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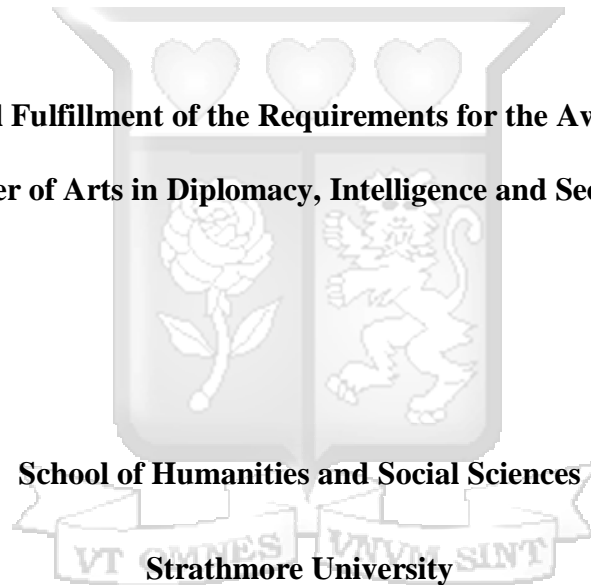
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**MULTI-AGENCY COOPERATION IN COMBATING TERRORISM IN THE
AVIATION INDUSTRY IN KENYA**

EDNA NYATICHI OMWENO

**Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of
Master of Arts in Diplomacy, Intelligence and Security.**



Nairobi, Kenya.

MARCH, 2020

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Signature..... Date.....

EDNA NYATICHI OMWENO

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SUPERVISOR’S APPROVAL

This research project has been submitted by EDNA NYATICHI OMWENO for presentation with my approval as the university supervisor.

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ACKNOWLEDGEMENT

I am thankful to God for giving me good health and strength to complete my coursework and to finish this dissertation. Special thanks to my supervisor Dr. Ochien'g Kamudhayi for his intellectual support and for the significant role he played in guiding me throughout my research work.



DEDICATION

This research dissertation is dedicated to my children Leonard, Sonya and Lillianne for your understanding and constant prayers for me, during the study period. Special dedication goes to my husband Noah. Without your constant love and support, completing this journey would have been impossible.



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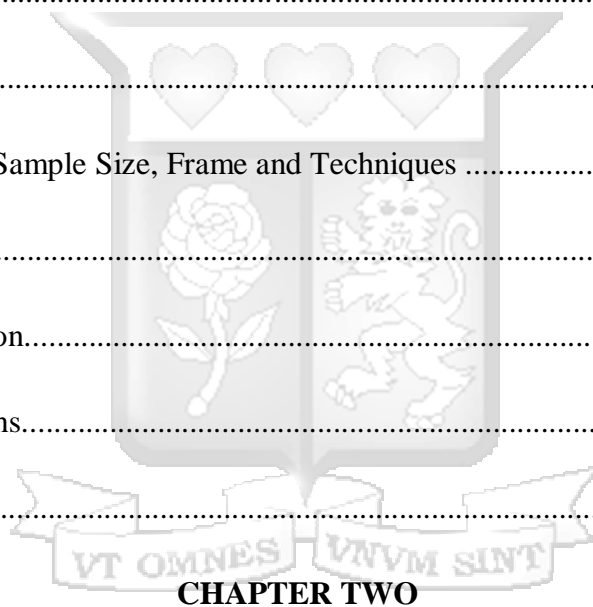
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LIST OF ABBREVIATIONS AND ACRONYMS

ANO	Abu Nidal Organization
AU	African Union
AVSEC	Aviation Security Program
BCOCC	Border Control and Operations Coordination Committee
BMA	Border Management Agency
BMC	Border Management Committee
BOAC	British Overseas Airways Cooperation
CISC	Criminal Intelligence Service Canada
DHS	Department of Homeland Security
EAAC	East African Airways Corporation
EAC	East African Community
EAC CASSOA	East Africa Community Civil Aviation Safety and Security Oversight Agency
ECAC	European Civil Aviation Conference
FAA	Federal Aviation Administration
GTD	Global Terrorism Database
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IS	Islamic State
JOCs	Joint Operation Centres
KAA	Kenya Airports Authority
KCAA	Kenya Civil Aviation Authority
KQ	Kenya Airways
LAS	League of Arab States
MAC	Multi-Agency Cooperation
MO	Modus Operandi
MTPs	Medium-Term Development Plans
OAS	Organization of American States
PFLP	Popular Front for the Liberation of Palestine
PISCES	Personal Identification Secure Comparison and Evaluation System
SARPS	Standards And Recommended Practices
U S	United States
UK	United Kingdom
UN	United Nations
UNSC	United Nations Security Council
USA	United States of America
USAP	Universal Security Audit Program
USOAP	Universal Safety Oversight Audit Program

ABSTRACT

Terrorists' acts against the civil aviation industry have remained sustained over a period of time. The devastating effects of a successful attack transcend the jurisdictions of many states, threatening their national and human security. The transnational nature of these attacks has led to states cooperating under the auspices of the International Civil Aviation Organization (ICAO) to come up with standard measures to address the same. The devastating effects of the 9/11 attacks led to a review of the existing legal and regulatory responses which were found to be largely reactionary and ineffective. A new thinking was introduced which embraced responses that were proactive in nature and that encouraged a multi-layered security structure. Being a signatory to ICAO, Kenya has not only domesticated the new thinking but also operationalized it by establishing the Border Coordination and Operations Control Committee (BCOCC) - a multi-agency working framework. This study sought to empirically examine Multi-Agency Cooperation (MAC) and its implications on aviation security in Kenya. It attempted to answer the question whether the adoption of multi-agency cooperation as an approach to security in Kenya's aviation industry had enhanced aviation security in light of terrorist threats. The specific objectives were; to examine the evolution of the aviation industry and the terror threat within it; to analyze the evolution of the responses adopted to combat terrorism in the industry and to examine how the multi-agency cooperation strategy is functioning to enhance and facilitate effective counter terrorism strategies in Kenya's aviation industry. Similarly, the study sought to establish the relationship between international aviation security law and domestic aviation security. It employed a descriptive case study methodology and largely used qualitative data supplemented by quantitative data collected from multiple sources namely; questionnaires, interviews, document reviews and observation methods. The study established that the improvement of the international civil aviation security program has consequently led to the improvement of Kenya's aviation security system in combating terrorism. However, whereas the multi-agency adopted from the international system by the aviation security has played a significant role in enhancing and facilitating counterterrorism strategies; it faces legal and structural challenges that need to be addressed in order to strengthen it further.



CHAPTER ONE

MULTI-AGENCY COOPERATION AND SECURITY

1.1 Introduction

This chapter introduces the topic by giving an introduction and background to the research study. Whereas the introduction defines the purpose of the study, the background provides a context to the research study. The chapter also captures the statement of the research problem and clearly outlines the problem that this study addresses. It equally raises the research questions, which help to focus the research study. The objectives indicated how the study was going to answer the research questions raised. The chapter further presented the justification of the study, which clearly explained why the research was being conducted. The literature review helped in identifying the research gap to be filled and located the research in the context of other works done earlier. The conceptual framework helped to identify variables of the study and explained the relationship between them. Lastly, the methodology explained the techniques used to obtain and analyze data that answered the research question.

Attempts to combat terrorism have conventionally been characterize by unilateral activities of law enforcement agencies within their specific mandates. Recent research efforts have indicated a near universal consensus on the weaknesses of this approach, compared to the significance of building on multi-agency cooperation, especially in countering terrorism owing to its multi-faceted nature.¹ After the 9/11 terrorist attack in the U.S, the complexities associated with securing national borders and entry points have become matters of urgency in a states' national security discourse. In response, a number of states have been compelled to revise their approaches

¹ Schneider, Stephen, and Christine Hurst. "Obstacles to an Integrated, Joint Forces Approach to Organized Crime Enforcement: A Canadian Case Study." *Policing: An International Journal of Police Strategies & Management* 31, no. 3 (2008): 359-379 p.360

to national security owing to the evolving and non-predictive nature of terrorism threat. States are consistently moving from using reactive and adopting proactive approaches in their effort to effectively address security threats within their territories. One of the proactive approaches is the joint working approach that involves various security agencies in a multidisciplinary mode.

The global trends in the application of a joint working approach commonly known as multi-agency cooperation (MAC) indicates that the United States remains in the forefront in transforming this model to address national security threats. It initiated the Department of Homeland Security (DHS), a move that involved movement of more than 22 agencies from their original departmental location to establish a new cabinet level Department of Homeland Security with the mandate of securing the U.S. homeland. Today, a number of federal agencies are working together in a spectrum of security-oriented activities both domestically and overseas.² Comparably, changes have been evident in Australia where in 2008, the government came up with a new national security concept embracing a Whole-of-Government approach. This replaced the traditional Department of Defence-centric system.³ Australia's border and entry ports for instance are today manned by a multi-agency border protection command task force under the Australian Customs and Border Protection Service.⁴

Whereas the above approaches perceive MAC as a long-term approach, the Canadian approach to MAC is slightly different. It calls for an ever-increasing number of joint forces operations both in the short-term and long-term periods. An example is of a MAC in Canada's security structure is the Criminal Intelligence Service Canada (CISC) created in 1970. It facilitates

² Koenig, Kristi L. "Homeland Security and Public Health: Role of the Department of Veterans Affairs, the US Department of Homeland Security, and Implications for the Public Health Community." *Prehospital and disaster medicine* 18, no. 4 (2003): 327-333. p.330

³Waddell, Aaron Phillip. "Cooperation and Integration among Australia's National Security Community." *Studies in Intelligence* 59, no. 3 (2015): 25-34. p.26

⁴Customs, Australian. "Border Protection Service. Annual Report 2013–14. Canberra: ACBPS, 2014." (2016): 16.

the exchange of information on organized crime among all Canadian law enforcement agencies.⁵ The member agencies that make up the CISC collaborate in the collection, collation, evaluation, analysis, and dissemination of criminal intelligence by contributing to the Automated Criminal Intelligence Information System.⁶

Despite the different approaches in the formation of the MACs in the security sectors of the countries discussed above, what remains constant is the concerted effort towards cooperation in the execution and delivery of security services. The USA demonstrates that cooperation in state security matters should not just be at the domestic level but should also consider cooperation at the international level. The Canadian approach on the other hand stresses the fact that multi-agency cooperation needs to look at as both short-term and long-term formations depending on the security aspect that is being addressed.

Outside the Northern Hemisphere, especially in Africa, significant steps have been undertaken in the direction of using the MAC approach to security. In the case of South Africa for instance, multiple government agencies harness their resources in border control and management. Key among these agencies are, immigration, customs, intelligence services, the police, agriculture, health, trade and industry, home affair and transport. Consequently, the South African government established a joint Border Management Agency that has since taken control of the country's ports of entry and exit and borderline functions.⁷ This was informed by the government's realization that the primary obstacle to effective security was lack of coordination and cooperation among the various government departments responsible for border control.⁸

⁵Ibid

⁶ Schneider, Stephen, and Christine Hurst. "Obstacles to an Integrated, Joint Forces Approach to Organized Crime Enforcement: A Canadian Case Study." *Journal of Police Strategies & Management* 31, no. 3 (2008): 359-379. p. 361

⁷ *Department of Home Affairs*. Republic of South Africa. Border Management Agency (BMA). Project Overview October 2015. p.16

⁸ Steinberg, Jonny. "An Overview of South African Border Control: 1994-2004," *Institute for Security Studies Papers* 2005, no. 103 (2005): p. 1

In West Africa, Nigeria's Constitution provides for a functional and productive inter-agency relationship among security, law enforcement and intelligence agencies coordinated by the country's National Security Council. The inter-agency relationship brings together various security agencies to deal with national security challenges with each agency having specific operation responsibilities.⁹ Other than ensuring authenticity of multi-agency cooperation, anchoring multi-agency formation on the country's supreme law ensures that the conduct of the various agencies involved is well directed, supported and resourced by the state. It also ensures equality and fair treatment of partner agencies to avoid supremacy wars which curtail effective security service delivery.

In the last decade, Kenya's security architecture has also changed through the manifestation of efforts towards a MAC approach to security threats. To counter terrorism for instance, the government has secured and attracted the assistance of regional and international organizations at both bilateral and multilateral levels through cooperation partnerships. In April 2018, Kenya entered a partnership with the U.S to deploy automated systems that facilitate sharing in advance passenger information through the use of Personal Identification Secure Comparison and Evaluation System (PISCES). At the same time, multiagency Joint Operation Centres (JOCs) were launched at specified entry points including airports to encourage sharing of information and maintenance of partnerships with stakeholders.¹⁰ These steps have aligned Kenya's approach to MAC in aviation security.

Domestically, the importance of cooperation among various security agencies manning Kenya's ports of entry/exit cannot be overemphasized. The government realized that the initial

⁹Oladimeji et al., "Nigeria Custom Service Inter-Agency Cooperation and National Security." *International Journal of Advanced Research* (2018) Vol 6, No 12 p. 1187

¹⁰ United States Department of State. *Country Reports on Terrorism 2017–Kenya*. Retrieved from <https://www.refworld.org/docid/5bcf1f9c11.html>

fragmented approach in which each agency only focused on their specific mandate did not holistically and effectively address threats such as terrorism that mostly emanate from across its borders. Consequently, it adopted a MAC approach that involves joint working among all its security-oriented agencies deployed at its ports of entry/exit. This initiative was institutionalized through the 2014 Security Laws (Amendment) Act which established the Border Control and Operations Coordination Committee (BCOCC) with a legal mandate of enhancing efficient and effective security of all ports of entry/exit through a coordinated approach.¹¹ The move was prompted by the prevailing uncertain security environment that was marked by increased radicalization and the evolving nature of terrorism activities in the country.

In recent decades, there has been a renewed interest from global terror groups in attacking ‘soft’ targets such as aircrafts and airports.¹² Globally, the aviation industry becomes a key target for attacks owing to its vulnerability and the massive losses that even semi-successful attacks can engender.¹³ Kenya’s aviation industry is not an exception in this case. In 2002 for instance, the country’s major airports were put on high alert following an incident in which missiles were fired at an aircraft carrying 261 passengers and 10 crew members after taking off from Moi International Airport, Mombasa. Were it to be successful, the event would have resulted into massive fatalities and huge economic losses besides the psychological and political pressure associated with such events. Coupled with the Lamu military airstrip attack by the Al Shabaab terrorists in the recent past, the country has witnessed an increase in the number of advisories by the U.S government

¹¹ Kenya Citizenship and Immigration Act No.12 of 2011 (Rev. 2016)

¹² Tidhar, R., “Being Naive is Not an Option: The Threat of Terrorism to the Aviation Industry.” *International Airport Review*.(2019): Retrieved from: <https://www.internationalairportreview.com/article/69862/threat-of-terrorism-aviation-industry>. p1.

¹³ Baker, David Mc A., "Tourism and Terrorism: Terrorists Threats to Commercial Aviation Safety & Security," *International Journal of Safety and Security in Tourism and Hospitality* 1, no. 12 (2015): 1. p.1

intelligence, warning of an imminent terror attack in Kenya's airspace. This clearly indicates the high level of vulnerability of the country's aviation industry to terror attacks.

1.2 Statement of the Research Problem

The devastating effects of a successful terror attack in the aviation industry (which often serves as a country's national symbol) extend to causing massive fatalities and damage to its installations and associated businesses. This in turn earns the attacked country huge economic dents, besides causing it political embarrassment. This has detrimental effects to both human and national security of the attacked country. The various dimensions and intricacies of the aviation ecosystem which include airports, installations within them, aircrafts, air navigation facilities, airlines' facilities and the airspace engender a number of threat vectors that the enemy can and does manipulate.

Recent responses to combating the phenomenon lean towards the adoption of proactive approaches that are more preventive rather than reactive in nature. In line with this, the International Civil Aviation Organization (ICAO) has introduced standards and procedures which member countries have domesticated with a view of operationalizing them in the fight against aviation terrorism. As a member state, Kenya has domesticated and implemented these standards and procedures. Their effectiveness and implementation formed the basis for the establishment of a multi-agency cooperation approach to the industry's security system.

While a public absence of any major security breaches may seem to indicate that this approach is successfully working, the different agencies involved engage in activities and restrictions that have the potential of curtailing the multi-agency cooperation's functioning. Where such happens, the potential of impeding the very functions that the multi-agency exists to protect with a subsequent compromise of the country's national security becomes high.

From the literature reviewed, no study has been conducted to critically examine how the multi-agency cooperation is functioning to safeguard Kenya's aviation industry which also serves as a host to its major entry and exit points. This study therefore sets out to empirically examine multi-agency cooperation and its implications in aviation security in Kenya. It attempts to answer the question whether adoption of multi-agency cooperation as an approach to security has increased the industry's security in light of terrorist threats.

1.2.1 Main Research Question

This study attempted to answer the question, how Kenya's aviation industry was adopting a MAC to meet its aviation security needs. It was guided by the following specific research questions:

1.2.2 Specific Research Questions

- i. How has the aviation industry and the terror threat within it evolved since its establishment?
- ii. How have the responses adopted to combat terrorism in the aviation industry evolved since their inception?
- iii. How is the multi-agency cooperation strategy functioning to enhance and facilitate effective counter terrorism strategies in Kenya's aviation industry?

1.3 Objectives of the Study

1.3.1 Main Objective:

The general objective of this study was to establish how Kenya's aviation industry has adopted a MAC to meet its aviation security needs. The study addressed this through the following specific objectives:

1.3.2 Specific Objectives

- i. To examine the evolution of the aviation industry and the terror threat over time.
- ii. To analyze the development of responses to combat terrorism within the aviation industry over time.
- iii. To examine how the multi-agency cooperation strategy is functioning to enhance and facilitate effective countering terrorism strategies in Kenya's aviation industry.

1.4 Justification of the Study

The purpose of this study was to examine MAC approach to combating terrorism in the aviation industry in Kenya. It sought to understand the measures that have been introduced following the adoption of MAC as well as the barriers and consequently the enhancers of MAC. The knowledge generated is expected to contribute to the existing body of knowledge on counter terrorism strategies. Its findings will fill up the knowledge gaps in the study of MAC as an approach to combating terrorism in the aviation industry. Students and professional researchers are also expected to refer to its findings for more information on counter terrorism strategies and their effectiveness in combating terrorism.

The conclusions drawn, will also be useful to decision makers in aviation security and other organizations applying multi-agency security approaches. They are expected to guide effective MAC policy and strategy formulation and as well as its implementation. This will contribute to a positive social change having recognized the kind of actions that enhance multi-agency working so that they can be advanced while withdrawing those that hinder the functioning of MAC.

1.5 Literature Review

1.5.1 Conceptualization of Terrorism

The popular adage, “one person’s terrorist is another person’s freedom fighter” sums up the quintessence of providing a precise definition of terrorism.¹⁴ A number of jurisprudences have attempted to demonstrate how terrorism is characterized by violent and severe felonies with adverse effects like bodily harm, death, destruction of property, and negative health implications.¹⁵ The United States, United Kingdom, and even Canada recognize the idea that terror activities are intentionally designed to infuse fear, shock as well as anxiety to the public and this is meant to influence policy makers and affected state government(s) to act in a particular manner.

In the UK, the legal definition of terrorism is presented in its Terrorism Act of 2000, in which terror actions are described under subsection (2) (1) as, “the use” or “threat” that is designed to influence the government or an international governmental organization or to intimidate the public or a section of the public. The “use” or “threat” is made for the purpose of advancing a political, religious or ideological cause. Overall, the UK’s legal definition of terrorism puts emphasis on the “means,” “intent,” and “motivation” to come up with a conclusive legal

¹⁴ Simeon, James C., "The Evolving Common Law Jurisprudence Combatting the Threat of Terrorism in the United Kingdom, United States, and Canada." *Laws* 8, no. 1 (2019): 5. p.2

¹⁵ *Ibid* p. 10

description of what terrorism is.¹⁶ This definition however lacks information concerning who the perpetrators of terrorism are, yet this information is critical in informing law enforcement agencies on who to keep a keen eye on.

In the United States, the statutory provisions that deal with terrorism are stipulated in the Code, Title 18, Part I, Chapter 113B—Terrorism. Terrorism is defined in two separate scopes: “domestic terrorism,” and “international terrorism.” Generally, the code describes “terrorism” as an activity that comprises violent acts or acts dangerous to human life that are a violation of the criminal laws of the United States or of any other state, or that would be a criminal violation if committed within the jurisdiction of the United States or of any other state.”¹⁷

Clearly, the UK’s legal definition, is more extensive since it not only spells out the means used to conduct the terror activity but also the intent of the terrorist and the terrorist’s target. The U.S’ legal definition on the other hand ignores the intention or motivation behind the terrorist’s actions. The implication is that policy formulators and implementers can easily miss out on addressing the grievances of the terror perpetrators. Consequently, chances of suffering repeated attacks remain high as the perpetrators remain determined to make their statement. The other implication is that by not considering the “intention,” policy makers are likely to come up with responses that are reactionary in nature which have already been proven to be ineffective in combating the terror phenomenon even in the global spheres.

The U.S’ definition however adds to the understanding by distinguishing “domestic terrorism” and “international terrorism.”¹⁸ This is helpful in understanding that terrorism is an act that transcends boundaries and jurisdictions and as a result, strategies to counter it need to take

¹⁶ Retrieved from: <http://www.legislation.gov.uk/ukpga/1990/18> on 4/6/2020 at 1224 Hrs

¹⁷ Simeon, James C. "The Evolving Common Law Jurisprudence Combatting the Threat of Terrorism in the United Kingdom, United States, and Canada." *Laws* 8, no. 1 (2019): p.2

¹⁸ *Ibid.* p 1

account of this fact. Salient in the legal definitions, is the amplified aspects of threat and use of violence implying a criminal perception of the terrorism act.

