



STUDY ON THE UPDATED DETECTION SYSTEM OF BENGALURU INTERNATIONAL AIRPORT

**Prasanna V. Raju, Research Scholar, Dept. of Management, Shri
Venkateshwara University**

**Dr. S K Bhogal, Professor, Dept. of Management, Shri Venkateshwara
University**

ABSTRACT

This study is done on the basic outcome of the precautionary methods used for the protection of the airport of Bengaluru and passengers. The secure functioning of a country's aviation sector, as well as the use of the world's airspace by the country, foreign partners, and legal commercial interests, are crucial to the country's security and economic growth. A lack of security, on the other hand, could threaten the aircraft's or passengers' safety. Aviation has historically been targeted and exploited by terrorists, criminals, and hostile nation-states. These attacks, which are becoming more regular around the world, have changed governments' attitudes on how to safeguard and defend their populations, borders, and key assets, as well as the need of taking prompt action to limit the chance and impact of future attacks. The basic objective of this study is to gauge the security and detection methods used in the airport.

KEYWORDS: *Safety, Methods, Aviation, Protection, Detection.*

INTRODUCTION

The safe operation of a country's aviation system, as well as the country's, international partners', and legitimate commercial interests' use of the world's airspace, are critical to the country's security and economic prosperity. However, a lack of security could jeopardize the aircraft's or passengers' safety. Terrorists, criminals, and hostile nation-states have long targeted and exploited aviation. These types of attacks, which are becoming more common around the world, have significantly altered countries' perspectives on how to secure and protect their populations, borders, and critical assets; they have also highlighted the



importance of taking immediate action to reduce the likelihood and impact of future attacks. Successful airport attacks can result in mass casualties and severe economic damage, as well as a great deal of public attention due to the impact on the modern transportation system.

As a result, threats to airports are getting more likely, and their consequences are becoming more severe. Terrorists (both international and domestic), activists, pressure organizations, single-issue zealots, rebels, disgruntled employees, or criminals, whether white collar, cyber hackers, organized or opportunists, are among the new unusual opponents facing airport security forces. Car suicide bombing, man-portable air-defense systems (MANPADS), improvised explosive devices (IED), ambushes, hijacking, kidnapping or hostage taking, attack with armed hands, hacking, and information warfare are among the methods used by these adversaries.

An important airport in India was constructed in just thirty-three months after being put on hold for more than a decade. With the installation of Siemens-supplied airport-specific equipment, in addition to safety and security technologies and electrical distribution, the project was completed on schedule, a feat made possible by the company's commitment to excellence.

In July 2005, work began on the construction of Bengaluru International Airport, which is located around 35 kilometers north of Bangalore's city centre, just along National Highway 7, also known as the Bangalore-Hyderabad Highway. Additionally, flights commenced on May 23, 2008 at approximately 12:01 am, when a Jet Airways flight from Mumbai touched down on what was formerly known as a red-clay wasteland consisting mostly of sand and boulders. Within minutes, an Indian Airlines aircraft to Singapore became the first plane to take off from Bengaluru International, and the airport handled an amazing three hundred and forty-one flights in its first twenty-four hours of operation.

More over 9 million people pass through the airport on a yearly basis, with approximately 27 aircraft movements each hour. It is capable of handle 720 aircraft operations per day and 11.5 million people in a year when operating at maximum capacity, according to the airport.



With the procurement and installation of all of the technical systems for the vast, ongoing project, Siemens was a major contributor to the resounding technological success of Bengaluru (also known as 'Bangalore') International Airport.

"An international airport was desperately needed in a city like Bangalore, which is the technical capital of India and the "Silicon Valley" of Asia," said V. P. Baligar, Principal Secretary of the Indian Government for Infrastructure Development. We were looking for a company that could provide more than just technical installation services. We were looking for a trustworthy companion with whom we might build a long-term connection. I was looking for someone who could provide financial security, technical know-how, and, most importantly, timely completion."

Today, this prominent airport serves fifteen major international airlines and ten domestic airlines, with an average of more than four hundred aircraft movements each day at present time.

