport. This suggestion arises as a result of a problem and this suggestion is good and constructive. The suggestions in this study are as follows: Suggestions for Adi Soemarmo Boyolali International Airport, There are several research suggestions for Adi Soemarmo Boyolali International Airport as follows: The need for further action to address the constraints of straw burning which is often carried out by local residents beside the Runway area . There needs to be restrictions on land, especially the Airside area so that it is not easily accessible by residents because it is a Danger area. The Runway Safety Campaign needs to be increased 2-3 times a day with the aim of the Runway being in the category of more clean and safety. The fire fighting training process needs to be carried out more frequently in one year/month so that personnel are more prepared and alert in dealing with real incidents. In handling flight safety and security in the future, it is expected to be more alert. Suggestions for further research. For further research, it is hoped that this research can be used as a reference and reference related to the Role of the PKP-PK Unit in Efforts to Improve Aviation Security and Safety at Adi Soemarmo Boyolali International Airport. The fire fighting training process needs to be carried out more frequently in one year/month so that personnel are more prepared and alert in dealing with real incidents. In handling flight safety and security in the future, it is expected to be more alert. Suggestions for further research. For further research, it is hoped that this research can be used as a reference and reference related to the Role of the PKP-PK Unit in Efforts to Improve Aviation Security and Safety at Adi Soemarmo Boyolali International Airport. The fire fighting training process needs to be carried out more frequently in one year/month so that personnel are more prepared and alert in dealing with real incidents. In handling flight safety and security in the future, it is expected to be more alert. Suggestions for

further research. For further research, it is hoped that this research can be used as a reference and reference related to the Role of the PKP-PK Unit in Efforts to Improve Aviation Security and Safety at Adi Soemarmo Boyolali International Airport.

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