A number of other scholars have built on these developments to further attempt to clarify terrorism as a concept. Duchesneau for instance adds to this a communication angle. He views terrorism as a communication strategy of non-state actors. By its asymmetrical, systematically planned unpredictable violence against targets arbitrarily selected for their symbolic value (including civilians), terrorism is meant to create a mood of extreme fear or insecurity within the civilian population. By means of psychological manipulation and maximum pressure created, it brings about a desired reaction.”¹⁹ That is, the reaction of fear and despondency.

Arasly on the other hand acknowledges that modern-day terrorism may be considered like a certain type of war, and that can progressively take newer forms. This is attributed to economic, military, cultural and financial asymmetries that come about whenever “post-industrial and traditional societies” are entwined in international conflicts.²⁰ Arasly further points out that the ~~idea of terrorism can be understood~~ based on the intentions and modus operandi of the terrorists. In his view, it is the incapacity of non-state actors to bear a direct altercation with the regular military force of the state actors that drives them to engage in unconventional operational approaches like terrorism.²¹ The use of unconventional operational approaches has in recent decades been evident in the aviation industry. As an act, terrorism is continually evolving, and hence cannot have a clear standard definition but instead, a constantly revised one.

¹⁹ Duchesneau, J. *Aviation Terrorism: Thwarting High-Impact Low-Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada, 2015. p.49

²⁰ Arasly, Jangir, "Terrorism and Civil Aviation Security: Problems and Trends." *Connections* 4, no. 1 (2005): 75-90. p.78

²¹ Ibid p.78

1.5.2 Conceptualization of Aviation Terrorism

There is limited empirical literature in the area of aviation terrorism as a field of study. According to Duchesneau and Langlois aviation terrorism is, “a political act against civil aviation carried out by non-state actors who systematically target civilians and intentionally use violence in order to create terror and coerce authorities, at times by making demands.”²² Duchesneau, in his study identifies three dimensions of aviation terrorism that make it a unique phenomenon.²³ The first dimension is about the nature of the activities which he describes as terror acts directed to the civil aviation industry with a potential of putting the public’s safety and security at risk.

An additional dimension is in regard to legal regimes. He notes that under the auspices of International Civil Aviation Organization (ICAO), the aviation sector maintains certain legal and regulatory frameworks that are in turn strengthened by the national justice systems. In the third element he outlines concerns about the complex law enforcement problems. Here, he observes that the prevalent aviation terror threats lack national boundaries, are interconnected, and should therefore be tackled at the international, regional and local levels.²⁴ In the same breath, policies and strategies to counter aviation related terror attacks need to be cognizant of this fact.

Avihai on the other hand conceives aviation terrorism as, “a deliberately violent act ~~sometimes indiscriminate that~~ is aimed at commercial civil aircraft or against passengers and crew on board conducted by individual clandestine agents or subnational groups in order to promote general political objectives but not to fulfil personal objectives exclusively.”²⁵ Despite being one of the few scholars who have attempted to define terrorism in the aviation industry, his definition

²² Duchesneau, J. & Langlois, M. (2017), “Airport attacks: The Critical Role Airports Can Play in Combating Terrorism.” *Journal of Airport Management*, 11(4), p. 343

²³ Duchesneau, J. *Aviation Terrorism: Thwarting High-Impact Low-Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada, 2015. p.41

²⁴Ibid p. 61

²⁵ Avihai, Hillel, "Aviation Terrorism: Evolution, Motivation and Escalation." *Saarbrücken: VDM Verlag* (2009). p.

is limiting. Aviation attacks are not only directed to commercial and civil aircraft as it is implied here. A recent terror attack of the military airstrip in Kenya indicates that the target of attack extends beyond civil and commercial aircrafts. Avihai's conception of aviation terrorism also implies that the targets of attack are only passengers and crew on board. This is far from the reality. There are many recorded aviation terror attacks launched from the airport grounds targeted on passengers waiting in terminals, airport employees as well as airport infrastructure and key installations. A case in point is the Rome and Vienna airports attacks in 1985 in which attackers used assault rifles and hand grenades aimed at passengers and personnel in airport terminals.

To illustrate this, Bart delineates three key categories of aviation terror informed by the target which he identifies as aircraft; aviation infrastructure, and air cargo.²⁶ In his work, "Aviation terrorism: The Essence of the Phenomenon, Systematics, Typology," Glen also concurs that the target of attack extends beyond the passengers and aircraft. He notes that the subject or object of attack can be organizations, apparatus, and people involved in aviation activity, or being beneficiaries of such activity."²⁷ This therefore implies that responses to terror threats in the aviation industry must address the entire aviation ecosystem which includes the aircraft, airspace, aviation infrastructure and the cargo.

Choi observes that aviation terrorism is not suddenly going to disappear due to its international and symbolic nature that make it an attractive means for terrorists to make a statement. Such attacks have a potential for multi-governmental involvement a fact that gives terrorists the ever-desired wide publicity.²⁸ It is also an effective tactic for terrorists to create mass

²⁶ Bart, Elius., "National Aviation Security Policy, Strategy, and Mode-Specific Plans: Background and Considerations for Congress." Library of Congress Washington DC: *Congressional Research Service*, 2009, p.7

²⁷ Andrzej Glen. 'Aviation Terrorism. The Essence of the Phenomenon, Systematics, Typology', *Siedlce University of Natural Sciences and Humanities*, 2018. p.61

²⁸Choi, Jin-Tai, and Robert B. Munson., "Aviation Terrorism: Historical Survey, Perspectives and Responses." *Springer*, 1993. p. xi

impact that attracts mass media coverage as was in the case of the 9/11 attack. In concurrence, Duchesneau and Langlois observe that aviation terrorism has a potential of projecting a global reach to cover a wider audience given the rapid transmission of information necessitated by the global technological advancement.²⁹

Regarding the impact of aviation terrorism, Krull argues that a successful attack on an airline which is a symbol of its country of origin has significant negative effects on the government causing it political embarrassment besides the mass casualties, economic, social and psychological implications such as instilling fear into the public.³⁰ Choi adds that although the number of direct victims of aviation terrorism may be small statistically, the impact is greater than any other type of attack on the civil population politically, economically and psychologically. This makes aviation terrorism an effective tactic for terrorists.³¹

Tactics used in aviation terror attacks are varied. Bart for instance points out that perpetrators use acts such as by bombing, shooting, hijacking, and smuggling in of weapons and persons as well as cargo related crimes to execute their intentions as demonstrated in figure 1 below. To this, Duchesneau adds the aspect of suicide missions which can be carried out either in flight or on the ground.³² Wilkinson also acknowledges these tactics in his advice that airport security systems must be able to effectively deal with the continuing threat of aircraft hijacking, sabotage bombing, bombing and shooting attacks on airport terminals and against aircraft on the

²⁹Duchesneau, Jacques, and Maxime Langlois., "Airport attacks: The critical role airports can play in combatting terrorism." *Journal of Airport Management* 11, no. 4 (2017): 342-354. p. 343

³⁰Krull, Katie E., *The Threat Among Us: Insiders Intensify Aviation Terrorism*. United States: Northwest Pacific., 2016. pp 6-7

³¹ Choi, Jin-Tai, and Robert B. Munson. "Aviation Terrorism: Historical Survey, Perspectives and Responses." *Springer*, 1993. p. xii

³²Duchesneau, Jacques, and Maxime Langlois. "Airport Attacks: The Critical Role Airports Can Play in Combatting Terrorism." *Journal of Airport Management* 11, no. 4 (2017): 342-354. p. 343

ground. This implies that mechanisms to address the threat need to equally cover the entire aviation ecosystem both on ground and in the airspace.

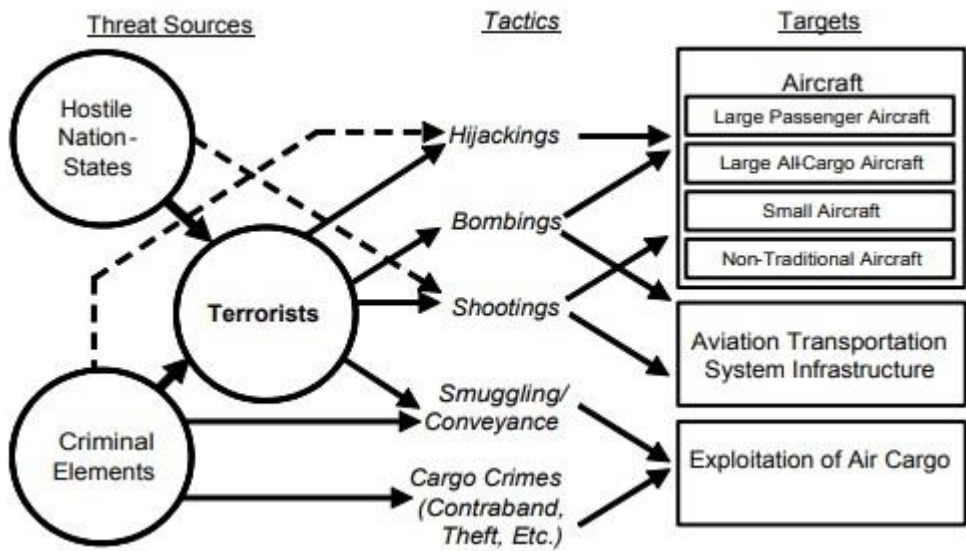


Figure 1.1 Dimensions for defining aviation terrorism

Source: (CRS analysis of *The National Strategy for Aviation Security*, Department of Homeland Security, March 26, 2007)

Salient also in Avihai’s definition above is the question of perpetrators of aviation terrorism who he identifies as individuals and sub-national groups.³³ Duchesneau agrees to the assertions that aviation terrorism attacks are carried out by non-state actors.³⁴ This is however limiting and far from the truth. A case in point is one in which the Libyan government authorities took advantage of the existing terrorist groups to carry out attacks indirectly against the Pan AM 103 flight in 1988, leading to 270 fatalities.³⁵ The Lyban government was heavily sanctioned by the United Nations Security Council for this act. Generally, the above assertions denote a lack of standardized way of conceiving the concepts, “terrorism” and consequently “aviation terrorism.”

³³Avihai,Hillel., *Aviation Terrorism: Evolution, Motivation and Escalation*. VDM Verlag (2009). p. 35

³⁴ Duchesneau, Jacques, and Maxime Langlois. "Airport Attacks: The Critical Role Airports Can Play in Combatting Terrorism." *Journal of Airport Management* 11, no. 4 (2017): 342-354. p. 343 p. 343

³⁵ Richardson, Louise., *What Terrorists Want: Understanding the Enemy, Containing the Threat*. Random House Incorporated, 2007. p.52

Efforts to define aviation terrorism indicate a trend to tailor the concept in a way that suits the author's particular objectives. Despite the definitional variations, salient is the fact that some words are commonly used. These include: "deliberate," "use of violence," "threat to use violence," "political motivation," "creation of fear" and "multiple targets." The convergence of these definitions around certain terminologies indicates that terror activities bear specific characteristics distinct from other attacks and therefore can easily be identified and distinguished with other criminal activities within the aviation industry. This is useful in the formulation of policies and strategies that are specific in addressing terrorism.

1.5.3 The Ad hoc and Comprehensive Multi-agency Cooperation Schools of thought

In their writings on "the case of interagency deliberate planning," Said & Sami present two schools of thought concerning the nature of MAC. The first school of thought, views MAC as an ad hoc initiative that brings different professionals to jointly work together to address a specific urgent security matter for a particular season. This school of thought has however earned certain criticisms. Its opponents argue that even though such initiatives have merit, MACs of this nature tend to be narrow in scope and largely reactive to negative trends in the society. They also claim that ad hoc initiatives only present piece meal corrective actions that do not tackle issues from their root causes.³⁶ In support of these assertions, Orton et al., hold the opinion that cohesion and commitment among ad hoc initiatives is challenging and near an impossibility since the member agencies remain engrossed in their silos and mandates, knowing that they would soon return to their parent organizations.³⁷

³⁶Said, Sami, and Cameron G. Holt. "A Time for Action: The Case for Interagency Deliberate Planning." *Strategic Studies Quarterly* 2, no. 3 (2008): 30-71. P35

³⁷Orton, James Douglas, and Christopher J. Lamb. "Interagency National Security Teams: Can Socia Science Contribute?" *Prism* 2, no. 2 (2011): 47-64. P58

On the contrary, the second school of thought views MAC to security as a comprehensive government framework that contains a wide range of systemic adjustments intended to address an array of security issues.³⁸ Prompted by the evolving and resilience nature of security threats particularly terrorism whose multi-faceted nature endears itself to a multi-disciplinary approach as a counter measure, majority of states are now adopting an all government approach in restructuring their security systems preferring comprehensive to ad hoc formations. Both ad hoc and comprehensive measures aim at responding to threats. Ad hoc initiatives however are temporary and offer short term responses to specific threats. Comprehensive government mechanisms on the other hand are long term initiatives which respond to terror threats from a proactive approach which aims at enhancing prevention rather than curing.

However, the complexities involved to successfully attain comprehensive formations have made some states to prefer ad hoc formations implemented only during times of disasters to manage the situation at hand. Others prefer to have comprehensive formations only for critical ministries such as security while the rest remain independent unless a crisis situation demands for joint working which will then be temporarily implemented. It is therefore important to understand the two dimensions of MAC initiatives in analyzing MACs. In restructuring aviation security systems to respond to terrorism threat, many states are now adopting an all government approach preferring comprehensive to ad hoc formations. Jointly addressing all security issues that are interconnected with terrorism ensures that all risks, vulnerabilities and the root causes of aviation terrorism are well addressed to prevent a terror related occurrence or a repeat of a terror occurrence.

³⁸ Said, Sami, and Cameron G. Holt., "A Time for Action: The Case for Interagency Deliberate Planning." *Strategic Studies Quarterly* 2, no. 3 (2008): 30-71. p.35

1.5.4 Conceptualization of MAC

Lyoid et al., observe that the prevailing policy interests in creating joint solutions to shared problems has engendered a need to come up with a superfluity of terminologies to explain the collaborative processes needed. This has led to the prevalence of terms like ‘multiagency,’ ‘interagency,’ ‘inter-professional,’ ‘collaboration,’ ‘cooperation,’ among others. Some scholars like Cheminais perceive multi-agency cooperation as a situation where practitioners from more than one agency work together jointly, sharing aims, information, tasks, and responsibilities in order to intervene early and prevent security threats from arising.³⁹ She adds that MAC’s major concern is to ensure that each practitioner brings his/her professionalism to bear, understand each other, and share with other agencies aspects of their work with the goal of attaining a shared rather than individual objectives.⁴⁰ The aspect of sharing implied in this definition means that multi-agency working requires joint planning and delivery of services that are responsive to multifaceted societal problems such as aviation terrorism.

Similarly, Frazier considers MAC to exist whenever multiple organizations facing a common problem come together and agree to address the issue by creating links through a formal contract.⁴¹ Typically, this formal contract enables resource-sharing and restructuring of internal and external procedures to address an issue at hand. Frazier further underscores the fact that even in any aptly designed systems, the responsibilities of state agencies will typically overlap, meaning that forms of cooperation will always be inevitable. Because of this, it could be discerned that developing and implementing public policies may require some form of multidisciplinary cooperation capable of eliminating conventional delimitations or jurisdictions.

³⁹ Cheminais, Rita., *Effective Multi-Agency Partnerships: Putting Every Child Matters into Practice*. Sage, 2009. p.4

⁴⁰ Ibid 4-5

⁴¹ Frazier, Russell M., "A Cannon for Cooperation: A Review of the Interagency Cooperation Literature." *Journal of Public Administration and Governance* 4, no. 1 (2014): 1. p.2

For Llyod *et.al*, however, multiagency working involves more than one agency working for the same client but not necessarily jointly.⁴² According to these authors, it is the aspect of working for the same client that qualifies MAC and not necessarily the act of working together in order to achieve a common goal. This perspective therefore implies that the question of shared aims, information and responsibilities does not necessarily arise in MAC. In the researcher's opinion, this is a very fluid approach to addressing security matters particularly the multi-faced aviation terrorism. If multi-agency working is perceived this way, it means that the various agencies supporting the security system in the aviation industry will remain working in a fragmented way that has already been proven ineffective in guaranteeing effective aviation security due to overlaps and unclear responsibilities that culminate into competitions among the partnering agencies.

The above approaches to MAC demonstrate lack of agreed standard definition of what constitutes MAC. Scholars and practitioners in the field have continuously used the concept interchangeably with concepts such as collaboration, coordination, partnership and interagency working without any rigorous attempts to differentiate these terms.⁴³ This has negative implications in multi-agency working. At the strategic level for instance, it increases the likelihood of formulating loose and weak policies for multi-agency working. This will consequently lead to formulation of weak strategies at the operational level that will not effectively function at the tactical levels to offer optimal aviation security. The resultant security system will be marred with a lot of risks and vulnerabilities that will eventually render it susceptible to terror attacks. Agencies involved in MACs are largely a subject of what specific phenomenon is being addressed and the governance structure of the country involved. This therefore differs from one country to another.

⁴² Frazier, Russell M. "A Cannon for Cooperation: A Review of the Interagency Cooperation Literature." *Journal of Public Administration and Governance* 4, no. 1 (2014): 1. p 6

⁴³ Bertram, T., C. Pascal, S. Bokhari, M. Gasper, and A. Holterman. "Early Excellence Centre Pilot Programme: Second Evaluation Report. 2000-2001." (2002). p 9

In Kenya for instance, the security sector MACs involve eight key government agencies namely, National Police Service, National Intelligence Service, Department of Immigration Services, Customs and Boarder Control, Kenya Airports Authority, Kenya Plant Health Inspectorate Services, Kenya Bureau of Standards and Port Health Services. Before the concept of multi-agency working was adopted, most of these agencies worked in a fragmented manner and hoarded their information.

1.5.5 Modelling of MACs

This section presents the different approaches to multi-agency working as adopted by various organizations that work in partnership. Atkinson et al., in Duggan & Corrigan suggest a typology of joint working primarily based on the purpose of multi-agency work. It proposes MAC at various levels within a multi-agency organization namely, decision-making groups, consultations and training events, center-based delivery, operational team delivery and lastly the coordinated delivery. The decision-making groups are located at the strategic level of the MAC and all the rest at the operational and tactical levels. The coordinated delivery model however rides on the three levels through an appointed coordinator composed of varied experts situated on one site whose work is to deliver a more coordinated and comprehensive service.⁴⁴

The model envisions a continuous sequence of working from decision making levels composed of different professionals who maintain their distinct role to operational teams where the different professionals work closely with a likelihood of merging their roles.⁴⁵ The decision-making group is composed of professionals from diverse agencies who are brought together to make critical decisions on a common issue.

⁴⁴ Duggan, Carmel, Carmel Corrigan, and W. R. C. Social. *A Literature Revie of Inter-Agency Work with A Particular Focus on Children's Services*. Dublin: Children Acts Advisory Board, 2009. p.17

⁴⁵ Ibid p.17

⁴⁶ Puonti, Anne., *Learning to Work Together: Collaboration Between Authorities in Economic-Crime Investigation*, Unpublished PhD Dissertation, University of Helsinki, Finland (2004). p. 26

Atkinson and others, further observe that the essence of operational and tactical levels is to bring teams together to deliver the services required.⁴⁷ Puonti expounds on this pointing out that this level concerns concrete joint actions directed towards the security areas of concern for instance joint pre-trial investigation, inspection and enforcement exercises. Atkinson et al.'s model therefore envisions a multi-layered cooperation centered at the three critical levels of a MAC organization namely strategic, operational and tactical levels. In response to terror threat at the aviation industry for instance, this model suggests a need for cooperation at the highest national security decision making level (strategic), at the highest organizational level of the enforcement team (operational) and cooperation at the level of frontline enforcement team (tactical).

It also stresses on the need for a coordinating multi-disciplinary body that ensures seamless synergy within the three levels in service delivery. This model is useful in that it encourages interaction and relationship building among peers from the different agencies at their levels of service delivery. Salient also, is the emphasis on having a representation of the different professionals at all four levels namely, decision making, operational, tactical, as well as at the coordination level. Such a relationship is critical since it guarantees comprehensive service delivery and better results unlike when cooperation exists only at one level.

Unlike Atkinson and others, model which is formulated on the basis of purpose of MAC, Frost suggests that MACs should be modelled based on a hierarchy of terms that describe the level of relationships existing within the joined-up agencies. In his view, there are four models of MAC informed by how close the agencies relate. The first is the cooperation model which he describes as the weakest of the four. This model denotes partnerships in which the various agencies work jointly to attain consistent goals and complementary services although they still retain their

⁴⁷Atkinson, Mary, Paul Doherty, and Kay Kinder. "Multi-Agency Working: Models, Challenges and Key Factors for Success." *Journal of Early Childhood Research* 3, no. 1 (2005): 7-17. p7.

independence occasionally and informally. The model is closely followed by the collaboration model which denotes a partnership in which services are planned jointly. Here, issues of overlap, duplication and gaps in service provision are addressed all in the aim of engendering a common outcome.

Frost further describes a third model, “co-ordination” which is characterized by a closer relationship among the different agencies working together unlike that of the former two models. In this model, agencies are said to work together in a planned and systematic manner that is geared towards attaining shared and agreed goals. The last formation which he defines as “integration”/ “merger” involves different agencies coming together and transforming into one organization for purposes of enhancing service delivery.⁴⁸

Rather than emphasizing cooperation formations at strategic, operational, tactical and coordination levels of a MAC organization, Frost’s model visualizes cooperation from the general angle of how closely knit are the agencies forming the MAC are in their joint working relationship. It implies that the partnering agencies decide before-hand the level at which they want to commit to one another.⁴⁹ Depending on the agreement, the MAC formed will therefore fit into either of the four proposed models. Salient about Frost’s model however is the fact that it offers options from which to consider the level of relationship a multi-agency team wants to engage in. Depending on the security problem at hand and the ability to procure necessary resources to enable the MAC attain its objectives, the partners will make a rational decision on how to engage. Secondly, it offers an opportunity to grow from a loosely attached relationship to a more cohesive one over time. The

⁴⁸Nick Frost, *Professionalism, Partnership and Joined Up Thinking: A Research Review of Front-Line Working with Children and Families*, Dartington, UK, (2005) p.14

⁴⁹Kaiser, Frederick M. “Interagency Collaborative Arrangements and Activities: Types, Rationales, and Considerations.” *Arthur D. Simons Center for the Study of Interagency Cooperation*, 2011. pp 14-19

multi-faced nature of terrorism threat demands a closely-knit relationship that ensures no area is left vulnerable to attacks.