Improvements have been made in its experimental capacity in the field of aviation security and explosives recognition. It is planned to build a large-scale testing centre that will allow the European Commission to evaluate aviation security recognition breakthroughs in-house and independently (for example security scanners, X-ray image scanners, cargo scanners and explosives recognition frameworks).

India, the world's second largest economy, is a stunning blend of traditional and modern culture. It has the world's second-fastest-growing economy and the world's densest democracy. India is a melting pot of many different religions, with over 400 different languages spoken across the country. There are seven association territories and twenty-eight states in India.

Air travel is likely to grow dramatically in the future decades. It has a good safety record, as may be seen from relative safety norms. However, public safety awareness focuses on absolute rather than relative safety records. As a result, new air transport safety targets have been developed.



Aviation protection is a combination of human and material resources used to protect civil aviation from criminal involvement. Terrorism, sabotage, threats to life and property, false threats, explosions, and other forms of unlawful intervention may be considered.

Following the hijacking of a plane in Kandahar in 1999, India increased airport security. The Central Industrial Security Force, a paramilitary organization, is in charge of airport security under the Bureau of Civil Aviation Security (Ministry of Civil Aviation) legislative framework. The CISF established an Airport Protection Organization to secure Indian airports.

Terrorist threats and drug trafficking are the main concerns at Indian airports. Another challenge that some airports encounter is the proliferation of slums near airports in locations like Mumbai. Before boarding, additional hand luggage scans are expected. In addition, the CISF has a number of other responsibilities in terms of aviation security.

The use of statistical data to explain the causes of injuries is a viable option. Although most accidents are the result of various causes and conditions, causal link research has revealed that there are just a few primary components that cause accidents.

It's no coincidence that safety has been top-of-mind throughout history when it comes to our air transportation system's safety and security. Although most people are aware that aviation is safe, those who do not work in the industry are rarely aware of the extraordinary lengths to which airport managers, airlines, pilots, aircraft suppliers, air traffic control organizations, and service providers go to maintain this good record and strive for change.

According to its website, the Central Industrial Security Force (CISF) was founded in 1969 to provide security for "Public Service Undertakings (PSUs)," but has since evolved into "the country's premier multi-skilled security agency, mandated to provide security for the country's major critical infrastructure facilities in various areas" (India N.D.B).



OBJECTIVES OF THE STUDY

The major objectives of this study are illustrated below:

1. To know about the level of security at the airport in BIAL.
2. To determine the updated security measures in place at airports and airlines.
3. To investigate the notion of aviation security.

RESEARCH METHODOLOGY

The method of this research work is descriptive and analytical. The researcher has tried to put every single thing in this research work to assess the level of security in the airport. The potential for conflicting agendas between airport management and security authorities is a major issue with airport security breaches. The goal of airport management is to keep operational throughput as high as possible while causing the least amount of disruption. Security authorities, on the other hand, are concerned about the passengers' safety as well as the infrastructure itself. Meeting the needs of both stakeholders is the problem.

Research Design

The research conducted for this study was related, but not novel. Alternatively, numerous parts of previous scholarly research exist in respect to the role of security in Airport and Aviation Management, specifically for India, but also for other major countries throughout the world. As a result, the planned study appeared to be yet another study on a topical academic topic. The design of this research revolves around the questionnaires that have taken place.

Sample Size

There is total 101 sample size of the study who had participated in this study. The totals of 101 are of the airlines staff who had actively participated in this study. The data analyzed on the basis of this survey questionnaires.