Bertram also presents MAC modelling approach that is close to Frost's proposition on how close the agencies forming MAC associate.⁵⁰ The difference in Bartram and others' case is that the four models of MAC that they propose are structured based on only three organizational levels namely, training, management and staffing. Their first model is named as the coalition. It involves the management, training and staff of the varied agencies working in a federated partnership that has an alliance of elements but operating differently. The second model that they consider higher in hierarchy to the first one is the coordinated model. This model entails the management, training and staff of the partnering agencies being synchronized for purposes of working harmoniously although each agency still remains individually distinct.

Bertram's third model is the unified model which involves amalgamated management, training and staffing structures. Services here may be delivered by different sectors but these sectors are all closely united in their operation. The last model they describe is the hybrid model in which the MAC strategically operates with a mixture of all the described three models in order to achieve its full range of services without any of the models dominating.⁵¹ Like Atkinson and others, Bartram's model stresses on cooperation at the management level which is the decision-making level of a MAC organization and at the staffing levels which denote both the operational and the tactical levels of service delivery. Salient however is the singling out of the training component which is usually considered as one of the many aspects handled at decision making

⁵⁰Bertram, T. C. Pascal, S. Bokhari, M. Gasper, and A. Holterman. "Early Excellence Centre Pilot Programme: Second Evaluation Report. 2000-2001." 2002. p 8

⁵¹ Ibid

levels to stand alone as an area of cooperation in MACs. Perhaps to stress the importance of joint training in successful MACs.

Puonti⁵² on the other hand proposes a different perspective of MAC modelling. Focusing specifically on the operational level of a MAC organization, she suggests two models namely, sequential and parallel. She describes sequential model as one in which partner agencies pass a case of interest from one agency to another rather than addressing it together. For instance, immigration officials may suspect a crime and decide to hand it over to the police with the knowledge that the police are better trained to handle such incidents. Without any more interaction than necessary, the police will take over the case and carry it to completion.

This means that the other agencies are seen as assistants rather equal partners. The parallel model on the other hand is one in which operations such as raids are jointly carried out on the working site. The varied professionals forming the MAC give expert input helping each other find relevant material for investigation of a security threat of interest. The agencies will negotiate together over the case and discuss what each party expects. This kind of cooperation takes place in real time and simultaneously.⁵³ Comparatively, the parallel model offers a better alternative for addressing terror related threats given its inclusive and consultative manner of service delivery. This ensures that a security problem is considered jointly from various angles before a final decision which is rich in content is finally made.

From the literature reviewed, it is evident that there is no standard way of modelling MACs. Despite the disparities in their formations, it is the nature of the working relationships that the partner agencies form that is more important. The cohesiveness of these relationships is what

⁵² Puonti, Anne. *Learning to Work Together: Collaboration between Authorities in Economic-Crime Investigation*. Unpublished PhD Dissertation, University of Helsinki, Finland (2004). p. 27

⁵³Ibi

eventually determine the quality and output of MACs. Loosely associated models tend to align themselves to ad hoc MACs that address short term security issues. The more cohesive models offer a better solution in addressing long term security issues such as terrorism in the aviation industry.

1.6 Summary of Gaps in Literature Review

The purpose of this dissertation was to assess how MAC is functioning to aid enhanced and effective countering of terrorism in Kenya's aviation industry. The literature reviewed covered the conceptualization of terrorism and consequently aviation terrorism. Although the main focus of the study is aviation terrorism, it was necessary to review literature on terrorism because it provides the roots for understanding the subject better. Aspects on definitional problems, motivations, effects, targets and the tactics of aviation terrorism emerged in the discussions. The literature also covered the concept of Multiagency Agency Cooperation (MAC) and deeply looked into how the concept is conceived by various actors. Aspects of its definitional problems, the main schools of thought and the varied ways of modelling MACs formed the debates in this area.

It was clear that although terrorism in the aviation industry as an area of study has received some attention from practitioners, governments, intergovernmental organizations and the media, especially in the aftermaths of 9/11, academic research studies on the same as a specific field of study are lacking. Furthermore, a dearth in research on the functioning of MACs in combating terrorism in the aviation industry is evidently glaring. This area of research remains empirically unexplored particularly in Kenyan's aviation industry. The evolving nature and intensity of terror attacks in the country calls for a need to interrogate the strategy as a response. This research study aims to contribute to this gap in knowledge.

1.7 Conceptual Framework

According to Yosef, a conceptual framework is a network of interlinked concepts that together provide a comprehensive understanding of a phenomenon while bringing out the key factors and presuming relationships between and among them.⁵⁴ This study conceptual framework is developed based on the works of Aleman Moses⁵⁵, Duchesneau Jacques,⁵⁶ Bogdanos Matthew⁵⁷ and Andriessen Hinke.⁵⁸

Generally, the aviation industry is continually growing owing to its efficiency in facilitating faster mobility of people, goods and services in a world that is increasingly becoming socially, politically and economically interdependent. These same factors have provided an attractive ground for terrorists to advance their agenda by causing massive destructions and human fatalities as a tactic to make their statement. The need for an effective aviation security system therefore becomes paramount both at the national and international airspaces owing to the transnational nature of the terrorism phenomenon. In order to mitigate the terror problem which has become persistent in the international aviation industry, government leaders and international organizations have responded by sponsoring a number of international conventions and adopting international standards and recommended practices (SARPS), which are usually updated on

⁵⁴ Jabareen, Yosef. "Building A Conceptual Framework: Philosophy, Definitions, And Procedure." *International Journal of Qualitative Methods* 8, no. 4 (2009): 49-62. p.51

⁵⁵ Aleman, Moses., "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management*. 2008: 65-75.

⁵⁶ Duchesneau, J. *Aviation Terrorism: Thwarting High-Impact Low-Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada, 2015.

⁵⁷ Bogdanos, Matthew F., "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, No. 37 (2005): 10-18.

⁵⁸ Andriessen, Hinke, Coen Van Gulijk, and B. J. M. Ale. "Human Factors in Layers of Defense in Airport Security." *11th International Probabilistic Safety Assessment and Management Conference and the Annual European Safety and Reliability Conference*, Helsinki, Finland, 25-29 June 2012.

regular basis. These judicial and technical aspects have so far provided a comprehensive security structure for the global civil aviation industry.⁵⁹

Actions taken by individual states to improve their aviation security will often mirror these conventions and protocols adopted by ICAO and other international organizations. Member states are obliged to ratify the legal instruments and integrate into their own national justice systems all the crimes specified in the international civil aviation security related treaties.⁶⁰ Additionally, they are obligated to enact them in a manner that is consistent to international organizations' standards and recommended practices. Proper and timely application of the international civil aviation security instruments at the domestic level will however depend on some intervening factors mainly, the political system that is in place, the characteristics of the domestic aviation industry and the constitutional mandate.⁶¹

Previous weaknesses manifested in both the international legal instruments and the individual nations' aviation security systems led to successful terror exploitations of the industry. The events have however led many governments into strengthening their aviation security systems by developing a more professional focused security workforce to manage the security systems of their aviation industries, through legislative changes. This means, shifting from an aviation security system that is based on airline responsibility to one in which the primary responsibility rests with the government. Therefore, in its efforts to prevent terrorism, the government guards the industry as part of its national borders.⁶² In this sense, a nation's capability to identify and assess

⁵⁹ Aleman, Moses, "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management*. 2008: pp.65-75.

⁶⁰ Duchesneau, J., *Aviation Terrorism: Thwarting High-Impact Low-Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada, 2015. P. 161

⁶¹ Bogdanos, Matthew F. "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, No. 37 (2005): 10-18 p.18

⁶² Aleman, Moses, "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management* [2008]: 65-75.

terror threats within its aviation industry becomes centralized within its national security architecture in a multi-layered defense approach that needs the state and the implementing security agencies.⁶³

The implementation of this anticipatory approach which focuses on the prevention of terror attacks in the aviation industry remains the responsibility of each individual member state. The ratification of multi-agency cooperation as one of the international aviation security SARPS has emerged as the best way to defeat today's terrorism threats in the aviation industry by harmonizing franchised government security actions through the facilitation of joint planning at multiple levels.⁶⁴

The conceptual framework below indicates that the ratification of the independent variable, which constitutes the international civil aviation security's legal and regulatory frameworks, has an impact in the adoption of multi-agency working in a member states' domestic aviation security system. This in turn guarantees improved security against terror attacks in the industry.

This study makes the following assumptions:

1. There is no relationship between international aviation security law and domestic aviation security.
2. There is a relationship between international aviation security law and domestic aviation security.

⁶³Andriessen, Hinke, Coen Van Gulijk, and B. J. M. Ale. "Human Factors in Layers of Defense in Airport Security." *11th International Probabilistic Safety Assessment and Management Conference and the Annual European Safety and Reliability Conference, Helsinki, Finland, 25-29 June 2012.*

⁶⁴Bogdanos, Matthew F. *Joint Interagency Cooperation: The First Step.* Institute for National Strategic Studies, No. 37(2005):10-18. p. 18

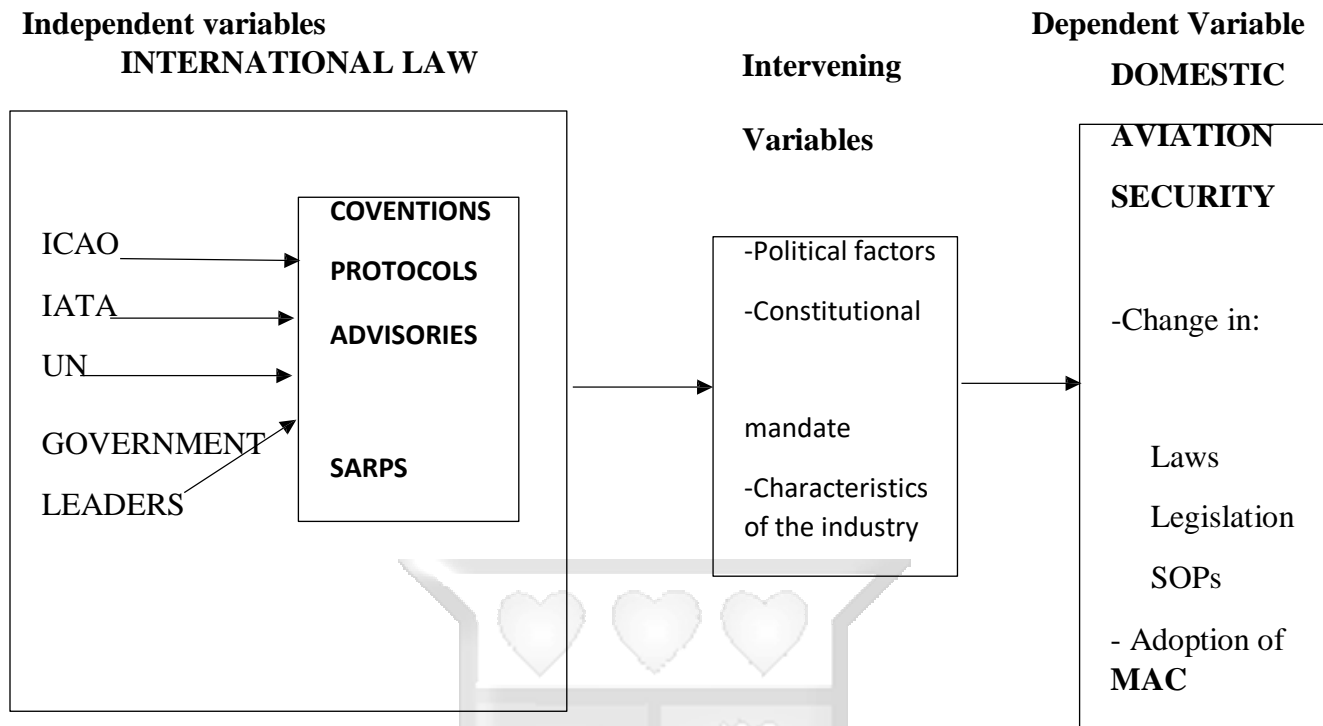


Figure 1.2 Conceptual Framework
Source: Researcher

1.8 Research Methodology

Methodology describes the specific procedures or techniques that will be used to collect, analyze and interpret data. This study adopted a descriptive case study methodology because of the approach's strength in accurate presentation of the characteristics of multi-agency working in combating terrorism in Kenya's aviation industry. The approach was also suitable for this study due to its ability to conduct a comprehensive, intensive and in-depth study of multi-agency working in its real-life context.⁶⁵ Its support for a deeper and more detailed investigation of the MAC phenomenon guarantees more insight that might not be achieved with other approaches.⁶⁶

⁶⁵ Aberdeen, Trudie., Yin, RK., "Case Study Research: Design and Methods." *The Canadian Journal of Action Research* 14, no. 1 (2013): 69-71. p.20

⁶⁶ Rowley, Jennifer, "Using Case Studies in Research." *Management Research News* 25, no. 1 (2002): 16-27. p.16

1.8.1 Research Design

This is viewed as a research plan designed to provide direction on how the research is to be undertaken. The aim is to answer the research questions at hand.⁶⁷ Rowley describes it as an action plan describing how to get from questions to conclusions.⁶⁸ The study employed a mixed methods case study research design consisting of multiple sources of data detailing regarding the functioning of MAC in combating terrorism in Kenya's aviation industry. Case studies focus on the detailed inquiry of a unit of analysis as a bounded system (the case).⁶⁹

The study covered all airports in Kenya that serve international passengers and cargo. They are: Jomo Kenyatta International Airport, Moi International Airport, Kisumu International Airport, Eldoret International Airport and Wilson airport. The airports have adopted a multi-agency approach in their effort to combat terrorism as demonstrated in the various Border Management Committees hosted in their establishments.

1.8.2 Data Collection

Both primary and secondary data were collected. Primary data was collected through questionnaires, interviews, document reviews and observation methods. An unstructured interview schedule consisting of open-ended questions was used to collect information regarding the perceptions and construction of meanings and experiences of MAC functioning within the industry, based on the account of the multi-agency's senior level professionals and some members of its secretariat. The interview approach engaged the respondents in a way that allowed comparison of participant responses in order to answer the research questions.⁷⁰ Questionnaires

⁶⁷ Creswell, J. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks: CA, SAGE Publications, pp.35-9

⁶⁸Rowley, Jennifer. "Using Case Studies in Research." *Management Research News* 25, no. 1 (2002): 16-27. p 18

⁶⁹ Harrison, Helena, Melanie Birks, Richard Franklin, and Jane Mills. "Case Study Research: Foundations and Methodological Orientations." *Qualitative Social Research Forum*, vol. 18, no. 1. (2017).

⁷⁰Lindlof, Thomas R., and Bryan C. Taylor., "Asking, Listening, and Telling." *Qualitative Communication Research Methods* 2 (2002): 170-208. p.104

containing both closed and open-ended questions were also administered to the various professionals within the different agencies working in the multi-agency team at the operational levels. This supplemented the data collected from the interviews, observations and documentary reviews. The mixed sources of data in this study complimented each other to provide a rich basis of information to draw conclusions from.⁷¹

1.8.3 Target Group, Sample Size, and Sampling Procedure

The target population consisted of all security supporting personnel deployed in the above-named International airports drawn from National Police Service, National Intelligence Service, Department of Immigration Services, Customs and Boarder Control, Kenya Airports Authority, Kenya Plant Health Inspectorate Services, Kenya Bureau of Standards and Port Health Services. The study settled on these population because it is directly involved in multi-agency working towards combating terrorism in Kenya's aviation industry. Purposive sampling was used to select a total of forty-five different professionals representing the above named eight key security agencies at each of the five targeted international airports. These constituted both senior and middle level management officials who sit in the Border Management Committees and actively participate in Joint Operations in their workstations. The senior management officials also included five members who sit in the BMC secretariat.

⁷¹ Onwuegbuzie, A., Leech, N., & Collins, K., "Qualitative analysis techniques for the review of the literature." *The Qualitative Report*, 17(56), p. 11.

Table 1.1 Sampling Frame

Organization	Sample size
National Police Service	5
National Intelligence Service	5
Department of Immigration Services	5
Customs and Boarder Control	5
Kenya Airports Authority	5
Kenya Plant Health Inspectorate Services	5
Kenya Bureau of Standards	5
Port Health Services	5
Secretariat	5
Total	45

Source: Researcher

1.8.4 Data analysis

Data analysis is a process of transforming collected data with the goal of discovering useful information that will inform the conclusion to be made. Qualitative data was analyzed thematically, based on the approach laid out by Miles and Huberman's (1994) framework for data analysis.⁷² In order to draw conclusions, the method specifically involved compliance with four critical aspects namely, data reduction, data display, verification of findings and drawing conclusion.⁷³ Quantitative data was edited, coded and tabulated. Statistical summaries were drawn thereafter. Data from the various sources was compared, contrasted and collated in order to get deeper insight concerning how MAC is functioning and the associated challenges it faces in combating terrorism in Kenya's aviation industry.

⁷² Miles, M. & Huberman, M., *Qualitative Data Analysis: An Expanded Sourcebook*. Sage: Newbury Park. (1994) p. 10

⁷³ Flick, Uwe. *An Introduction to Qualitative Research*. (5th ed). Los Angeles: SAGE Publications. 2014. pp. 10-11

1.8.5 Ethical Consideration

Pertinent ethical issues were considered all through the research cycle to ensure that the research adheres to the recommended ethical standards. Prior to collecting data, the participants' consent was requested. This is to ensure that they participated in the study willingly and without any form of coercion. Each prospective participant was provided with a consent form containing relevant research details spelling out research objectives and the scope of the study. Participants were also verbally informed of the research objectives and its significance to their profession. The intention here was to make the participants aware of the study's contribution to the role they play as stakeholders in the security system of the aviation sector. Their privacy and confidentiality was also protected by ensuring that each participant's name was anonymized.

1.8.6 Research Limitations

The work culture of most of the study respondents may have impeded them from sharing sensitive security related information. To remedy this, the researcher commitment to keep information gathered from them anonymous and purely for the study. Secondly, researcher was careful not to ask case specific questions that could have made the respondents uncomfortable to share details and instead dwelled on general information concerning MAC work practice.

1.9 Chapter Outline

Chapter one covers Multi-Agency Cooperation and Security. It introduces and gives background information about MAC and its application in national security. It therefore sets ground for the research study whose focus is on MAC in combating terrorism in Kenya's aviation industry. The chapter also captures the statement of the research problem and consequently raises the research questions, objectives of the study and the justification of the study. Additionally, it

presents the literature review and identifies the gaps therein, and lastly deals with the conceptual framework and the study methodology.

Chapter two focuses on aspects of evolution and development of the aviation industry globally, and in Kenya. The chapter unearths the threats and challenges that the industry has faced over time with particular focus on terrorism and factors that render the industry vulnerable to terror threats. This is followed by chapter three which covers the responses to terrorism in the aviation industry tracing the measures and actions taken over time. It examines the process and development of civil aviation's legal, regulatory and technical framework for combating terrorism in the industry. It also focuses on MAC as one of the strategies adopted in the new aviation security thinking, taking Kenya as a case study.

Chapter four examines the MAC approach within Kenya's aviation security and analyses how it is functioning in order to facilitate and enhance effective countering of terror activities in the industry. Apart from identifying and analyzing the response measures introduced after adoption of MAC as an approach in aviation security, it also identifies the factors that may hinder effective functioning of MAC.

Chapter five draws a summary of the findings of the study and discusses them in relation to the study objectives, the conceptual framework, the assumptions made by the study and literature reviewed. Based on this, the chapter draws a conclusion with both theoretical and policy related recommendations.

CHAPTER TWO

THE UNIVERSAL DEVELOPMENT OF THE AVIATION INDUSTRY AND THE TERRORISM PHENOMENON

2.1 Introduction

This chapter is a continuation of chapter one which generally introduced the aviation industry as a soft target for terror attacks highlighting the negative political, social and economic implications of the phenomenon to national security. It aims to trace the origins of this challenge of terrorism within the aviation industry by showing how it begun and how the challenge has evolved and transformed over time. It therefore sets base for examining the responses that have been introduced. The chapter is divided into three sections. The first section gives a chronological global overview of how the aviation industry and the challenge of terrorism have developed and evolved over time. The second section chronologically traces terrorism events in the African airspace, delving into the East Africa airspace. The last section highlights on the development of the Kenyan aviation industry and the terror threat within it.

2.2 The Universal Development of the Aviation Industry

The world's first inaugural passenger scheduled flight was in 1914 at St. Petersburg, Florida. Before this, air transport was mainly developed on a massive scale in the military context.¹ The early use of airplanes was indeed largely in warfare and collection of intelligence. It is after World War I that commercial flights around the world increased rapidly in terms of speed and capacity of passengers. Governments in Europe nurtured the infant industry by establishing passenger airlines. This model of transport became commercially relevant especially for airmail

¹ Rhoades, Dawna L., *Evolution of International Aviation: Phoenix Rising*. Routledge:USA, 2016. p. 5

which facilitated the velocity of money supply and helped bring together dispersed enterprises.²

By the time of World War II, the air industry had extensively expanded with numerous airports being established, more trained pilots and improved aviation related technologies.³

Post 1945 to present, the world continues to witness significant and continuous growth in the air transport industry. Technical innovation has led to the creation of wide-bodied aircrafts that necessitate high passenger capacity, advanced avionics and high-speed aircrafts.⁴ Consequently, there has been increased demand for air travel over time based on increases in real incomes among populations. The International Air Transport Association (IATA)'s 2019 annual review report indicates that in 2018 the world's airlines moved four billion passengers over a global network of 22,000 routes, an increase of 1300 from that of 2017.⁵ In addition, a total of about 64 million tons of cargo was transported to markets around the world. The growth of airports has therefore become inevitable for facilitation of air transport services in the effort to ensure faster movement of passengers and goods across borders. The flipside of it is that this growth and development has at the same time provided an avenue to globalize terrorism in the industry.⁶

2.2.1 Evolution and Development of Terrorism in the Aviation Industry

According to the Global Terrorism Database (GTD) more than 1,363 attacks on aircrafts and airports globally were executed by different terrorist organizations between 1970 and 2016.⁷

This section chronologically highlights and discusses some of the significant aviation terror attacks

² Bowel & Rodrigue., "Air Transport: The Rise of Air Transport." *The Geography of Transport Systems*. Routledge. 2016 p. 147

³ Mwikya, Nelson, and Angeline Mulwa., "Implementation of Aviation Safety Standards and Performance of Air Transport Industry: A Conceptual Persepctive," *African Journal of Business and Management*, 4(2) 2018:20-23.

⁴ Rhodes, Dawna. *Evolution of International Aviation*. London: Routledge, 2016. p. 12

⁵ www.iata.org/publications/annual-review.asp p 8

⁶ Sweet, Kathleen, *Aviation And Airport Security: Terrorism And Safety Concerns*. CRC Press, 2008. p.12

⁷ Krull, Katie E. *The Threat Among Us: Insiders Intensify Aviation Terrorism*. Pacific Northwest National Lab., 2016. p. 7

that have been documented over time on the basis of their modus operandi (MO) which is summarized into of four waves.

The first wave of aviation terrorism was characterized by a series of aircraft hijackings. Literature indicates that the first ever documented aircraft hijacking occurred in 1930 when Peruvian rebels seized control of an airplane in order to disperse propaganda leaflets airborne.⁸ The subsequent three decades recorded more incidents of such hijackings which escalated in the 1960s. The terrorists targeted the aircraft and used the passengers on board as hostage and a factor to guarantee them safety as they landed in a friendly state. Between 1961 and 1967, a total of 12 aircraft seizures occurred in the US alone which escalated to 22 in 1968.⁹

The perilous activities were both criminally instigated and intended to bolster aviation terrorism as an instrument of pressurizing state governments to acknowledge the severity of the terrorists' political cause and spread propaganda.¹⁰ An example is the July 1968 incidence in which insurgents from the Popular Front for the Liberation of Palestine (PFLP) hijacked an Israeli passenger airliner El Al flight 426 en route Tel Aviv from Rome. They made express demands for an exchange of hostages who were members of their group detained in Israeli government. This was the first time in the history of terrorism when an airplane had been seized to pressure a state to submit to the demands of an insurgent group with a political cause.¹¹ The security implications of the first wave hijackings in the aviation industry led to states realizing that they cannot fight unilaterally against the phenomenon which was global in nature. It's during this period in time that states cooperated under the auspices of ICAO seeking to arrive at common and acceptable

⁸ Arasly, Jangir. "Terrorism and Civil Aviation Security: Problems and Trends." *Connections Journals*, 2005: 75-90.

⁹ Ibid p. 81

¹⁰ Aleman, Moses. "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management* [2008]: 65-75. p.66

¹¹ Arasly, Jangir., "Terrorism and Civil Aviation Security: Problems and Trends." *Connections Journals* 4, no. 1 (2005): 75-90. p.76

measures to deal with the perpetrators as demonstrated in the establishment of the Tokyo and the Hague conventions of 1963 and 1970 respectively.¹²

The beginning of the 1970s marked the era of the second wave of aviation industry terror attacks whereby ground attacks began to take root. These involved violent acts launched on or from the ground targeting either the airport and its installations or aircrafts on the ground either in a gated state, taking off, landing or flying.¹³ The first ever listed airport attack occurred on 10th February 1970 at Munich airport in Germany. The terrorists, (PFLP members) attacked a bus carrying passengers to their aircraft using guns and grenades.¹⁴ Another airport attack happened in May 1972 involving the attack of Lod Airport outside Tel Aviv in Israel. The perpetrators were Japanese Red Army operatives who used assault rifles and hand grenades to attack passengers waiting at immigration desks. 26 people were killed and 80 others injured.¹⁵ The weapons used to commit this act were smuggled into the airport in the perpetrators' luggage.¹⁶

The transition from aircraft hijackings growing into airport attacks meant that states needed to widen their scope in terms of measures used to secure their aviation industries. It meant that security officials had consider measures beyond those that just safeguard the aircraft and persons in it, to include those that cover the security of airports, the installations in it, and the people within its environs be they passengers, staff or businessmen. Ground attacks also posed a challenge that

¹² Abramovsky, Abraham. "Multilateral Conventions for the Suppression of Unlawful Seizure and Interference with Aircraft Part I: The Hague Convention." *Journal Transnational* 13 (1974): p. 381.

¹³ Duchesneau, J., *Aviation Terrorism: Thwarting High-Impact Low-Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada, 2015. p. 113

¹⁴ Duchesneau, Jacques, and Maxime Langlois. "Airport Attacks: The Critical Role Airports Can Play In Combating Terrorism." *Journal of Airport Management* 11, no. 4 (2017): 342-354. p. 343

¹⁵ Horvitz, Joanne F. "Arab Terrorism and International Aviation: Deterrence v. The Political Act." *Chitty's Law Journals* 24, no. 5 (1976): p. 145

¹⁶ Tominaga, Erika. "Japan's Middle East Policy, 1972–1974: Resources Diplomacy, Pro-American Policy, and New Left." *Diplomacy & Statecraft* 28, no. 4 (2017): 674-701. p. 6

called for the necessity of screening passenger baggage and carryon bags before entering airport premises or boarding an aircraft, so as to prevent entry of dangerous weapons into the aircraft.

The third wave was characterized by a series of sabotage events which began in the late 1970s escalating in the 1980s. During this period, the aviation industry experienced deadly mid-air sabotages by terrorists which involved the use of explosive devices triggered from within an aircraft while flying or when on the ground. One of the earliest cases in which an aircraft was sabotaged is the bombing of Air India Flight 182 en route to London from Montreal in June 1985, which resulted into 329 deaths, both passengers and crew.¹⁷

On the 27th December of the same year (1985), the first coordinated and simultaneous airport bombings happened at Rome and Vienna airports. The insurgent group Abu Nidal Organization (ANO) specifically targeted an identical group of passengers waiting at the check-in counters belonging to Trans World and El Al airlines at both airports.¹⁸ The attacks resulted into 20 deaths and 120 injuries. The security implications here were that a need arose for aviation security systems to consider incorporating checks and control of devices and materials that had a potential of being used to sabotage aircrafts and the industry grounds plus its installations.

The fourth and current wave which began in the 1990s is characterized by a metamorphosis of the attacks into suicide missions.¹⁹ This nature of attacks involve an individual or a group of individuals intentionally committing suicide in order to destroy an aircraft or an aviation installation while at the same time killing people within. The motive in such cases is for purposes

¹⁷ Seshia, Maya. "From Foreign to Canadian: The Case of Air India And the Denial of Racism." *Canadian Journal of Cultural Studies* 27 (2012): 215-231. p. 215

¹⁸ Schiavo, Mary. "A Chronology of Attacks Against Civil Aviation." *Aviation Security Management* [2008]: p.213

¹⁹ Wilkinson, Paul, and Brian Jenkins. *Aviation Terrorism and Security*. Routledge, 2013.

of annihilation whereby the perpetrators use the aircraft as the weapon for hitting a previously selected target with the intention of causing political, psychological and material damage.²⁰

The most fatal of all successful suicide mission attacks in the aviation industry is the 9/11 attack that happened in 2001 in the U.S. It involved a series of four coordinated terror attacks which resulted in 2,977 fatalities and over 25,000 injuries and destruction of about 10 billion U.S dollar worth infrastructure and property damage. Besides hijacking the planes as a target, the terrorists proceeded to use them as weapons for executing their plan of mass destruction. This particular attack had the greatest impact on the security structure of many states' aviation industry. It is in its aftermaths that the international civil aviation community realized that its approach to responding to terrorism in the industry was not effective. The approach was responding to the last attack rather than preventing the next attack. The realization led to changes in the aviation security structure moving from reactive to proactive approaches.²¹

In their comprehensive study, Azani and others demonstrated that terrorism in the aviation industry remains sustained even after the 9/11 attack. Among the examples they give is the 2006 ~~terror plotting that was unearthed~~ as Al-Qaeda operatives plotted to carry out seventeen simultaneous terror attacks on American and Canadian planes using liquid explosives over the Atlantic Ocean.²² A number of other terror attacks in the industry are still being recorded, some of which will be highlighted in the subsequent sections. This clearly shows that aviation terrorism is still a security threat to many states and pursuance of effective measures to mitigate its negative effects and prevent its occurrence remain every state's priority.

²⁰ Arasly, Jangir. "Terrorism and Civil Aviation Security: Problems and Trends." *Connections* 4, no. 1 (2005): 75-90. p. 81

²¹ Schiavo, Mary., "A Chronology of Attacks Against Civil Aviation." *Aviation Security Management* [2008]: p.140

²² Azani, Eitan, Lorena Atiyas , and Daniel Heberfield . <https://www.ict.org.il/Article/1757/trends-in-aviation-terrorism>. August 10, 2016. (accessed December 18, 2019).

2.3 Chronology of Terrorism Events in Africa's Aviation Industry

Historically, Africa has also had its own share of terrorism incidents against its aviation industry. Most of these incidents were politically instigated. Salient also is the fact that the terror events transcended airspaces of different states and continents. This demonstrates the difficulty of locating a certain aviation related terror event as specifically African especially where the plane's origin is outside the continent but landed on African soil by the hijackers or where a hijacked plane is originating from the region but forcefully landed on a country/continent outside the region.

This also posed a security challenge as the question of which state was to lay charges against the perpetrators of such terror events remained a subject of debate in the industry for a long time. To mitigate the challenge, measures on suspect extradition have been enhanced as spelt out in the current treaties on unlawful acts against civil aviation such as the 2010 Beijing protocol.²³ This section presents some of the documented aviation related terror events that have threatened the security of the African airspace.

Among the earliest recorded incidents is the July 1976 hijacking of Air France airliner destined for Paris from Tel Aviv by two Palestinian insurgents. They demanded release of Palestinian detainees in Israel and other countries in exchange of the hostages. The insurgents forced the plane to land at Entebbe Airport in Uganda during the reign of Idi Amin as the president. In October the following year, a Lufthansa airlines flight 181 was also hijacked en route to Frankfurt by terrorists who landed it in a runway in Mogadishu, Somalia. At the end of a five-day stand-off, the hijackers had killed the plane's pilot and released eighty-six other unharmed

²³ Abeyrtne, Ruwantissa., "The Beijing Convention of 2010 on The Suppression of Unlawful Acts Relating to International Civil Aviation: An Interpretative Study." *Journal of Transportation Security* 4, no. 2 (2011): 131-143.

hostages.²⁴ Despite the one case fatality at this period in time, the hijackers' main motive was to retain the hostages as means to achieve their political agenda but not to kill the hostages.

1980s recorded an upsurge in the use of explosives due to advancement in technology by the time. For instance, the baggage compartment of Air Malta B-737 exploded on the ground in Cairo Egypt while offloading luggage in October 1981. A porter and three security guards were injured when two parcels exploded about fifteen minutes apart. A third bomb that was yet to explode was discovered later.²⁵ In another incidence in November 1985, terrorists heavily armed with guns and grenades seized an Egypt Air aircraft flight 648 flying from Athens to Cairo and diverted it to Malta, where they began executing American and Israeli passengers. The subsequent raid on the aircraft by Egyptian troops led to an exchange with the terrorists using explosives which led to fifty seven deaths out of the 90 passengers on board. This was one of the most lethal terror incidents in the region's aviation history. Important to note in this incident was the fact that the terrorists aimed to cause deaths of particular pre-identified people, with the divides centered on race and religion.

Later during this period, the region also began to record an upsurge in ground attacks in form of airline or airport attacks. In August 1986 for instance, a Sudan Airways flight from Malakal to Khartoum was shot down by the SPLA militants using missiles. All the 160 people on board the aircraft were killed. This trend continued into the following decade, an example being the August 1992 incident in which a powerful bomb planted by Muslim extremists exploded in Algiers International Airport, indiscriminately killing nine persons and injuring over one hundred others.²⁶

²⁴ Krause, Kent C., "Putting the Transportation Security Administration in Historical Context." *Journal of Air Law & Commerce*. 68 (2003): 237

²⁵ Selth, Andrew, "International Terrorism: A New Kind of Warfare." *The Russian Journal* 132, no. 1 (1987): p.65
2008

²⁶ Mellah, Salima, "The Massacres in Algeria, 1992-2004," *Extracts from a Report Presented by the Justice Commission for Algeria*. Berlin: Algeria Watch (2004). p. 8

November 1996 also recorded one of the most lethal aircraft hijackings in the African region involving an Ethiopian airline B-767 en route Nairobi from Addis Ababa by three Ethiopians. The assailants demanded that the aircraft which carried 163 passengers and 12 crew members be diverted to Australia where they intended to seek political asylum. One hundred and twenty-three people died when the plane ran out of fuel and crashed into the Indian Ocean.²⁷

The late 1990s also recorded an upsurge in aircraft shootings. In December 1998 for instance, an Antonov-12 cargo/passenger aircraft flying at a low altitude was shot down by rebel forces in Angola in a fight between government forces and UNITA rebels. In the same month, a C-130 aircraft chartered by the U.N was also shot down by the same rebels in Huambo area using surface to air missile launcher. In the following year 1999, Ethiopia military shot down a Learjet N350JF en route from Naples to Johannesburg thinking it was Eritrean having sidetracked deep into the Ethiopian airspace.²⁸ Airport bombings in the region also recorded an upsurge in the first decade of 2000s. In July, 2000 for instance, a bomb planted in a dustbin exploded between the international and domestic terminals at Cape Town International Airport in South Africa. On 28th December of the same year, the heavily guarded civilian airport in Benguela was attacked resulting in the damage of the control tower, three airplanes and the runway by the UNITA rebels in Angola.

The above events demonstrate that attacks of the nature of aircraft hijackings, sabotages and ground attacks remained persistent and consistent especially in the second decade of the twenty-first century in the region's history. Kishan & Prashanth for instance narrate a February 2014 incident in which the Ethiopian Airlines Flight 702 destined for Rome from Addis Ababa was forced to divert to Geneva airport in Switzerland. The hijacker was a co-pilot who claimed to

²⁷ "Criminal Acts against Civil Aviation," *Office of the Civil Aviation Security*, Springfield, U.S. Department of Transportation, USA (1996). P.42

²⁸ Schiavo M., "The Chronology of Attacks against civil aviation," *Aviation Security Management*. 2008: p. 250

have wanted to seek for political asylum.²⁹ In the month of October the following year, the African airspace also experienced a sabotage attack involving an Airbus A321-231. The airline was bombed above the northern Sinai following its departure from Sharm El Sheikh International Airport in Egypt, en route to Pulkovo Airport Saint Petersburg, Russia.³⁰ The terrorists used explosive devices killing all the people on board.

In February 2016, Al-Shabaab also planted a bomb in the passenger plane in Somalia causing it to develop a hole after take-off.³¹ In January 2018, terrorists also staged ground attack of an international airport in Tripoli Libya killing twenty people and injuring sixty-nine. The armed group of terrorists attacked the airport with heavy weapons, claiming to be seeking to free the Islamic State (IS), al-Qaida and other terrorists from the detention.³² Generally, the terror events in the Africa's airspace took a similar trend over the history of their tactical development from plain hijackings, advancing to include ground attacks and eventually sabotages. The transnational nature of terrorism in the aviation industry is be the best reason to explain the similarity in the trend.

The persistent nature of the terror attacks both in the African and global airspace called for a need to interrogate the general security system of the industry in general. The varied tactics used by terrorists implied that the measures taken to address the challenge were not sufficient to address the terror challenge that the industry was facing in its entirety. The varied tactics employed also implied that there were many cracks within the aviation security system that made it easier for the enemy to penetrate the industry by taking advantage of the vulnerabilities portrayed. Further, they

²⁹ Kishan, K. K., and KV Mahendra Prashanth. "Techniques for Detecting and Tracking of Baggage in Airports." *In 2017 International Conference on Recent Advances in Electronics and Communication Technology (ICRAECT)*, pp. 333-338. IEEE, 2017.

³⁰ Abeyratne, Ruwantissa, "Regulation of Air Transport: The Slumbering Sentinels." *Springer Science & Business Media*, 2013. p. 97

³¹ Barabash, Viktor V., et al., "The Specifics of the Interpretation of Tragedy Over Sinai," *Astra Salvensis* 11 (2018). 289-310

³² Mohamed, Tamer ZF, and Tamer S. Elseyoufi. "Terrorism in the Middle East: Implications on Egyptian Travel and Tourism." *International Journal of Religious Tourism and Pilgrimage* 6, no. 3 (2018): p.7

Indicated a terror group that was way ahead of government security systems in terms of creativity having considered the vulnerabilities in place.

The effects of these persistent attacks are not only felt by the affected airlines but also by the people affected and more so the targeted states. These effects that are social, political and economic in nature transcend societies given the fact that air transport is an interconnected system. The terror activities therefore not only posed security challenges to the security of the airline industry but also to the human, state and the global security.

2.4 Chronology of Terrorism Events in the East African Airspace

Among the earliest recorded incidents in this category is the 20th March 1974 hijacking in which the East African airways Douglas C-4 flight was seized after departing Nairobi en route to Mombasa. The plane was landed in Uganda and later on the passengers were released after President Idi Amin negotiated with hijackers who had demanded to be flown to Libya via Khartoum.³³ Two years later in July 1976, the region experienced another hijacking involving Air France which had been forced to land in Uganda as discussed above. In 1982, Air Tanzania flight B737 was hijacked en route to Kilimanjaro from Mwanza Tanzania. The perpetrator, members of the West wing group who were armed with firearms and grenades demanded for the resignation of the Tanzanian president Mwalimu Julius Nyerere.

Three years later, the region experienced another politically instigated hijacking which happened in November 1985 involving a Ugandan Airways flight from Kampala to Arua, Uganda. The plane was forced to land in Kasese in the southwest of the country. In February 1988, Tanzania experienced another domestic flight hijacking involving Air Tanzania B-737 which was en route

³³ Schiavo M., "The Chronology of Attacks Against Civil Aviation," *Aviation Security Management*. 2008. p. 187

Kilimanjaro from Dar es Salaam with 76 people on board. The perpetrators demanded the release of a political figure who was in the government's custody.

Other than the hijackings, the region has also experienced a ground attack on the 6th of June 1994 in which the plane carrying the sitting presidents of both Rwanda and Burundi was shot down while approaching the runway of Kigali International Airport. This attack is said to have signaled the start of the 1994 Rwandan genocide, whose basis was also on political and ethnic divides. In December 2000, the region experienced the shooting of the Sabena flight airbus A300-200 en route from Brussels to Nairobi. The plane that was on the verge of landing in Bunjumbura International Airport was shot at an altitude of approximately 100 meters by Hutu rebels fighting the Tutsi-led government.³⁴

The events highlighted indicate that the East Africa region's airspace equally witnessed events of hijackings which evolved to include ground attacks taking the same pattern as those have happened in both the African and global region. The above events whether regional or global reveal a sustained spirit of resilience by terrorists to attack the aviation industry. The motives behind the attacks largely remain the push for both a political and religious agenda. The sustained effort by terror groups is because the tactic of attacking the aviation industry has been proven to be effective in projecting their political and religious agenda globally.

Besides this, a successful terror attack in the industry has a potential to cause massive deaths and loss of property which in turn instill psychological fear among masses as states remain coerced to give into the terrorists' demands. Azani and others observe that one successful attack in the industry strengthens the terrorists' motivation to continue carrying out the same activities in

³⁴ "Criminal Acts Against Civil Aviation," *Office of the Civil Aviation Security*, Springfield, U.S. Department of Transportation, USA (1996).

the industry.³⁵ The continually changing and unpredictable nature of the M.O used by aviation terrorists poses a challenge to security agencies to widely incorporate intelligence as a measure to deter the attacks.

2.5 The Evolution and Development of the Kenyan Aviation Industry

The history of domestic air transport services in Kenya started immediately after the First World War. Wilson Airways provided the very first domestic air transport services from 1929. Four years later, the airline introduced regular passenger services that plied Nairobi-Dar es Salaam route through Mombasa on a day by day basis.³⁶ This led to the development of regional communication that linked the towns in East Africa with key routes like Cairo in Egypt and Cape Town in South Africa. Wilson Airways also introduced flights to Entebbe in Uganda, as well as Jinja, Kisumu, and Nakuru.³⁷ The development by the Wilson airways laid a foundation for the aviation industry in Kenya and East Africa. The government, realizing the importance of air transport put into place measures to control and facilitate the landing spaces. They classified the landing into three categories which include government-owned and managed civil aerodromes, private civil aerodromes and private unlicensed aerodromes that are not accessed by the public.³⁸

The earliest scheduled international air transport was during the 1930s with services provided by the Imperial Airways, the forerunner of the British Overseas Airways Cooperation (BOAC) which would pass through Nairobi to Cape-Town.³⁹ However, when World War II broke out in 1939, Wilson Airline was liquidated, but later in 1946, East African Airways Corporation

³⁵ Azani, Eitan, Lorena Atiyas, and Daniel Heberfield . <https://www.ict.org.il/Article/1757/trends-in-aviation-terrorism>. August 10, 2016. (accessed December 18, 2019)

³⁶ Evaristus M. Irandu, 'The Development of Jomo Kenyatta International Airport as A Regional Aviation Hub,' *Journal of Air Transportation* 11:1 (2006), p.54

³⁷ Ibid 34

³⁸ Makunyi, Evaristus. "Air Transport in Kenya: An Analysis of Domestic and International Airline." *University of Nairobi Educational Journals* 1995: 52-90. P.61

³⁹ Evaristus M. Irandu, 'The Development of Jomo Kenyatta International Airport as A Regional Aviation Hub.' *Journal of Air Transportation* 11:1 (2006), p.56

(EAAC) was created to replace it and form a regional airline. EAAC came about when three African countries, Kenya, Tanzania and Uganda, came together to start a joint operation of the then African Airways which operated and only disintegrated with the East African Community (EAC) in 1977.⁴⁰ It is after this that each started operating its own aviation industry by establishing its national carrier as well as construct modern international airports. Accordingly, Kenya started its own airline known as Kenya Airways (KQ) in 1977 to offer domestic and international scheduled passenger flight services.