DATA COLLECTION AND ANALYSIS

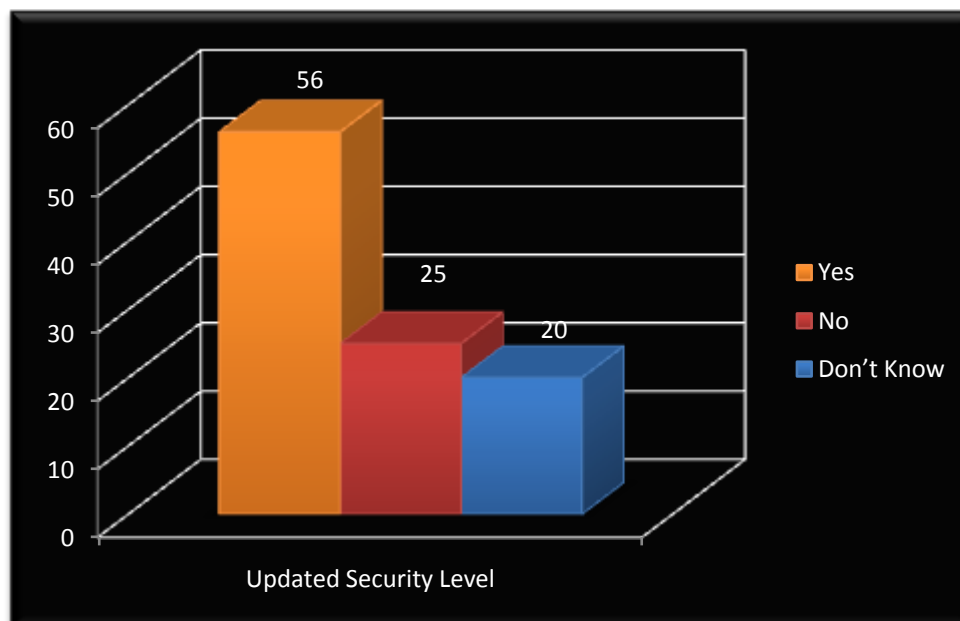
The data collected for this study is exploratory in nature and is focused primarily on primary data. The exploratory testing approach was used in this analysis. Exploratory research is described as research conducted to learn more about a problem that isn't well defined. It is carried out in order to gain a clearer understanding of the current problem, but the findings will not be definitive.

ANALYSIS OF THE DATA

The data of this study is analyzed on the basis of the questionnaires.

Q1. Do you think that security level of airport is updated?

	Updated Security Level			
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	56	55.44	55	55
No	25	24.75	25	80
Don't Know	20	19.80	20	100
Total	101	100	100	



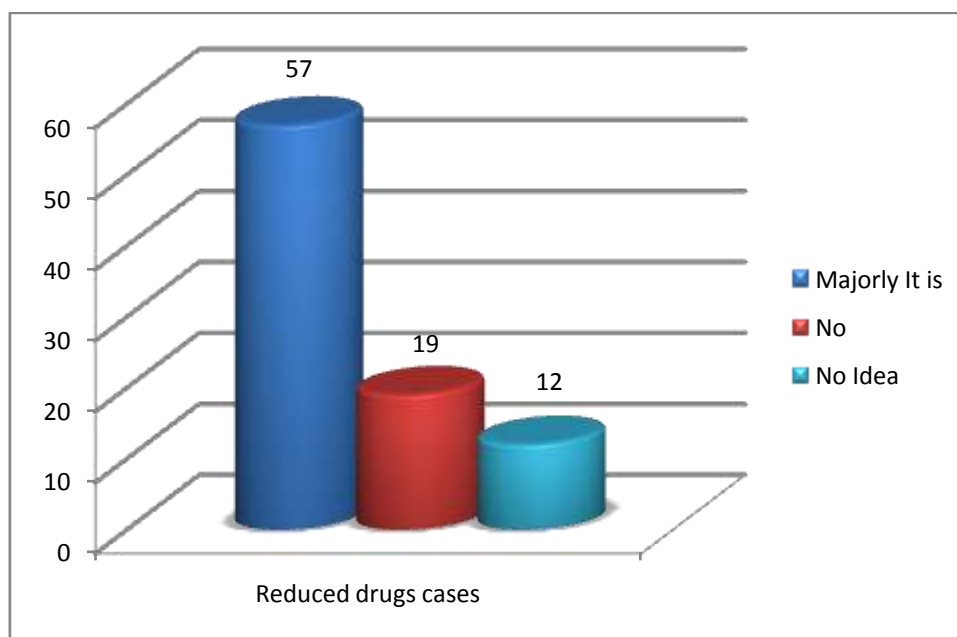


INTERPRETATION

For the very first question asked to the respondents about their opinion on the updated level of security. Out of 101 respondents 55% of the respondents voted yes on the question, 25% of the respondents argued “no” and the rest 20% of the respondents had no idea about that. Conclusion came out after this question is that majority of the respondents argued that the security of airport is updated while there is somehow some need of updating in the security level.