As a country, Kenya aspires to be a regional hub by the year 2030, and according to its Medium-Term Development Plans (MTPs), it has prioritized this vision and started by establishing and upgrading the existing airports and airstrips into modernized international and domestic airports. The major reason for this upgrade is to increase the number of commercial flights into the country and connect Kenya to the rest of the world. With such developments taking place, the country anticipates increased commercial activities especially in all enterprises that serve airports, increased job opportunities, thriving aviation industry and significant growth in the Kenyan economy.⁴¹

2.5.1 The Terror Threat in Kenya's Aviation Industry

The remarkable growth and development in inter-connectivity and technology in Kenya's aviation industry has not been spared of terror threats. This is partly attributed to Kenya's proximity to Somalia, the hideout of Al Shabaab insurgents as well as the highly porous borders. The earliest recorded incident concerning the first encounter Kenya had related to aviation terrorism concerns the hijacking of Air France plane, flight number 139 in 1976 as discussed in the foregoing thematic areas. The plane was seized en route to Israel from France and flown into

⁴⁰ Felix Kiminyei and Brian Obiero, 'Making Kenya the Aviation Hub in Africa', *KIPPRA*, 2019, p.1

⁴¹ *KIPPRA*. Retrieved November 2, 2019, from <https://kippra.or.ke/making-kenya-the-aviation-hub-in-africa>. (2018)

Entebbe, Uganda. Kenya's role in hosting the Israeli rescue team pre and after their rescue mission in Uganda led to it being ostracized by almost all African countries claiming that Kenya sided with Israeli in its aggression against Uganda. The accusations were tabled before the United Nations Security Council (UNSC).⁴²

The other documented terror related incident in Kenya's aviation industry is the attempt to down an Israel bound airliner which happened in November 2002. The Al-Qaeda affiliated operatives executed a twin terror attack in Kikambala Mombasa. In one of the attacks, two shoulder-launched Strela 2 (SA-7) surface-to-air missiles were fired at an Israeli chartered airliner as it was taking off from Moi International Airport en route to Tel Aviv with over 261 passengers on board.⁴³ The ground attack is believed to have been orchestrated by Al-Qaeda operatives in an attempt to disrupt the Israeli tourist industry on the African continent. The missiles narrowly missed the plane, otherwise the effects would have been devastating.

This attack occurred two and half months after the first anniversary of the September 11 attacks which occurred in New York and Washington, DC. The incident was followed by a foiled terror plot to attack the US embassy along Mombasa road in June 2003. This attack was to be executed jointly using a truck-bomb and a hijacked airplane from Nairobi's Wilson Airport loaded with explosives.⁴⁴ The discovery of the plot led to the closure of the targeted embassy for four days. The incident also led to Kenyan authorities banning flights to and from Somalia, deemed to be a haven for terrorists. It is also believed that in early 1990s, Wilson airport acted as the staging base for Al-Qaeda operatives' entry flights to Somalia.⁴⁵ This means that the airport plays a key

⁴² Kreß, Claus, and Benjamin K. Nußberger. "Part 1 The Cold War Era (1945–89), 19 The Entebbe Raid—1976." Oxford University Press. (2018).

⁴³ Eichstaedt, Peter. Pirate State: Inside Somalia's Terrorism at Sea. *Chicago Review Press*, 2010. p.124.

⁴⁴ Cigar, Norman, and Stephanie E. Kramer, eds. *Al-Qaida After Ten Years of War: A Global Perspective of Successes, Failures, and Prospects*. Government Printing Office, 2011

role in facilitating the movement of terror perpetrators to and from Somalia. It also implies that its safety guarantees may also extend to security in Kenya's air aviation industry.

In October 2004, an explosion struck a customs warehouse at Nairobi's Wilson Airport and injured two customs workers. The blast was so powerful that it tore roof tiles off and shattered wooden beams. Although the Kenyan government denied that it was a terror attack, the United States Department of State indicates in its 2004 counterterrorism country reports that the uncoordinated response to the explosion calls for the need for better coordination mechanisms and continued improvement of security measures.⁴⁶ It is quite telling that the blast was not an ordinary one for it to be recorded in the U.S' counterterrorism reports.

Terrorists have constantly posed threats to the country's aviation industry. It is for this reason that security officials at Kenya's airports are often cautioned to be on high alert. For instance, on the 26th of February 2016, contents of an internal memo authored by Kenya's Airports Authority addressed to all its airport managers were brought to the public. The memo warned airport employees that the al Qaeda-linked terror group Al Shabaab would deploy suicide bombers trained in Somalia "on airborne suicide missions to attack any of the industry's facilities."⁴⁷

The constant travel advisories by the international community's intelligence to its citizens regarding exercising caution in their travel plans to Kenya are equally indicative of an imminent ~~terror attack in the country's~~ aviation industry. On the 31st of December 2019 for instance, a US government agency warned of a terror threat in Kenya's airspace. The advisory by United States Federal Aviation was directed to its civilian airlines and all operators of US registered aircraft

⁴⁵Downing, Wayne A. *Al-Qa-ida-s (Mis) Adventures in the Horn of Africa*. DIANE Publishing, 2009. (2007). p.49

⁴⁶"Country Reports on Terrorism 2004," *Office of the Coordinator for Counterterrorism*. United States, Department of State (2005).

⁴⁷Kriel Robin, "Kenya's Major Airports on High Alert After Terror Threat Warning." 29th February 2016. Retrieved from <https://edition.cnn.com/2016/02/29/africa/kenya-airports-terror-alert/index.html>

warning the air carriers to exercise caution when flying over Kenyan space, citing possible attacks by extremists.⁴⁸

Barely a week after, on the 5th of January 2020 the Al Shabaab attacked a military airstrip used by both US and Kenyan forces in Manda Bay in Lamu County. Besides attacking and destroying vital military installations, aircrafts and other properties, three US personnel were killed while others were left wounded.⁴⁹ The fact that the airstrip is located adjacent to a military camp base that hosts military personnel from both Kenya and U.S forces did not deter the insurgents from executing the attack. This indicates that the terror group is determined to launch successful attacks against the state's aviation facilities. Another warning that followed this on the heel was issued on the 26th of February 2020. In the advisory, the United States Federal Aviation Administration (FAA) cautioned all U.S registered airlines to be cautious while flying into, out of, within, or over the territory and airspace of Kenya due to the possibility of extremist/militant activity.⁵⁰ Indeed, Kenya has become a stage for various and numerous terrorism attacks. The continued upsurge of the unpredictable attacks calls for the need to exercise extreme caution in structuring the industry's security system.

2.5.2 Vulnerabilities of the Kenyan Aviation Industry to Terrorism

Various scholars and practitioners have identified poor location of the state's international airports, encroachment of airport land, ineffective security screening equipment and procedures, irregular update of technology and inadequate training of security personnel as some of the factors that render the industry vulnerable to terror activities. Most of Kenya's aviation industry is

⁴⁸Ngugi Brian., "US Agency Warns of Threat to Kenyan Airspace." The East African. December 31, 2019. <https://www.theeastafrican.co.ke/accessed> April, 3, 2020.

⁴⁹Gibbons-Neff et. al., "Chaos as Militants Overran Airfield Killing Three Americans in Kenya." The New York Times. January 22, 2020. <https://www.nytimes.com/accessed> April 3, 2020.

⁵⁰Nyambega G. "Fears as US Warns of Possible Terror Threat in Kenyan Airspace." <https://www.nation.co.ke/accessed> April 3, 2020.

vulnerable to missile attacks due to the poor location of its facilities that include the international airports. Majority are closely located to bushy or residential and business areas that are characterized by high population. This not only makes it difficult to police the facilities, but also renders them susceptible to acts of unlawful interference.⁵¹

Such environments easily attract terrorists who camouflage themselves within the environment and can easily use shoulder launched missiles from these areas aimed at a flight while landing, taking off, flying low or at lower speed. This is what happened in the 2002 attempt to down the Israeli airliner in Kikambala. Missiles were aimed at the aircraft that was carrying a number of tourists flying back to Israel from Moi International Airport as it was taking off.

The poor location of the industry's facilities is largely a factor of inadequate land for expansion. This has made it difficult for the industry management to effectively implement risk management procedures.⁵² A study by Agoi on success factors and risk management at KAA indicates an increasing demand for the aviation facilities which the management cannot offer. Kenyan airports which were initially constructed to handle 1.5 million passengers per year are now handling more than 6.5 million passengers.⁵³ Challenges of grabbing airport land, squatter encroachment and high prices of land around the airports have aggravated the problem making it difficult to acquire more land to put up facilities that will accommodate the ever-growing numbers of passengers.

Ineffective security screening equipment and procedures are also factors that render the industry susceptible to terror related activities. Occasionally, the airport equipment fails to operate

⁵¹ Bichou, Khalid, Joseph Szyliowicz , and Luca Zamparini. *Maritime Transport Security: Issues, Challenges and National Policies*. New York: Edward Elgar, 2014. p. 52

⁵² Agoi, Alfred. *Critical Success Factors and Risk Management Procedures at the Kenya Airports Authority*. Unpublished Masters Research Project. University of Nairobi, Kenya. 2013: 1-72

⁵³ Ibid p 44

and this compromises its security system. Airports need to have high technology security equipment to enable activities such as effective explosive detection and computer assisted passenger screening. Screening procedures need to include standard measures at the various layers of the aviation industry such as departure areas, security restricted areas, and waiting lounges. This serves to ensure that both passengers and cargo meet the required standards before they are allowed entry.

Concerns of VIP treatment procedures have been questioned whereby senior government officials and resident diplomats decline to go through the screening procedures claiming immunity rights.⁵⁴ This equally renders the industry susceptible to terror threats in that it is possible for terrorists who fraudulently obtained a diplomatic passport to escape the stringent passenger screening measures. Coupled with this factor is the use of obsolete technology. This renders the aviation industry vulnerable to security threats that emanate as a result of non-detection of risky objects and persons into airport restricted areas and aircrafts. Adopting better, productive and updated approaches that encourage more use of sophisticated luggage screening devices, people scanners and biometric systems therefore becomes a necessity in enhancing the industry's security system.⁵⁵

The industry however faces the challenge of insufficient funds to enhance security efficiency by procuring up to date airport security technology.⁵⁶ This factor precipitates its overreliance on external funding, the strings attached notwithstanding. An example is the passenger screening systems donated and maintained by the U.S government. While the gesture is

⁵⁴ Bichou, Khalid, Joseph Szyliowicz , and Luca Zamparini. *Maritime Transport Security: Issues, Challenges and National Policies*. New York: Edward Elgar, 2014. p55

⁵⁵ Ibid.p.32

⁵⁶Agoi, Alfred. *Critical Success Factors and Risk Management Procedures at the Kenya Airports Authority*. Unpublished Masters Research Project,University of Nairobi, 2013. p.54

okay, the danger is that the government is not fully in control of this information database which is critical for state security. A lack of an updated security technology also limits the state's capacity and ability to stay ahead of terrorists.

Air cargo is another challenge that presents potential threat not only to the freight carriers and storage facilities within the industry, but also to the passenger planes involved in carrying the cargo.⁵⁷ Many cargo related companies working within the industry's facilities employ a number of people whose background is not well checked to provide cheap labour. It therefore becomes easy to employ an operative whose intentions may not be publicly displayed some of whom can be compromised to sneak in explosives in the storage facilities and aircrafts. This renders the cargo system vulnerable to terror threats. Such vulnerability renders the air transport industry at risk and with detrimental effects to the global economy due to massive losses of life, property and interruption of trade in case of a successful terror attack. The aftermaths of 9/11 terror attack led to emphasis on enhanced passenger air travel security leaving the cargo security system more vulnerable, and hence, a likely target for terrorists.⁵⁸

Inefficient border control measures compromise the security architecture of any aviation industry. Airports serve as part of the frontier pathways into a country. The inadequacy of these measures guarantees ineffective security at airports leaving the country vulnerable to illegal immigrants, smuggling and trafficking in of persons, drugs and arms and organized criminals including terrorists. Many countries are reconsidering the security architecture of their frontier pathways. Additional control measures over immigrants, asylum seekers and other foreigners such as use of tamper proof passports and imposing of stringent rules on visa issuance need to be introduced.

⁵⁷ Ibid p. 185

⁵⁸ Szliowicz, Joseph. "Aviation Security: Promise or Reality." *Journal of Studies in Conflict & Terrorism*, 2010: 47-63. P56

Bichou and others, propose consideration of integration of all border security support services such as immigration, intelligence and customs as a measure to enhance security. They argue that this will enhance detection of unlawful activities at ports of entry and the interlinking of frontier posts for easy sharing of information on matters of aviation security and monitoring of immigrants.⁵⁹

Although these stakeholders have not integrated their services, mechanisms have been put in place to enhance their cooperation in joint delivery of security services to the industry through joint operation centers and border management committees. Agoi however points out that coordination challenges make these efforts ineffective. He further points out that the coordination challenges are occasioned by unclear protocol concerns.⁶⁰ Putting in place proper protocols on communication and information sharing provides a platform for establishment of common objectives, early identification of security threats, designing of achievable corrective and mitigation measures as well as effective implementation of agreed objectives and strategies.⁶¹

The above discussed challenges demonstrate the vulnerable areas that can easily be penetrated by terrorists who may be aiming to attack the state's aviation industry. This can be aggravated in the form of aircrafts arriving from airports where prior passenger and cargo screening is not keenly observed at take-off. This means that a terrorist or explosive device can easily be sneaked into the country, more so because the arrival clearance procedures do not require arriving passengers and their luggage which passes through many transfer points to be screened through x-ray machines upon arrival.

⁵⁹ Bichou, Khalid, Joseph Szyliowicz, and Luca Zamparini. *Maritime Transport Security: Issues, Challenges and National Policies*. New York: Edward Elgar, 2014. P.41

⁶⁰ Agoi, Alfred. *Critical Success Factors and Risk Management Procedures at the Kenya Airports Authority*. Unpublished Masters Research Project, University of Nairobi, 2013.. P.43

⁶¹ Mulama, Kevin, and Yusuf Muchelule. "Factors Affecting Contingency Preparedness at Kisumu International Airport, Kisumu County, Kenya." *Journal for Studies in Management and Planning*, 2016: 364-378. p.376

2.6 Conclusion

The chapter's main highlights were on the historical development of the aviation industry as well as that of the terrorism phenomenon within it. Notable is the fact that as the industry grew in terms of technology and connectivity, so did the terrorism threat whose complexity kept advancing extensively and intensively within the globe. Salient is the fact that the terrorism phenomenon has remained sustained over time within the industry and its effects transcended the jurisdiction of many states. The chapter laid the foundation for the next chapter's discussion on the responses that have been adopted over time to address terrorism in the aviation industry.



CHAPTER THREE

RESPONSES TO TERRORISM IN THE AVIATION INDUSTRY

3.1 Introduction

In chapter two this study explored the evolution and development of the aviation industry. The chapter traced the development of the industry from a global level and cascaded down to the national level. The chapter also singled out and focused on the challenge of terrorism in the aviation industry tracing its roots of origin and evolution to the present. It was evident that just as the aviation industry developed and evolved from the global to the national levels, so did the terrorism phenomenon.

This chapter focuses on responses to these challenges tracing such actions and measures taken. It examines process and development of the international civil aviation's legal, regulatory and technical framework with a focus on combating terrorism. This provides a general understanding of the rationale behind the establishment of the responses and how they have shaped the current civil aviation security both at the global and national levels.

3.2 The Evolution of Legal, Regulatory and Technical Responses

Global responses to aviation terrorism have been mainly through the development and enactment of international law and legal and regulatory frameworks which are established bilaterally and multilaterally. The legal and regulation process entails the establishment of rules and principles that guide and help to bring or maintain order within the aviation industry. The process is mainly negotiated either bilaterally or multilaterally between and among willing states. Such meetings examine issues related to terrorism in the aviation industry, adopt recommendations Or resolutions, or conclude or amend intergovernmental agreements.¹

¹ Manual on the Regulation of International Air Transport (Doc 9626) (Third Edition -2016) p. 52

The first ever multilateral diplomatic conference convened to consider air transport regulation was the 1910 Paris International Conference of Air Navigation. The government of France invited twenty-one European States to Paris to regulate air navigation.² Despite ending up to be a diplomatic failure, the conference set the basis for the 1919 diplomatic conference in which the Paris Convention accord that confirmed the notion of states' sovereignty over their airspace was drafted and signed.³ Conducted under the auspices of the International Commission for Air Navigation, the objective of the conference was to address the political wars involved in international aerial navigation. The accord drawn by the Aeronautical Commission of the Peace Conference of Paris gave rise to some guiding principles and provisions.⁴ Subsequently, a number of other aviation regulation conferences were conducted but the most significant of them was the Chicago Convention on Civil Aviation which exclusively became the legal reference for civil aviation.⁵

The Chicago conference was called by the United States in 1944 during World War II period, with the aim to promote cooperation among nations on civil aviation related matters. Amongst the milestones achievement of the conference was the Chicago Convention on International Civil Aviation which established the basic rules of international air law and also gave provisions for the basis of the regulation of international civil aviation worldwide.⁶ It is this Convention that established the International Civil Aviation Organization (ICAO) which eventually became a UN specialized agency in October 1947. ICAO has henceforth become quite

² Cooper, J., "The International Air Navigation Conference, Paris 1910," *J. Air L. & Com.* 19 (1952): 127.

³ International Civil Aviation Organization. *Manual on the Regulation of International Air Transport.* Vol. 9626. International Civil Aviation Organization, 2004. P.53

⁴ Bouve, Clement L. "The Development of International Rules of Conduct in Air Navigation." *Air Law.* Rev 1 (1930): 1.

⁵ Mackenzie, David. *ICAO: A History of The International Civil Aviation Organization.* University of Toronto Press, 2010. p. 1

⁶ Roderick D. van Dam, *Regulating International Civil Aviation: An ICAO Perspective,* (Norwell, MA: Martinus Nijhoff, 1992). p.11

Instrumental in spearheading multilateral regulation of international air transport which includes aviation counterterrorism measures. Although envisioned to have a futile future because of its overemphasis on civil aviation,⁷ the great strides made cannot be underrated.

3.2.1 Legal and Regulatory Responses to Aviation Security

As established in chapter two, the terrorism phenomenon evolved and became sophisticated as the aviation industry developed and its interconnectivity widened. Various actors in the industry made great progress towards developing a series of legal instruments and standards to regularize and harmonize its operations. Among them are; International Air Transport Association (IATA), United Nations (UN), Government Leaders (G7/G8) and International Civil Aviation Organization (ICAO). Of them all, ICAO is the most important one and its technical standards, legal regulation and operating procedures have made significant contribution to the development of international civil aviation security program.⁸

The international legal and regulatory framework that emerged has over time played a crucial role in instilling a culture of cooperation among states on matters of aviation security.⁹ From a legal perspective, the 1944 Chicago Convention on International Civil Aviation is one of the key instruments, as well as other related Conventions and Protocols that have been developed and adopted over time. The laws describe the acceptable aviation security conduct and through them, order has been brought into the industry. The regulatory arm is the technical component which relates to rules and regulations that support application of already set laws.¹⁰ The rules and

⁷ Cooper, "The International Air Navigation Conference, Paris 1910." p.300

⁸ Mackenzie, David. *ICAO: A History of The International Civil Aviation Organization*. University of Toronto Press, 2010.

⁹ Abeyratne, Ruwantissa. *Aviation security law*. Springer Science & Business Media, 2010. p.6

¹⁰ Aleman, Moses., 2008. "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management* 65-75. p.68

regulations form the Standards and Recommended Practices for Security (SARPS) in the international civil aviation which are incorporated in Annex 17 of the 1944 Chicago Convention.¹¹

The contemporary global environment which is highly interconnected and dynamic has provided fertile ground for terrorism to keep thriving both intensively and extensively in the industry. Following this, supplemental changes have been made to the international law and regulations in order to address and prevent terrorist attacks against civil aviation. Consequently, the aviation security structure of many nations has changed to embrace new strategies such as the multi-agency cooperation approach which involves the working together of different security supporting agencies deployed in the industry in pursuance of one common goal, which is to combat terrorism. The approach is used in implementing established security standards and procedures that have been adopted at both national and international levels to respond to the increasingly changing and multi-faced terrorism phenomenon in the aviation industry.¹²

The approach is considered to yield better results in mitigating terror attacks because it Tackles the problem using a multi-layered approach that involves positioning the involved security agencies at different levels of the aviation security structure, each tackling the problem from a different angle according to their area of specialties. Put together, the efforts ensure that all the risks and vulnerabilities within the industry are sealed to thwart the terrorists' efforts before maturity. In this case, a successful terror event must have passed through a number of security checks and screenings that are mandatory for any person or cargo that goes through the aviation industry for whatever reason. A successful terror event within a multi-layered security system Would therefore imply that the system had cracks within it to allow the enemy to penetrate. The

¹¹ Ibid. p.68

¹² Bogdanos, Matthew F., "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, No. 37(2005). pp. 10-18 p.11

Approach therefore provides a proactive way of responding to terrorism in the industry unlike the previous reactive approach which only addressed a terror event after its successful occurrence.

A number of conventions, protocols and subsequent security measures have been adopted to address civil aviation terror threats manifested in form of hijackings, ground attacks, bombings and suicide missions. A review of the philosophical basis of these instruments will provide an understanding into the genesis of national civil aviation anti-terrorism legislation, regulations and working procedures.

3.2.2 International Legislation on Combating Aviation Terrorism

In the initial responses to terrorism in the aviation industry, majority of nations primarily relied on unilaterally establishing national legislation and bilateral agreements to combat the acts of unlawful seizure and interference with aircraft.¹³ The inadequacy of these responses in curbing aircraft hijackings led states into seeking for an international law as the best solution to the problem which transcended many states.¹⁴ In this case, certain international regulatory responses have been adopted by the international community to counter aviation terrorism over the years since 1963. This section analyzes the establishment of these instruments in relation to the four waves of terror attacks in the aviation industry.

As established in chapter two, the 1960s were characterized by an escalating series of aircraft hijackings. The first three conventions namely, the Tokyo, the Hague and the Montreal were specifically established to address the rampant aircraft hijackings which were common During this era.¹⁵ The 1963 Convention on Offenses and Certain Other Acts Committed on Board

¹³ Abramovsky, A., "Multilateral Conventions for the Suppression of Unlawful Seizure and Interference with Aircraft Part I: The Hague Convention," *Columbia Journal of Transnational Law*. 13 (1974): 381.

¹⁴Ibid

¹⁵ Aleman, Moses., "The International Civil Aviation Security Program Established by ICAO." *Aviation Security Management* (2008) 65-75 p. 72

Aircraft was the first multilateral convention on aviation terrorism. The Convention normally referred to as the Tokyo Convention was adopted under the auspices of ICAO in September 1963.¹⁶ It was intended to achieve two main objectives: First, to ensure that there will always be a jurisdiction for offences against penal law in form of the state in which the aircraft is registered and secondly gave powers to the aircraft commander or any other specified persons to take measures against persons who commit or are about to commit an offence on board an aircraft which jeopardizes the safety of the aircraft or that of persons or property therein.¹⁷

Scholars like Gutierrez however saw the convention as ineffective right from its inception. Arguing that conflicts of jurisdiction may arise when a crime is committed on board an international flight. In addition, the issue on powers and responsibilities of the aircraft commander were legally disputed.¹⁸ Despite these misgivings, the convention entered into force in December 1969 following the July 1968 hijacking of El Al flight 426. This particular hijacking also fueled the second international legal response to aviation terrorism, the 1970 Convention for the Suppression on Unlawful Seizure of Aircraft adopted in December 1970. Also known as the Hague Convention, its primary objective was to arrive at an acceptable method of adequately dealing with alleged perpetrators of acts of unlawful seizure of aircraft.¹⁹ Despite the two legal instruments being in place, cases of aircraft hijackings remained persistent. The series of five hijackings by the Palestinian insurgents in September 1970 provided a basis for the third international legal response to terrorism in the aviation industry, “the 1971 Montreal Convention on the Suppression of Unlawful Acts against the Safety of Civil Aviation. The convention made it an offence for any

¹⁶ FitzGerald, F., “Offences and Certain Other Acts Committed on Board Aircraft: The Tokyo Convention of 1963,” *Canadian Yearbook of International Law* 2 (1964): 191–204. p. 191

¹⁷ Ibid. p.192

¹⁸ Juan J. Lopez Gutierrez, “Should the Tokyo Convention of 1963 Be Ratified,” *Journal of Air Law & Commerce*. 31 (1965): 1. p.1

¹⁹ Abramovsky, “Multilateral Conventions for the Suppression of Unlawful Seizure and Interference with Aircraft Part I: The Hague Convention.” p. 392

Person who unlawfully and intentionally performs an act of violence against a person on board an aircraft and a person who acts in a way that is likely to endanger the safety of the aircraft.

The convention also not only made it an offense for any person who attempts such acts but also any person who is an accomplice of a person who performs or attempts to perform such acts.²⁰ The stringent measures were majorly directed against hijackers and the nations tolerating them.²¹ The three conventions however had limitations in that they only dealt with "unlawful seizure" committed on board aircraft ignoring attacks committed on the ground as well as unlawful interferences with air navigation, facilities and services such as airports, air control towers or radio communications.²² It is evident that all these were established to mitigate aircraft hijackings which were already a menace in the industry. Despite their weaknesses, it is The Hague and Montreal Conventions that established a basis for multilateral instruments on terrorism in the aviation industry.²³

As established in chapter two, the second wave of terrorism in the aviation industry was characterized by an escalation of ground attacks in the 1970s. The highlights of these events were the simultaneous terrorist attacks at the termini of the Rome and Vienna International airports and this led to the establishment of the fourth international legal instrument, the 1988 Montreal Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation. The protocol amended the weaknesses of the 1971 Montreal Convention which only criminalized unlawful acts committed against the aircraft as discussed above.²⁴ The protocols

²⁰ Agaust, T., & Follows, A., "Discourage Acts of Violence Against Civil Aviation," *N.D.* p.1152

²¹ Thomas M. Franck and Bert B. Lockwood, "Preliminary Thoughts Towards an International Convention on Terrorism," *American Journal of International Law* 68, no. 1 (1974): 69–90. p. 70

²² René H. Mankiewicz, "The 1970 Hague Convention," *Journal of Air Law & Commerce* 37 (1971): 195. p. 209

²³ Witten S., "Introductory Note to The Convention on The Suppression of Unlawful Acts Relating to International Civil Aviation and The Protocol Supplementary To The Convention For The Suppression of Unlawful Seizure of Aircraft," *International Legal Materials* 50, no. 2 (2011): 141–59. p 141

²⁴Ibid

Establishment therefore enhanced the international regulations on aviation terrorism and provide an extension of coverage beyond the aircraft, thus covering airports which host passengers before they depart or after they arrive. Salient also is the fact that this protocol was established in the third wave period to address the second wave attacks of the 1970s after their long history of existence.

These legal instruments already in place were also found to be insufficient to address mid-air sabotage attacks which had escalated during the third wave period of the 1980s. Specific examples are the two incidents in 1985 and 1988 respectively which involved Air India which claimed 331 lives and the second Pan Am Flight 103 where 270 people perished. This realization led to the establishment of the 1991 Montreal Convention. The convention was passed seven years later aiming to prohibit and prevent the manufacturing and storage of unmarked plastic explosives, which were commonly used for mid-air attacks.²⁵ It is also obvious that this convention equally came long after mid-air sabotage attacks had become a security threat to the industry.

The international legal and regulatory instruments to address the forth and current wave of the aviation industry attacks of suicide mission in nature were established nine years after the 9/11 attacks which exemplify suicide mission attacks. This was through the 2010 Beijing convention and its supplementary protocol. Generally, the above trend illustrates that responses meant to address the first wave of terror attacks were developed in the second wave period. Those addressing the second wave challenges were developed in the third wave era. Further, the responses addressing the third wave attacks were also developed during the fourth wave era and those addressing the forth wave attacks were developed long after their escalation.

In other words, each instrument was established to address a specific terror event as it was Manifested and long after its escalation. The responses therefore took a reactionary approach rather

²⁵ Aleman, Moses.,” The International Civil Aviation Security Program Established By ICAO.” *Aviation Security Management* (2008) 65-75. p. 69

than a proactive approach and were found to be insufficient to combating terrorism and related events in the industry, as demonstrated by the sustained terror attacks even after their establishment.²⁶ This implied that the security system of the aviation industry needed to be reexamined.

3.2.3 Proactive Responses

A new forward-thinking approach to aviation security was hatched in 2010 which marked ICAO's transition era from focusing on reactive measures to laying emphasis on adopting proactive measures that emphasized prevention of terrorism and related activities in the aviation industry.²⁷ The 2010 Beijing Convention on the Suppression of Unlawful Acts relating to international civil aviation was informed by this new proactive thinking. The convention which was established after long deliberations following the 9/11 attacks constituted the sixth international legal response to terrorism in the aviation industry. In addition to the earlier offenses, the convention which is an improvement of the 1971 Montreal Convention criminalized cyber-attacks on air navigation facilities for the first time.²⁸ It also considered criminalizing the threat to commit an aviation related terror attack, hence the criminalization of the act of conspiring to commit an offence.²⁹ The convention therefore provided not only a pre-emptive approach in countering terrorism in the aviation industry by tackling the phenomenon from the level of intention to carry out a terror attack, but also the act itself. This strategy offered a more

²⁶ Azani, Eitan, Lorena Atiyas, and Daniel Heberfield. <https://www.ict.org.il/Article/1757/trends-in-aviation-terrorism>. August 10, 2016. (accessed December 18, 2019).

²⁷ Oster Jr, Clinton V., John S. Strong, and C. Kurt Zorn. "Analyzing Aviation Safety: Problems, Challenges, Opportunities." *Research in Transportation Economics* 43, no. 1 (2013): 148-164. p.149

²⁸ Damien Van der Toorn, "September 11 Inspired Aviation Counter-Terrorism Convention and Protocol Adopted," *Insights*, 1-5: (2010).p. 1

²⁹ Abeyratne, Ruwantissa. "The Beijing Convention Of 2010: An Important Milestone in The Annals of Aviation Security." *Air and Space Law* 36, no. 3 (2011): 243-255.

comprehensive response because of its ability to dispel a terror attack long before it causes any physical, social, political, economic or psychological harm.

The 2010 convention also provided a Supplementary Protocol to the Convention for the Suppression of Unlawful Seizure of Aircraft as an improvement of the Hague Convention which focuses on a specific offence, “the unlawful seizure of an aircraft in international civil aviation.”³⁰ In this sense, the protocol elaborated on the hijacking offense and strengthened its provisions in specific ways. For example, it recognized that not all persons involved in airplane hijackings will physically board the aircraft and for this reason it extended the cover of hijackings to occur pre or post-flight. The protocol also provided for criminalization of attempts to commit a terror offense, accomplice liability, conspiracy, and assistance after the act. It also included more detailed extradition and legal assistance provisions than the Hague Convention.³¹ It therefore put every actor in their various forms, passengers, insider employees or any other person on high alert lest one falls victim of being an accomplice or being used to support such activities.

3.3 Technical Responses

In this study, technical responses refer to the practical measures that have been put in place to enact the international legal instruments that address terrorism in the aviation industry. They consist of the state’s use of the international standards and recommended practices, the aviation security program and the universal security audit program.³²

³⁰ Abeyratne, Ruwantissa. "The Beijing Convention of 2010 on The Suppression of Unlawful Acts Relating To International Civil Aviation—An Interpretative Study." *Journal of Transportation Security* 4, no. 2 (2011): 131-143.

³¹ Witten S., “Introductory Note to The Convention on The Suppression of Unlawful Acts Relating To International Civil Aviation And The Protocol Supplementary To The Convention For The Suppression Of Unlawful Seizure Of Aircraft.” p.142

³²Aleman, Moses., “The International Civil Aviation Security Program Established By ICAO.” *Aviation Security Management*. 2008:65-75. p. 72

3.3.1 The International Standards and Recommended Practices (SARPS)

The ICAO's Annex 17 focuses on the international standards and recommended practices (SARPS) meant to safeguard the aviation industry against acts of unlawful interference.³³ The rules and guidelines spelt out in the annex are created by a specialist body that was inaugurated in 1985 following the bombing of an Air India Boeing 747 over the Atlantic where more than 300 persons died.³⁴ This further explains the fact that responses to combating terrorism in the aviation industry then were more reactive than proactive not only at the strategic levels but also at the operational and consequently at the tactical levels of aviation security. The specialist body's mandate extends to regular reviewing of the international security standards and re-writing them.

Annex 17 is therefore seen a secondary legislation that plays a critical role in the field of aviation security and ICAO member states are expected to implement it. It provides the standard operating procedures of aviation security and is also the basis for the existing international civil aviation security regulations. Annex 17 therefore provides civil aviation authorities with a comprehensive document that contains all SARPS that directly deal with matters related to aviation security.³⁵ Of importance too is the fact the manual seeks to coordinate activities of all agencies involved in aviation security programs and stresses on the importance of cooperation and coordination among them.³⁶ Strict adherence to this is expected so as to improve the security Situation of the air transport industry and thereby reduce cases of terror attacks within it.

³³ Rodney Wallis, "The Role of the International Aviation Organisations in Enhancing Security," *Terrorism and Political Violence* 10, no. 3 (1998): 83–100. p. 85

³⁴ Ibid p.84

³⁵ Aleman, Moses., "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management*. 2008:65-75. p. 72

³⁶Duchesneau, Jacques., *Aviation Terrorism: Thwarting High-Impact Low Probability Attacks*. Unpublished PhD Thesis, Royal Military College of Canada. 2015. p 172

3.3.2 The Aviation Security Program

The happenings of the 9/11 attacks brought to light the fact that despite the stringent measures put legally and in practice, there existed some lapses which needed to be revisited. On this basis, ICAO called for a review of all its security policies and consequently established and adopted an Aviation Security Program (AVSEC) meant to facilitate the development of long-term strategies meant to improve and intensify the implementation of SARPS as spelt out in annex 17 and the security manual that guides their implementation. The program is meant to be mandatory for all ICAO member states.³⁷ Proper implementation of the program will enhance the level of security in the industry, and consequently help to thwart terrorism and its related activities from it.

3.3.3 Universal Security Audit Program

The review of the security policies after the September 9/11 attack also called for the implementation of a Universal Security Audit Program (USAP). This was after establishing that some member states were slow in implementing the legal and regulatory measures agreed upon, even after assenting to them. This situation of events put the global airspace at risk of increased terror attacks by virtue of the increased air transport interconnectivity. The program calls for regular and mandatory audits that are aimed at evaluating national aviation security programs of ICAO member states.³⁸ The rationale behind this course of action is to strengthen the global aviation security by ensuring that member states remain committed to the course. Through the audits, every security measure set out in the security manual is assessed as it is being implemented. Recommendations from the audit findings help to improve counter terrorism measures and consequently the general security of the aviation industry.

³⁷Bassiouni, M. Cherif, Ed. *International Criminal Law: Sources, Subjects and Contents*. Neitherlands:Leiden Martinus Nijhoff Pub. (2008).

³⁸ Aleman, Moses., "The International Civil Aviation Security Program Established By ICAO." *Aviation Security Management* (2008):65-75. p. 73

3.4 Regional Responses to Aviation Terrorism

In their respective regions, different countries in the world have come together to wage a coordinated and collaborated effort against terrorism in their aviation industries. Examples of the regional bodies are the European Civil Aviation Conference (ECAC), Organization of American States (OAS) and League of Arab States (LAS). Most of the regional institutions have adopted actions that are similar to ICAO conventions and therefore provide an avenue through which to implement the technical aspects of ICAO.³⁹ In the same light, many African Union (AU) member states have also reaffirmed the urgent need to implement strategies on regional, sub regional and bilateral cooperation on aviation security in their adoption of the Windhoek Declaration on Aviation Security on the 7th of April 2016. Among matters agreed on is to cooperate in information sharing, trainings and technical assistance. Member states also agreed to ratify and adopt ICAO standards of aviation security.⁴⁰

Kenya is a member of the East Africa Community Civil Aviation Safety and Security Oversight Agency (EAC CASSOA). The agency was established in June 2007 as a self-accounting body of the EAC following the signing of the protocol for the establishment of EAC CASSOA by the three partner states of Kenya, Uganda and Tanzania. The body provides a common framework and mechanism for the partner states to fulfill their international safety and security oversight obligations as provided for by the convention, in an effective and efficient way. The purpose of EAC CASSOA is also to help partner states meet the requirements of the ICAO which includes countering terrorism activities in the East Africa Community airspace.⁴¹

³⁹Ibid

⁴⁰ *Windhoek Declaration on Aviation Security and Facilitation in Africa*: Ministerial Conference held in Namibia, 4th -7th April, 2016 p.6

⁴¹Maugo, Mtesigwa. "Dynamics, Emerging Legal and Regulatory Issues in Aviation Industry–African Perspective." (2016). Retrieved from <http://repository.eac.int/123456789/1462>

The initiative involves developing consensus among partner states, coordinating activities, sharing technical expertise and facilities and achieving effective oversight of civil aviation safety and security.⁴² Given that the member states share the common problem of terrorism insurgency in the sub region, the concerted efforts to share in countering the phenomenon which also manifests itself in the form of air transport attacks is a positive approach to protect the social, economic and political pillars of the individual countries and collectively. The measure works well as a proactive approach to deter terror activities from happening in the sub region's airspace.

3.5 The Legal Strategies Adopted by Kenya's Aviation Industry to Combat Terrorism

Generally, there have been several devastating terrorist attacks in Kenya. Being at the heart of domestic and international transportation, and a key pillar in the country's economic growth, concerns on the level of security in the aviation industry have been on the increase. Coupled with the happenings of 9/11, Kenya's aviation industry authorities, Kenya Airports Authority (KAA), Kenya Civil Aviation Authority (KCAA) and the government have been prompted to invest in stringent security measures to safeguard the industry against terrorism. A number of legal measures have been progressively initiated to strengthen the security of all aspects of Kenya's commercial civil aviation against terror attacks.

3.5.1 Protection of Aircraft Act, 1970

Revised in 2012, the act is one of the earliest legislations that Kenya assented to in the fight against terrorism in its aviation industry. It effected the following conventions to which Kenya is a signatory; The Tokyo Convention on offences and certain other acts committed on board aircraft, the Hague Convention for the suppression of unlawful seizure of aircraft, and the Montreal

⁴²Irandu, Evaristus. "Air Transport Security in Kenya." *Air Transport Security* (2018): p 194

Convention for the suppression of unlawful acts against the safety of civil aviation. The act provides for aircraft hijacking offenses and other offences relating to aircraft. It also provides for jurisdiction of the Kenyan courts in certain cases and provisions for extradition.⁴³ This is a clear indication that Kenya's first approach to combating terrorism in its air industry was also reactionary, taking the same trend and pattern as that of the global responses. It also indicates Kenya's commitment to implementing aviation security measures adopted by ICAO member states.

3.5.2 The Constitution of Kenya, 2010

Article 2(6) of the Constitution of Kenya provides that any treaty or convention ratified by Kenya shall form part of the law of Kenya.⁴⁴ By virtue of being a signatory of ICAO, Kenya has domesticated all treaties and conventions relating to countering unlawful acts against its aviation industry which include terrorism.⁴⁵ The ICAO conventions and treaties therefore form the philosophical foundations of all its civil aviation legislation and regulations in Kenya.⁴⁶ Furthermore, the provision allows any revisions or reviews to the conventions to automatically become part of Kenya's law without any delay. This enhances timely adoption of reviewed responses to terrorism phenomenon which are likely to happen given that the phenomenon's multi-faced nature, hence dictating the need for regular reviews.

3.5.3 The Civil Aviation Act, 2013

The Act supersedes the Civil Aviation Act of 2002 which established KCAA to regulate and oversight aviation safety and security as guided by the provisions of the Convention on the

⁴³The Protection of Aircraft Act, 1970 (Rev. 2012). 8

⁴⁴ Nyanhoga, Samuel A., "The Constitution, National Security Council and the War on Terror in Kenya." *Africa Amani* (2017): 7.p.11

⁴⁵ Mwikya, Nelson K., and Mulwa S. Angeline. "Implementation of Aviation Safety Standards and Performance of Air Transport Industry: A Conceptual Perspective." *African Journal of Business and Management*, no. 2 (2018): 20-33 p.23

⁴⁶ The Constitution of Kenya, 2010

International Civil Aviation. It prohibits acts of unlawful interference which include; seizure of aircraft in flight or on the ground, hostage taking on board aircraft or at airports, possession of a weapon or hazardous device intended for criminal purpose onboard aircraft or at an airport, use of aircraft in service for purposes of causing death, serious bodily injury or threats to cause bodily harm to passengers, crew and others whose safety is of interest to passengers or crew on the craft, and destroying or damaging air navigation facilities or interfering with their operations.⁴⁷

The Act not only addresses how to respond to modern aviation terrorism acts but also the varied tactics employed by perpetrators to attack the industry namely, hijackings, ground attacks, sabotage and suicide missions and cyber terrorism. It also addresses the question of use of threats, conspiracy and attempted acts intended to jeopardize the safety of civil aviation and air transport.

These provisions demonstrate the government's commitment to legally address terrorism in its aviation industry using a proactive approach as opposed to the previous reactive approach.⁴⁸ The measures guarantee a better and forward-thinking security structure that has a high potential of mitigating terror attacks in the industry if applied appropriately.

3.5.4 Kenya Security Laws Amendment Act, 2014 (Section 75)

To deal with the multi-faced terror problem in the country, the government crafted the Kenya Security Laws (Amendment) Bill 2014 which sought to amend among others the National Transport and safety act and the Kenya citizenship and immigration act.⁴⁹ The Act provided for the establishment of a mechanism for coordinating counter-terrorism measures in all entry and exit points of the country. By virtue of being the host of all the -international airports which serve as

⁴⁷ The Kenya Civil Aviation Act, 2013

⁴⁸ Muendo, Mercy. "Evolution of the Kenyan Aviation Transport Industry from Colonisation to the Present: Towards Legal Compliance with the International Standards of Aviation Law." *SSRN Journals* (2018): 1-18.

⁴⁹ Mwikya, Nelson K., and Mulwa S. Angeline. "Implementation of Aviation Safety Standards and Performance of Air Transport Industry: A Conceptual Perspective." *African Journal of Business and Management*, no. 2 (2018): 20-33. p. 12

entry and exit points in Kenya, the aviation industry is directly affected by the security laws.⁵⁰ Consequently, the multi-agency body, “Border Control and Operations Co-ordination Committee (BCOCC)” was formed and enforced with a mandated to coordinate activities of security supporting agencies deployed at the aviation industry among other entry and exit points. The multi-agency body also exercises oversight authority over operations of the respective agencies at the aviation industry. This study endeavors to find out how the different professional agencies function together to enhance optimal aviation security.

3.6 Regulatory Strategies Adopted to Combat Terrorism in Kenya’s Aviation Industry

These refer to the prescribed rules and guidelines relating to the actions to be taken by those working within Kenya’s aviation industry so as to carry out the intent of the industry’s legal instruments which is to combat terrorism.