Q2. Do you think that drug smuggling cases reduced in the airport?

	Reduced drugs cases			
	Frequency	Percent	Valid Percent	Cumulative Percent
Majorly It is	57	56.43	56	56
No	27	26.77	27	83
No Idea	17	16.87	17	100
Total	101	100	100	



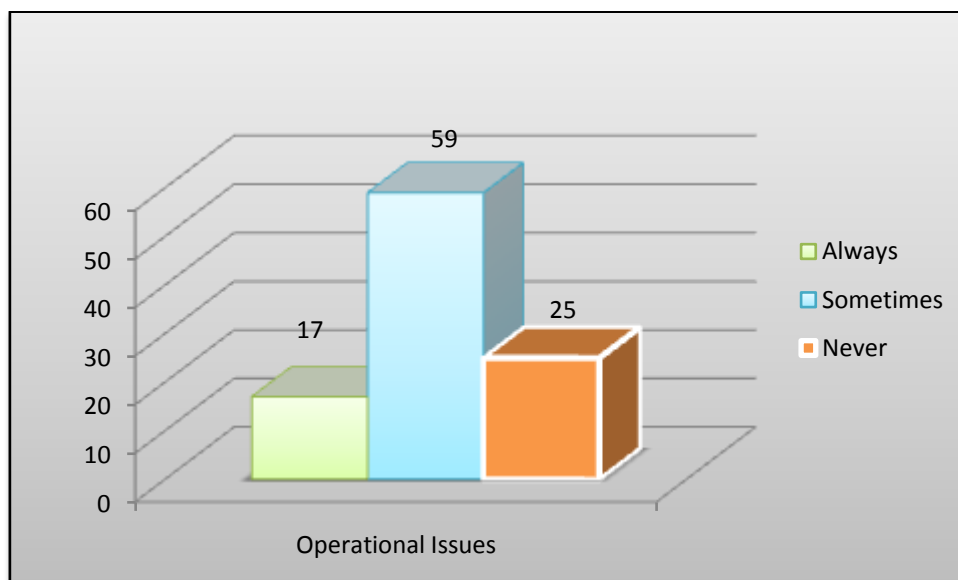


INTERPRETATION

From the above table and graph it is quite clearly visible that the majority of the respondents argued that there is reduced number of drugs and smuggling cases in the airport of Bengaluru. From the table it is quite very clear that 56% of the respondents said that due to the inauguration of the updated safety rules the newer cases of drugs smuggling is reduced, while 27% of the respondents disagree on this question while the remaining 17% kept quiet and said nothing about this question on the incoming of the drugs in the airport.

Q 3 Do you experience any issues in operational management?

	Operational Issues			
	Frequency	Percent	Valid Percent	Cumulative Percent
Always	17	16.83	16.83	17
Sometimes	59	58.41	58.41	75
Never	25	24.75	24.76	100
Total	101	100	100	