3.6.1 The Civil Aviation (Security) Regulations, 2019

According to article 37 of the Chicago Convention, Kenya as a member state is obligated to comply with ICAO SARPS.⁵¹ KCAA develops regulations and guidance materials on various operational matters concerning how security will be handled on a day to day basis in the industry. Key among these is the security regulations. To operationalize the Civil Aviation Act, 2013, the authority established the Civil Aviation (Security) Regulations, 2019 which seek to incorporate new and emerging security needs and ICAO requirements on International Civil Aviation Security. The regulations are addressed to, all aerodromes in Kenya, passengers, persons working in the Aviation industry, occupants of airport buildings and persons on land adjoining or adjacent to or

⁵⁰ The Kenya Security Laws (Amendment) Act, 2014

⁵¹Mwikya, Nelson K., and Mulwa S. Angeline. "Implementation of Aviation Safety Standards and Performance of Air Transport Industry: A Conceptual Perspective." *African Journal of Business and Management*, no. 2 (2018): 20-33. p. 23

within the vicinity of airports or air navigation installations which do not form part of the airport.⁵²

The strength in these regulations is demonstrated in its appreciation of the fact that optimal aviation security entails the concerted efforts of all the actors who are directly or indirectly involved in performing the outlined security measures that are meant to improve the security system of the industry and as a result thwart terrorism and its related activities.

3.6.2 Preventive Security Measures

Among the security aspects considered in the regulations that directly address terrorism in the industry are the regulations on Preventive Security Measures contained in Part IV of the Civil Aviation (Security) Regulations, 2019. These are aimed at protecting passengers, crew, aircraft, airports and aviation facilities and preventing acts of unlawful interference within the industry. Among others, they entail access restrictions and screening measures. The measures are also meant to ensure that the persons and goods allowed to access the airport areas are only those that have been thoroughly screened and whose intentions are known beforehand.⁵³ The screening regulations not only affect the air transport passengers, but also the air crew, industry staff, businessmen who operate business establishments within the industry's premises and the air cargo.⁵⁴ All these have a potential of being used to execute terror and related activities in the industry. When well applied, the measures play an important role in mitigating terror activities thereby improving the industry's Security

⁵²The Kenya Civil Aviation (Security) Regulations, 2019

⁵³ Poggiolini, David. "Intensifying Security at Kenya's Airports: Aviation." *Transport World Africa* 5, no. 1 (2004):1-48 p. 46.

⁵⁴ Agoi, Masadia A., *Critical Success Factors and Risk Management Procedures at Kenya Airports Authority*. Unpublished Masters Research Project, University of Nairobi (2013). p.36

3.6.3 National Civil Aviation Security Training Program

The training program aims to ensure that personnel of all entities involved with or responsible for the implementation of various aspects of aviation security are properly trained on the appropriate standards for tasks in accordance to the national civil aviation security program. Such trainings help in increasing the personnel's understanding in specific security areas as a means of mitigating risks and vulnerabilities that terrorists can take advantage of.⁵⁵ Among the subjects covered are; enhanced screening procedures, passenger profiling, and strict access control. The trainings also take the form of on job trainings and familiarization tours to foreign airports for bench marking.⁵⁶

3.6.4 Aviation Security Audits and Reviews

Through the Aviation Security Department, KCAA also conducts aviation security audits, inspections, system tests, investigations and surveys on airports, airlines, cargo agents, inflight catering operators among others.⁵⁷ The audits include a regular and mandatory Universal Security Audit Program (USAP) meant to identify and correct deficiencies experienced in implementation of security related Standards and Recommended Practices (SARPs).⁵⁸ Kenya participated in the audits in the years 2004 and 2008. A follow-up audit was also conducted in 2013 by the ICAO Universal Safety Oversight Audit Program (USOAP). Corrective Action Plans are currently ongoing by KCAA. Proper implementation of this measure in combating terrorism activities in the aviation industry ensures that flaws in the system are detected and fixed in time before the enemy takes advantage of the vulnerabilities and risks therein to advance his schemes. The measure

⁵⁵Ibid. p.42

⁵⁶ Poggiolini, David. "Intensifying Security at Kenya's Airports: Aviation." *Transport World Africa* 5, no. 1 (2004):1-48: p.46.

⁵⁷Mwikya, Nelson K., and Mulwa S. Angeline. "Implementation of Aviation Safety Standards and Performance of Air Transport Industry: A Conceptual Perspective." *African Journal of Business and Management*, no. 2 (2018): 20-33. p. 30

⁵⁸ The Kenya Civil Aviation (Security) Regulations, 2019

clearly supports the proactive approach towards thwarting terrorism activities in the aviation industry.

The security measures discussed above, and as embraced by Kenya's aviation industry mirror a multilayered security architecture that relies on more than one security agency to detect and deter terrorism threats in the industry. Each layer which presents a different measure of security checks is positioned in such a way that it forms a defensive anti-terror structure meant to detect, deter and respond in time to any threat. The structure improves the chances of intercepting a threat at any of the different stages before it is advanced to final execution. The different layers in this security architecture symbolize the different activities that aviation security agencies engage on a daily basis namely, passenger profiling, baggage screening, document examination, screening of airport grounds and gathering intelligence among a myriad other.

All these activities are aimed at achieving one common goal of safeguarding the entire industry's ecosystem from any unlawful acts that include terrorism. This requires that all the supporting agencies' personnel in their different professions work jointly in agreed models of cooperation having common objectives and sharing information. This approach to aviation security guarantees better outcomes in relation to preventing terrorism and its related activities in the industry.⁵⁹

3.7 Multi-Agency Cooperation Approach to Terrorism

Following the aftermaths of the US 9/11 terror attacks, many countries including Kenya strengthened their aviation security systems by establishing new security organizations and Changed some aspects of their existing security organization structures.⁶⁰ The multi-faced nature

⁵⁹Harris, Douglas H. "How to Really Improve Airport Security." *Ergonomics in Design* 10, no. 1 (2002): 17-22. p.21

⁶⁰ Koros, Rosemary Chebet. "Effect of Strategic Management Drivers on Performance of Airports in Kenya." Unpublished PhD Dissertation. *JKUAT-COHRED*, 2018. p.52

of terrorism and related activities in the aviation industry have demonstrated that it is not easy for one organization to oversee all security functions at an airport due to the complexity of its ecosystem.⁶¹ The need and urgency for building an effective coordination and cooperation among security personnel working in the industry therefore becomes inevitable.⁶² The security structure of Kenya's aviation industry is composed of several agencies, each having a specific mandate and working at different levels but all having one common goal of combating terrorism in the industry.

In appreciation to this, Section 10 (1) (a) of the Civil Aviation (Security) Regulations, 2019 provides for coordination of security activities between ministries, departments, agencies and other organizations concerned with or responsible for the implementation of various aspects of the national civil aviation security program at Kenya's aviation industry.⁶³ Cooperation efforts to combat terrorism in the aviation industry have been established by the government of Kenya anchored on the 2014 Security Laws Amendment Act, which provides for the establishment of a mechanism for coordinating counter-terrorism measures in Kenya's entry and exit ports of which the aviation industry is a key player by virtue of being the host center for all of Kenya's international airports. The inter-agency body, "Border Control and Operations Co-ordination Committee (BCOCC)" was formed and enforced to coordinate counterterrorism measures among the multi-agency players and also to exercise oversight authority over operations of the respective partnering agencies at Kenya's aviation industry.⁶⁴

The BCOCC has listed members whose functions include the coordination of exchange of information among respective security supporting agencies responsible for the industry's security.

⁶¹Ibid

⁶²Bogdanos, Matthew F. "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, No 37 (2005):10-18. p.18

⁶³The Kenya Civil Aviation (Security) Regulations, 2019

⁶⁴The Kenya Security Laws (Amendment) Act, 2014

The members are, National Police Service, Kenya Revenue Authority (Customs and Border Control), Department of Immigration Services, National Intelligence Service, Port Health Services, Kenya Plant Health Inspectorate Services, Kenya Bureau of Standards and Kenya Airports Authority. Kenya Airports Authority is the lead and coordinating agency of the security activities of this body.⁶⁵ This research study centers its focus on the functioning of this multi-agency efforts.

3.8 Chapter Conclusion

Aviation security became a challenge especially in the 1960s following an increase in the number of terrorist attacks in the industry. ICAO's legal, regulatory and technical responses through international conventions and protocols to address the challenge were reactionary in nature especially in the period before 9/11 US attacks. A review of their ineffectiveness called for responses that were more proactive and preventive in nature, as a better solution in mitigating terrorism in the industry. This called for the need of cooperation among various security supporting agencies in many states' aviation industry. The next chapter focuses on the functioning of the established multi-agency cooperation initiative in combating terrorism in the aviation industry in Kenya as a case study.

⁶⁵ Department of Immigration Services. Immigration Border Procedures and Operations Manual: Guidelines on Policies and Procedures for Immigration Officers. Second Revised Edition, 2017 p. 67

CHAPTER FOUR

MULTI-AGENCY COOPERATION IN COMBATING TERRORISM IN THE AVIATION INDUSTRY IN KENYA

4.1 Introduction

The chapter focuses on presenting and explaining data that was obtained through interviews carried out with senior management security personnel, documentary review and observation methods, complimented by that obtained through questionnaires distributed to middle level management of the aviation industry in Kenya. The explanations are informed by the literature, conceptual framework and field data obtained.

The literature will help to explain key variables that determine the functioning of multi-agency cooperation approach to combating terrorism in Kenya's aviation industry, and at the same time help place this study within the context of existing literature. Theory helps to explain the reality that exists. The assumptions are tested against the actual explanations that exist. The field data provides accurate account of the respondents' experiences and perceptions on multi-agency operations and procedures in combating terrorism in the aviation industry. Reference will also be made to chapter three in order to situate MAC within its philosophical foundations.

Both qualitative and quantitative data was collected from individuals working at the middle and senior management levels within the different aviation security support agencies, whose work entailed regular interaction and joint working towards a common goal of combating terrorism in the aviation industry. Quantitative data was used for purposes of complementing data obtained through interviews in order to gain on breadth and depth of understanding the research question. Observations were also made regarding how the various agencies interact and make decisions at

the tactical level. Additionally, documents which include the MAC standard operating procedures, daily performance recordings, reports, and minutes of the regular meetings were reviewed.

Qualitative data was analyzed centered on content analysis approach. All the interview and open ended-questions' data were coded and organized into themes in light of the study objectives. Quantitative data was analyzed using the Statistical Package for the Social Sciences (SPSS) software and descriptive statistics presented by way of summarized tables.

4.2 Response Rate

Of the targeted eight, only five of the senior personnel representing the eight key agencies forming the MAC approach to Kenya's aviation security were interviewed. The rest two could not be reached within the scheduled time of this study owing to the intensity of their security assignments in the government. Thirty-nine (39) out of the targeted forty (40) middle level management security personnel filled and returned the questionnaires thereby giving a response rate of 97.5%. Bryman and Bell note that a completion rate of a least 50% is enough to proceed with statistical analyses.¹ This return rate was therefore excellent and reasonable to continue with statistical analyses. The high response rate of the distributed questionnaires was attributed to a consistent follow up through phone calls and email and the fact that there was a notification to the potential participants. The respondents were also extremely cooperative and supportive owing to the fact that they fully understood the significance of research.

4.3 Demographic Information

The demographic information of the respondents included information about their gender, level of education and positions held. The purpose of this was to obtain an understanding of the background information of the respondents and their individual ability to provide relevant data

¹ Bryman, A., & Bell, E. (2015). *Business Research Methods*. New York, NY: Oxford University Press, 231-253.

sought. Findings in Table 4.2 indicate that all the respondents were management with majority (89.7%) being at middle level. Being at management level implied that the respondents were well informed people and were in a position to give the required information on the multi-agencies approach to aviation security. They were also privy to certain information by virtue of their position.

To establish which decisions were taken related to terrorism in the aviation industry, the gender of the respondents was equally important. Here, only 14 ladies participated while the male respondents were 25 representing 35.9% and 64.1% respectively. This means that in terms of aviation security, the male voice is still dominant compared to the female voice. The implication of this is that the approaches given to combating terrorism in the aviation industry are largely hard as opposed to soft approaches, based on gender disparities.

Table 4.2 Demographic Information

Item	Category	Frequency (f)	Percentage (%)
Position	Middle level Management	35	89.7%
	Senior management	4	10.3%
	Total	39	100.0%
Gender	Male	25	64.1%
	Female	14	35.9%
	Total	39	100.0%
Education Level	High school	3	7.7%
	College certificate	3	7.7%
	Diploma Certificate	1	2.6%
	Bachelor's Degree	16	41.0%
	Master's degree	16	41.0%
	Total	39	100.0%

The level of education is highly associated with problem solving skills and decision making. The more exposure due to levels of education, the better the skills and ability in decision making. 41% of the respondents had at least a basic degree while 2.6% only had a diploma and below. The implication of this is that within the aviation industry the management personnel are able handle the complexities in MAC in aviation security. Above all, the respondents therefore could engage others in the same level of reasoning.

4.4 Period in Collaborative Work with Other Agencies

The study sought to establish the experience of the respondents within a multi-agency setting. This was critical in order to establish how familiar the respondents were with matters of MAC and how easily they could embrace MAC. The finding analysis is shown in the figure 4.3 below.

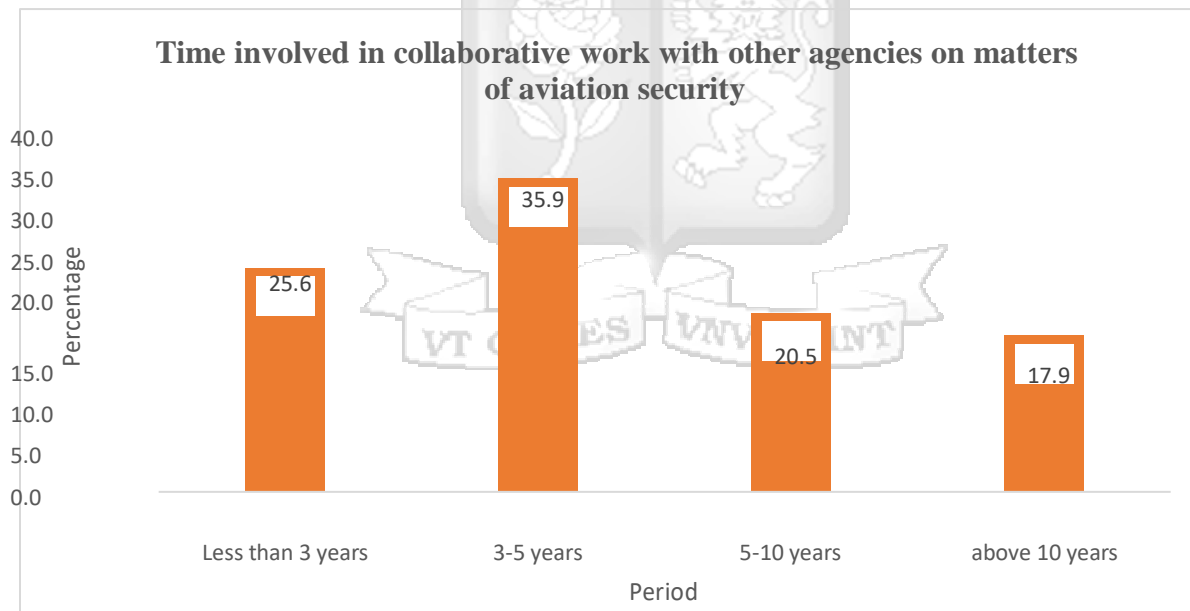


Figure 4.3 Period in collaborative work with other agencies

From the analysis, the study indicated that most of the respondents (35.9%) had been involved in collaborative work with other agencies for a period of three to five years. Only 25.6% of the respondents had been involved in collaborative work with other agencies for less than three

years meaning that majority had been involved in collaborative work with other agencies for more than three years. This implies that most of the security supporting personnel involved in this study were well acquainted and, in a position to give quality and accurate information about MAC approach to combating terrorism in Kenya’s aviation industry.

In conclusion, the demographic data contributed to understanding the background of the respondents and their ability to provide relevant data necessary to answer the study question. The respondents were also privy to the information sought owing to their managerial positions and many years of experience on multi-agency cooperation. Despite the gender disparities, the study finds the distribution valid since the research question is not gender sensitive. The level of education indicated that the respondents were able to easily share information.

4.5 Experience with Multi-Agency Cooperation in the Aviation Industry

Table 4.3: Experience with Multi-Agency Cooperation

Experience with Multi-Agency Cooperation	Frequency	Percentage
Somewhat poor (not very positive but there are some good outcomes)	4	10.3
Moderate (no strong feelings either way)	6	15.4
Good (overall positive with room to improve)	28	71.8
Excellent (extremely positive)	1	2.6
Total	39	100.0

Further, the study sought to establish the experience of the respondents within the multi-agency setting. Analyzed results represented in table 4.3 indicate that majority (71.8%) of the security supporting personnel reported that the experience was good but there was a room for improvement. The good experience was associated with the high cooperation levels among willing

security agencies who were open minded and willing to share of information which helped in making concrete decisions on operations.²

In the process of decision making, the respondents were able to bring their different professional experiences, share and understand each other in their effort to come up with joint solutions that helped to prevent terrorism and related activities in the industry. This is in line with Frazier's proposition that MAC's major concern is to share with other agencies aspects of their work with the goal of attaining shared objectives.³ The findings also agree with Duggan and others in their observation that MAC practices enable agencies access to partner agencies' services or expertise which is instrumental to early identification of security threats and intervention.⁴

A minority however rated their experience as poor (not very positive but there are some good outcomes) and moderate (no strong feelings either way) as shown by 10.3% and 15.4% respectively. The study established that the poor experience was because some agencies were not fully cooperative in sharing information and implementing what had been agreed on in MAC forums despite attending the regularly scheduled meetings.⁵ Responses from the open-ended question on the same pointed out to some partner agencies were not disclosing their information because they considered themselves superior to others. Schneider and Hurst observed that limited information sharing among different enforcement agencies is one of the most deleterious obstacles to a more unified approach to combating major and serious criminal conspiracies.⁶

² Interview with BMC Member (Moil International Airport). Telephone Interview. March 4, 2020,

³ Frazier, Russell M., "A Cannon for Cooperation: A Review of The Interagency Cooperation Literature." *Journal of Public Administration and Governance* 4, no. 1 (2014): 1. p. 4

⁴ Duggan, Carmel, Carmel Corrigan, and W. R. C. Social., *A literature Review of Inter-Agency Work with a Particular Focus on Children's Services*. Dublin: Children Acts Advisory Board, 2009.

⁵ Interview with JOC Member (Lead Agency Representative JKIA). March 4, 2020, Nairobi.

⁶ Schneider, Stephen, and Christine Hurst., "Obstacles to An Integrated, Joint Forces Approach to Organized Crime Enforcement: A Canadian Case Study." *International Journal of Police Strategies & Management* 31, no. 3 (2008): 359-379 p.373

The study established that some agencies still held information and this derailed the smooth running of MAC operations that are necessary for the effective countering of terrorism in the industry.

4.6 Perceptions concerning the Success of Multi-agency Cooperation Initiatives

The respondents were asked to rate their overall perception concerning the success of multi-agency cooperation initiatives in combating/thwarting terrorism and related activities in their work stations. The finding analysis is shown in the figure 4.4 below.

Table 4.4: Perception concerning the success of multi-agency cooperation initiatives

Perception concerning the success of multi-agency	Frequency	Percentage
Negative (collaboration initiative has made things worse)	1	2.6
Insufficient (insufficient outcome has been achieved)	1	2.6
Partial/complete (a bare minimum number of outcomes been achieved)	4	10.3
Successful (most outcomes have been achieved)	33	84.6
Total	39	100.0

Most (84.6%) of the respondents' perception concerning the success of multiagency cooperation initiatives in combating terrorism and related activities in their work stations was successful and that most outcomes had been achieved. The study established that the reason for this rating was still largely centered on the improved information sharing about terror threat suspicions which helped in early detection, deterrence and disruption of any terror activities. This is in line with Bogdano's observation that it was the lack of coordination and information sharing among government agencies that led to the 9/11 terror attack and the status quo should no longer be tolerated.⁷ The study also sought to further establish what indicators exist to show the success. Majority of the respondents observed that the number of arrests on terror suspicions and

⁷Bogdanos, Matthew F., "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, 2005: 10-18. p. 10

related crimes had increased,⁸ and that majority of responses made were timely. The study also established that decisions were largely made jointly by the agencies forming the aviation security MAC team.⁹

The researcher also observed that when the multi-agency gets intelligence reports regarding the terrorism threat or any security breach, all agencies moved together into action to forestall any possible attack by applying all available measures and actions. Members of the MAC team could often congregate together to interrogate and agree on what course of action was appropriate. The successful rating of the MAC initiative is in line with Kaiser's assertion that MAC practices increase work efficiency and productivity.¹⁰

4.7 Enablers of Multi-Agency Cooperation

The researcher further sought to establish whether the management respondents were familiar with the following governance structures which equally serve as MAC enhancing factors at their work stations. The results were analyzed as shown in the table 4.5 below. From the analysis in table 4.5 most (92.3%) respondents were aware that the MAC initiative had the backing of senior/political management and there existed a clear governance framework that detailed how decisions were to be made within the agency. Further, respondents (82.1%) were aware of the existence of accountability mechanisms that ensured that all participants in the process contributed to the success of the framework.

⁸ Interview with JOC Lead Agency Official. JKIA. March 5, 2020, Nairobi.

⁹ Interview with BMC Member, Wilson Airport. March 4, 2020, Nairobi.