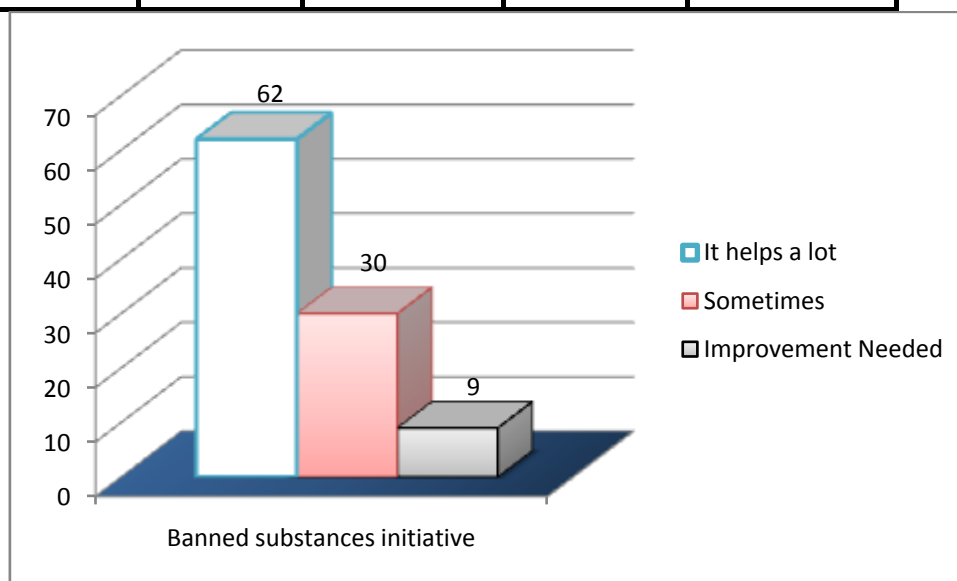


INTERPRETATION

Respondents are being asked about their experience of working while working for the airport and on the aspect of the security scenario. The result that came out is that 16.83% of the respondents from the BIAL have always faced issues regarding the security and the operational issues. The challenges range from different aspects that affect the level of operation. While, 58.41% of the respondents sometimes faces this sort of problem and the remaining 24.76% of the respondents never face this sort of an issue while working for the BIAL.

Q4. What do you think about the initiative of the airport staff on the banned substances?

	Banned substances initiative			
	Frequency	Percent	Valid Percent	Cumulative Percent
It helps a lot	62	61.38	61.39	61
Sometimes	30	29.70	29.7	91
Improvement needed	9	8.91	8.91	100
Total	101	100	100	





INTERPRETATION

Respondents are being asked about the initiative taken by the airport staff on the banned substances. The majority of the respondents stated that this initiative helps a lot the airline staff and passengers out there and out of 101 passengers 61% of the passengers voted yes, while, 30% of the passengers stated this initiative is sometimes not useful as the ones who carry these sort of substances find something or somewhere for the entrance of these banned substances on the airport. On the other hand 9% of the respondents stated this initiative need some improvement.

CONCLUSION

Kempegowda Airport is the busiest airport in Bengaluru. So, safety and security should also be on the hike. The results of the study after the successful questionnaire of the airport staff stated that the airport has done really good work on the detection and security system within Kempegowda International Airport. The conclusion came out is that the security status is updated and also the security level is good enough to ban the substances within airport but still somewhere only need some updates and hopefully it will be done in the near future.

REFERENCES

- Luria, Gil, Gal, Iddo & Yagil, Dana. (2018). Employees' Willingness to Report Service Complaints. *Journal of Service Research*, 12 (2), (November), 156-174.
- Kim, Taegoo (Terry), Kim Woo Gon & Kim Hong-Bumm. (2018). The effects of perceived justice on recovery satisfaction, trust, word of mouth and revisit intention in upscale hotels. *Tourism Management*, 30 (1), February, 51-62
- Weng, Hua-Hung (Robin). (2018). *Service Recovery: Trend, Path model and Cultural Comparison*. A Dissertation presented to the Graduate School of Clemson University in partial fulfilment of the requirements for the degree of Doctor of Philosophy, August.
- Yu-Kai Huang (2018), "The Effect of Airline Service Quality on Passengers' Behavioural Intentions Using SERVQUAL Scores. A TAIWAN Case Study",



Journal of the Eastern Asia Society for Transportation Studies, Vol.8, pp.2301-2314

- [CleanMax Solar to power Chennai Metro – Times of India". *The Times of India*. Archived from the original on 27 September 2017.](#)
- Adler N., Gellman A. (2012). Strategies for aviation in a new era of risk. Journal of Air Transport Management, forthcoming.
- <https://www.logisticsmiddleeast.com/logistics/article-4523-case-study-bengaluru-international-airport>
- <https://sid.siemens.com/v/u/A6V10374157>
- <https://www.deccanherald.com/city/top-bengaluru-stories/76-men-15-students-kia-passengers-in-2018-19-study-772721.html>
- <https://twu-ir.tdl.org/bitstream/handle/11274/10997/TRAN-THESIS-2018.pdf?sequence=1&isAllowed=y>
- <https://economictimes.indiatimes.com/topic/Kempegowda-International-Airport>
- <https://economictimes.indiatimes.com/topic/Kempegowda-International-Airport>