¹⁰ Kaiser, F. M., "Interagency Collaborative Arrangements and Activities: Types, Rationales, Considerations." *Center for the Study of Interagency Cooperation*, 2011. p. 17

Table 4.5: Awareness on the existence of multi-agency enhancing factors

Question	N	Yes	No	Don't
(%)			(%)	Know (%)
Support of the multi-agency initiative from senior/political leadership/management	39	92.3	2.6	5.1
A clear governance framework that makes it clear how decisions can be made	39	69.2	23.1	7.7
A lead agency with accountability for facilitating/managing the processes	39	82.1	12.8	5.1
Accountability mechanisms that ensure that all of the required participants in the process contribute to the success of the framework	39	82.1	10.3	7.7
The multi-agency includes all state agencies supporting aviation security	39	92.3	5.1	2.6
Your agency's role in the multi-agency partnership is clearly defined	39	89.7	7.7	2.6
There exist structures detailing how resources should be shared	39	20.5	53.8	25.6
A schedule for regular joint trainings with other partners on multi-agency delivery	39	48.7	41.0	10.3
A clear protocol on communication and information sharing modalities within the multi-agency	39	24.4	75.6	2.6
The multi-agency team is sufficiently resourced	39	17.9	74.4	7.7

This finding was also physically confirmed through the documents that were reviewed during the study. It was established that the aviation security MAC initiative at Kenya's aviation industry had an established governance structure¹¹ that was strongly supported by the political leadership which has been able to mobilize and bring multiple security agencies together at all the

¹¹Border Management Committee, "Standard Operating Procedures (Revised Edition) for Joint Operations Centre."p.3

three key delivery levels namely, the strategic level, the operational and tactical levels. This agrees with Atkinson's three-layered MAC modelling.¹² However, the findings also indicated that not all airports had established cooperation levels at the tactical level except for JKIA and Wilson airport.

The documentary review further revealed that the aviation security MAC had documented its shared goals and objectives, a governance framework, accountability mechanisms and had appointed a lead agency.¹³ This is in line with Orton and others who pointed out that a successful MAC needs to put in place an agreed team purpose, a strong support system and effective team structures.¹⁴ The findings further indicate that the management respondents had a strong sense of what the shared purpose was, what was required of them and how their role contributes to the wider purpose.

However, the study established that respondents were not aware of any structures detailing how resources should be shared (53.8%) among the partner agencies. A majority of them (75.6%) also indicated that they were not aware of any protocol on communication and information sharing modalities within the multi-agency. Ward and others stress on the need for a MAC to have a collaborative infrastructure or rules for implementation such as protocols that are jointly agreed on to give direction on implementation modalities of a particular aspect.¹⁵ The study established that the aviation security MAC had not established protocols of resource sharing, communication and information sharing.¹⁶

¹² Atkinson, Mary, Megan Jones, and Emily Lamont. "Multi-Agency Working and Its Implications for Practice." *CfBT Education Trust* (2007). p 7

¹³ "Border Management Committee and Joint Operations Centre Standard Operating Procedures (Revised Edition)" pp. 19-22

¹⁴ Orton, James Douglas, and Christopher J. Lamb. "Interagency National Security Teams: Can Social Science Contribute?" *Prism* 2, no. 2 (2011): 47-64. p. 50

¹⁵ Ward, Kevin D., Danielle M. Vardar, Diana Epstein, and Barbara Lane. "Institutional Factors and Processes in Interagency Collaboration: The Case of FEMA Corps." *The American Review of Public Administration* 48, no. 8 (2018): 1-20: p. 13

¹⁶ Interview with a Member of BMC Secretariat. March 5, 2020, Nairobi.

Further, the study findings indicate that 74.4% of the respondents denied that the multi-agency team was sufficiently resourced. By way of observation, the study also established that the MAC lacked adequate patrol vehicles and proper equipment to analyze information. It was established that the lack of adequate and sustained funding from the government treasury was the basis for the insufficiency of the resources allocated to the aviation security MAC team.¹⁷ The team had no budgetary allocation or central kitty dedicated to facilitate its operations.

Further on resources, the study also established through open ended question responses that the MAC team lacked sufficient time for MAC initiatives. This was because the agencies still had their individual agency mandate which needed to be fulfilled by the same officials. In addition, the study also established that the MAC team was thin on staffing levels attributed to rapid turnover rates of trained officials due to frequent work-related transfers.¹⁸ According to Sloper, MACs are enhanced by adequate resources involving shared and adequate finances, time and skilled staff which are necessary for the implementation of ongoing management of MAC.¹⁹ The aviation security MAC was insufficiently supplied with the three resources.

An open-ended question requiring respondents to list any standard operating procedures the MAC lacked and as a result, the team's activities were derailed elicited the following responses; a joint training schedule that involved all the multi-agencies, standards on sharing security information, standards on communication modalities, standards on evacuation contingency plan and standards detailing the independence of MAC in terms of decision making. The necessity of developing standard operating procedures detailing on working modalities of MAC is also in line

¹⁷ Interview with a Member of BMC JKIA. March 4, 2020, Nairobi.

¹⁸ Interview with BMC member, Wilson Airport. March 6, 2020, Nairobi.

¹⁹Sloper, Patricia., "Facilitators and Barriers for Coordinated Multi-Agency Services." *Child: Care, Health and Development* 30, no. 6 (2004): 571-580. p.576

with Carpenter and others' assertion that MACs need to set effective systems, protocols and procedures for MAC to aid in the facilitation of joint working ethos.²⁰

Documentary review established that the MAC's membership is composed of only state agencies that support aviation security. However, the representation of all the eight key agencies was lacking in other airports except for JKIA. Wilson, and Kisumu International airports for instance lacked representation from KEPHIS and Kenya Bureau of Standards respectively. The study established that the situation is caused by uneven deployment of all the agencies in the country's international airports by their respective ministries.²¹ this hampered the operations largely due to the lack of such expert opinion whenever need arises.

The study also established that non-state agencies were not participants in this initiative. This finding is not in line with UNODC's assertion that MACs that address multi-faced societal issues such as terrorism are more successful when they involve collaboration between state and non-state actors.²² In response to an open-ended question concerning which other agency(ies) not currently in the security MAC team needed to be included, given the nature of security threats experienced on a day to day basis; the study respondents indicated that the membership incorporate business vendors such as taxi drivers who conduct their businesses within the industry's environs, airline personnel and the residents of the community residing close to airports. The reason given for considering this non-state community in the MAC security team was that they are well positioned to notice any unusual and suspicious happening that can lead to a terror attack in the Industry.

²⁰ Carpenter, John, Sharon Brown, and Michaela Griffin., "Prevention in Integrated Children's Services: The Impact of Sure Start on Referrals to Social Services and Child Protection Registrations." *Journal of the British Association for the Study and Prevention of Child Abuse and Neglect* 16, no. 1 (2007): 17-31.

²¹ Interview with BMC Secretariat Representative. March 5, 2020. Nairobi

²² "Toolkit to Combat Trafficking in Persons." *United Nations Office on Drugs, Crime, and Global Programme Against Trafficking in Human Beings*. United Nations Publications, 2008. p. 75

4.8 Staff Practices and Perceptions on Multi-Agency Cooperation

Respondents were also asked to rate the statements in table 4.5 about staff practices and perceptions on multi-agency cooperation using a scale of 1 to 5 where 1 was strongly disagree and 5 was strongly agree. The means and standard deviation were calculated as shown below.

Table 4.6: Staff Practices and perceptions on multi-agency cooperation

Statements	N	Means	Std
Deviation			
My agency leaders often meet with leaders of partner agencies to deliberate on pertinent security issues	39	3.87	1.151
My leadership commits to joint training with other agencies	39	3.82	1.144
My agency easily provides information to partner agencies whenever they need information that is relevant to their work	39	4.03	1.112
Partnering agencies easily provide information to my agency whenever we need information that is relevant to our work	39	3.54	1.144
My agency finds it difficult to engage in cross sector cooperation due to its unique requirements	39	2.31	1.104
Our sister agencies often view my organization as competitors	39	2.44	1.252
Conflicting organizational policies make it difficult for my organization to cooperate with other partner agencies	39	2.72	1.191
My agency staff members tend to be suspicious and distrust staff from sister agencies	39	2.69	1.341

Findings in table 4.6 show that most of the respondents agreed that their leadership had committed to joint training with other agencies (M=3.82, SD=1.144). The study established that the generally observed strong commitment from the various agency leaderships to the security MAC initiative and trainings was largely a result of strong commitment from the political leadership at the National Security Advisory Committee level, to combat terrorism. Stressing on the need for joint trainings, Sloper, contends that joint training opportunities need to be improved to enable staff be familiar with MAC matters and delivery. She further observes that joint training

enables MAC staff to enhance their knowledge and understanding of other agencies, their roles and how they operate.²³

Majority of the respondents also agreed that their agency easily provided information to partner agencies whenever they needed information that was relevant to their work (M=4.03, SD=1.112) and that partnering agencies also easily provided information to their agency whenever needed (M=3.54, SD=1.144). The observed minutes detailing regularly held stakeholder security meetings indicated that forums for sharing information had been established and were functional. For instance, tactical level meetings by Joint Operation Centers (JOC) happen on a daily basis at Jomo Kenyatta International Airport while Border Management Committee (BMC) meetings happen on a monthly basis. This finding is supported by Schneider & Hurst who assert that information sharing need to be done through regular meetings and by developing effective communication networks.²⁴

The findings further indicate that majority of the respondents disagreed with the statements that it was difficult for their individual agencies to engage in cross sector cooperation due to their unique requirements (M=2.31, SD=1.104) and that their sister agencies often view their organization as competitors (M=2.44, SD=1.252). The study established that this situation is necessitated by the fact that the aviation security MAC has clearly defined roles for every agency and that every agency is aware of its boundaries and those of others.²⁵ Duggan and others observe that clear clarification of individual agency roles, responsibilities and expectations while at the same time understanding the role of partner agencies eliminates conflicts that arise as a result of

²³ Sloper, Patricia. "Facilitators and Barriers for Co-Ordinated Multi-Agency Services." *Child: Care, Health and Development* 30, no. 6 (2004): 571-580. p. 576

²⁴ Schneider, Stephen, and Christine Hurst. "Obstacles to an Integrated, Joint Forces Approach to Organized Crime Enforcement: A Canadian Case Study." *Policing: International Journal of Police Strategies & Management*. 31 (2008): 359.

²⁵ "Border Management Committee and Joint Operations Centre Standard Operating Procedures (Revised Edition)" pp. 19-22

inter-agency competition.²⁶ A documentary review of the MAC's standard operating procedures established that the MAC has clearly defined roles and responsibilities for each of the eight key security agencies at the individual and at the corporate level and hence, there was limited competition among the agencies.

A moderate number however agreed that conflicting organizational policies made it difficult for their agency to cooperate with partner agencies (M=2.72, SD=1.191). The study established that the reason for this was that some agencies were yet to synchronize their ethos to those of the MAC. According to Atkinson, professional and agency culture, protocols and values intrude and disrupt MAC because of the procedural differences.²⁷ The study established that some MAC agencies experienced the heat of conflicting policies. A senior law enforcement interviewee highlighted on this by saying that due to work culture dictates, he has taken a secrecy oath not to share information concerning evidence for instance. MAC on the other hand requires him to share such security sensitive information.²⁸

The findings also indicate that some staff tended to be suspicious and distrusted staff from sister agencies (M=2.69, SD=1.341) and this also contributed to the numbers of the agencies unwilling to share information. This was largely because most staff are yet to be sensitized and jointly trained on MAC delivery and lack of MAC procedures. Ronayne contends that organizations must make themselves vulnerable to the actions of other sister agencies and this entails risk taking.²⁹

Otherwise, there is no collaboration. This study found out that some agency staff members suspect and do not trust sister agencies within the aviation security MAC initiative.

²⁶ Duggan, Carmel, Carmel Corrigan, and W. R. C. Social. *A Literature Review of Inter-Agency Work with A Particular Focus on Children's Services*. Dublin: Children Acts Advisory Board, 2009. p.28

²⁷ Atkinson, Mary, Megan Jones, and Emily Lamont. "Multi-agency working and its implications for practice." *CfBT Education Trust* (2007) p. 52

²⁸ Interview with JOC Member (Law Enforcement official). March 4, 2020, Nairobi

²⁹ Ronayne, T., "Working Together for the Public Good." Paper Presented at We Can't Opt Out of the Future, National Conference of Disability Federation in Ireland, 21st / 2 November 2007.

4.9 Satisfaction Levels of Respondents Regarding Multi-Agency Practices and Outputs

The researcher further requested the respondents to rate the statements in table 4.7 using a scale of 1-4 where one (1) was extremely dissatisfied while four (4) was extremely satisfied. The results were analyzed and categorized into two that is, satisfied and dissatisfied.

Table 4.7: Satisfaction level

Statements	N	Satisfied	Dissatisfied
Extent to which my agency participates and contributes to setting multi-agency objectives	39	84.6	15.4
Extent to which member agencies cooperate	39	66.7	33.3
Quality and timely communication between member organizations	39	43.6	56.4
Extent to which information is shared between and among partner agencies	39	66.7	33.3
Contribution multi-agency cooperation has made to increasing my agency outcomes and output (e.g. in detecting, intercepting and seizing terror related activities)	39	82.1	17.9
Regular joint training of staff within the partner agencies on multi-agency delivery.	39	43.6	56.4
Extent to which the team is effectively facilitated by the lead agency making it easier for the different agencies to work together effectively	39	41.0	59.0

Research findings indicated that 84.6% were satisfied with the extent to which their agency participated and contributed to setting multi-agency delivery objectives. The study established the reason for this outcome was that majority of the representative agencies took part in the planning and setting of goals and objectives for the MAC.³⁰ This approach to MAC is supported by Winters in her proposition that MACs need to bring multi-agency participation to all command activities including the planning processes.³¹

33.3% of the respondents however indicated their dissatisfaction concerning the extent to which member agencies cooperate. A senior management interviewee indicated that one of the

³⁰ Interview with BMC Secretariat Representative. March 5, 2020, Nairobi.

³¹ Winters, Joanna Gutierrez. "Establishing a Conceptual Framework for Interagency Coordination at US Southern Command." *PRISM* 5, no. 1 (2014): 136-153. p. 145

reasons for the frequent absence of his agency from MAC meetings and operations (as established from the minutes of the regular meetings held) was because his agency was thin on human resources.³² Hence, the agency had to prioritize the mandate of its individual agency over that of the MAC. This finding similarly indicates that to some extent, the aviation security MAC team suffered competing priorities at their individual agency levels and this hindered their full participation in the MAC initiative. This is supported by Atkinson and others in their assertion that competing priorities due to the significance of different organizational goals is one of the barriers facing multi-agency working.³³ Another senior official interviewee also expressed his disappointment that some few agencies did not take the initiative serious in that some operational leadership sent junior officers to attend high level MAC meetings.³⁴

66.7% of the respondents indicated that they were satisfied with the extent to which information was shared among partner agencies. One of the interviewees who had been in the MAC for long observed that there was an improvement in information sharing among participating agencies seen specially during the regular MAC briefs.³⁵ The study findings further indicate that 33.3% of the respondents were dissatisfied with the extent to which information was shared among them. Besides the lack of cooperation by some members as discussed above, the study also established that partner agencies lacked direct access to partner agency databases which inhibited timely information sharing.³⁶

Responses to an open-ended question on the same also indicated that lack of protocols to guide information sharing contributed to the lengthy process of seeking clearance from high level

³² Interview with JOC member representative, (Wilson Airport). March 6, 2020, Nairobi

³³ Atkinson, Mary, Megan Jones, and Emily Lamont. "Multi-Agency Working and Its Implications for Practice." Reading: *CfBT Education Trust* (2007). P. 52

³⁴ Interview with BMC Member of the Lead Agency (Kisumu International Airport)

³⁵ Interview with a JOC Member (JKIA). March, 4, 2020, Nairobi

³⁶ Interview with BMC Representative of the Secretariat. March 5, 2020. Nairobi

senior authority so as to access the information required. This is contrary to Duggan & Corrigan's recommendation that protocols of information sharing need to be developed to ensure agencies deliver their mandate.³⁷ The study therefore established that even though information sharing had improved, the extent to which some agencies held information was still significant and hindered smooth operations of the security MAC team at the industry.

From the findings, more than half (56.4%) of the respondents were dissatisfied with the extent to which quality and timely communication was shared among the MAC team. One reason for this was that there was too much control of information from senior authorities at the headquarters.³⁸ The study also established that another factor contributing to this situation was the work culture restrictions on sharing security intelligence and the lack of interlinked information databases, as discussed above.

From the interviews held, the study also established that "territoriality" was also a contributing factor in that some agencies could not release information and communicate it to sister agencies because they felt it was a way of protecting their turf.³⁹ This is supported by Ronayne in his definition of 'turf' as one of the barriers that hinder effective multi-agency working and this happens when organizations perceive others to be trying to take over their individual agency function.⁴⁰ The member of the secretariat also indicated that the MAC was yet to employ a public affairs officer who would be in charge of linking communication to all exit and entry points in an appropriate and timely manner.

³⁷ Duggan, Carmel, Carmel Corrigan, and W. R. C. Social. *A Literature Review of Inter-Agency Work with A Particular Focus on Children's Services*. Dublin: Children Acts Advisory Board, 2009. p. 136

³⁸ Interview with BMC Member Representative (Wilson Airport). March 6, 2020, Nairobi

³⁹ Interview with BMC Secretariat Member Representative. March 5, 2020, Nairobi

⁴⁰ Ronayne, T. 'Working Together for the Public Good.' Paper presented at We Can't Opt Out of the Future, National Conference of Disability Federation Ireland, 21st / 2 November 2007.

Similarly, 56.4% of the respondents indicated their dissatisfaction with the extent to which regular joint training on multi-agency delivery was conducted. The study established that lack of regular joint training for MAC officials was as a result of limited financial resources to facilitate the same.⁴¹ The government largely relied on support from donor organizations, largely International Organization for Migration (IOM) to finance the trainings. A senior official interviewee indicated that even where such trainings were conducted, they faced challenges of constant high turnover rates for trained officers who are then replaced by new ones who in most cases were not trained on MAC delivery. Further, the transferred trained officers do not ensure proper handing over concerning MAC to the incoming officials.⁴²

The study also established that the strategy used to select officials to be trained was not inclusive. It involved random picking of officers by their regional heads who were not keen to capture all officials when such opportunities were availed. Further to this, the study established that the trainings had been done had only captured agency heads, their deputies to the third/next officer in rank.⁴³ Majority of the tactical level officers who are the delivery arm of the MAC had been left out. A study by Kanyi and others on security preparedness at Wilson Airport, supports this finding in their observation that a lot needed to be done as appertains to training of the security staff to adhere to the set ICAO standards.⁴⁴

Findings on the extent to which the aviation security MAC team was effectively facilitated by the lead agency to make it easier to work together scored the lowest at 41%. These results were largely attributed to the perennial financial constraints (discussed above) that the MAC faced

⁴¹ Interview with BMC Secretariat Representative Member. March 5, 2020, Nairobi

⁴² Interview with JOC Lead Agency Representative (Wilson Airport). March 6, 2020, Nairobi.

⁴³ Interview with BMC Secretariat Member. March 5, 2020, Nairobi

⁴⁴Paul, Kanyi, Kamau P.K , and C Mireri. "Assessment of The Security Preparedness And Adherence To International Civil Aviation Standards At Wilson Airport, Kenya." *IOSR Journal Of Humanities And Social Science*, 2016: 23-41.

coupled with inadequate technical resources. There is no budgetary allocation or central kitty dedicated to facilitate the operations of multi-agency security team.⁴⁵

As part of the measures to address this problem, the study established that efforts by the MAC team to pool resources amongst themselves were in place. This is supported by Frazier's proposition that MACs that come together to face a common problem need to create links through formal contracts which enable resource sharing.⁴⁶ Through observation, the study established that it was difficult for the member teams to share resources such as patrol vehicles because the same vehicles were also used by the donating agency to run individual agency mandate. This caused delays on urgent operations. The study further established the situation was worsened by the lack of documented policies detailing modalities on how pooled resources should be used.⁴⁷

Other factors that emerged through interviews and open ended questions as enhancers of ineffective facilitation by the lead agency include agency superiority whereby some agencies felt superior to others since they were the biggest financiers of MAC activities. This resulted to competition and resistance by other agencies. The study also established that some agencies did not respect the lead agency in its coordination role. These findings were largely caused by insufficient opportunities such as joint trainings to enable the various agencies forming the MAC team to understand and appreciate each other in relation to the role played by each and the contribution each made to aviation security. This is in line with Percy's observation that MACs that have not build trust and mutual respect amongst themselves have weak partnerships.⁴⁸

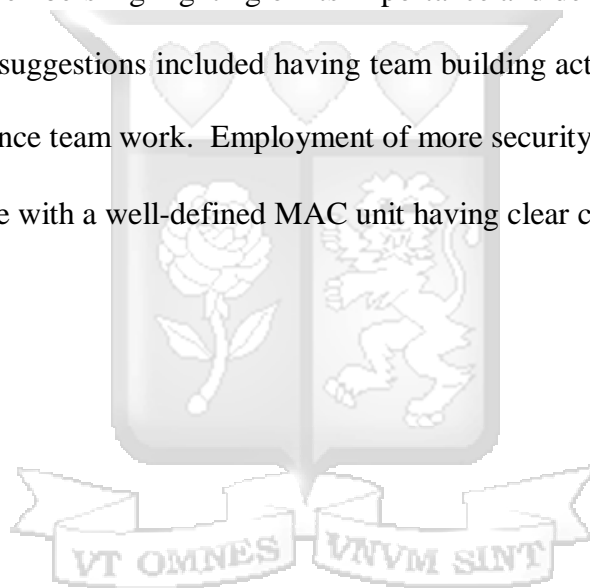
⁴⁵ Interview with JOC Lead Agency Representative (JKIA). March 6, 2020, Nairobi

⁴⁶ Frazier, Russell M. "A Cannon for Cooperation: A Review of The Interagency Cooperation Literature." *Journal of Public Administration and Governance* 4, no. 1 (2014): 1. p.2

⁴⁷ Interview with JOC Member Representative (Wilson Airport)

⁴⁸ Percy-Smith, J. (2006). 'What Works in Strategic Partnerships for Children: A Research Review,' *Children and Society*, 20, 4, 313–323. p. 318

The last question to the interviewees and the middle level management sought for suggestions on how to improve the performance of the aviation security MAC initiative. In response to this, the following were suggested as ways to mitigate barriers to multi-agency working: Improving on interoperability and surveillance; timely sharing of information across the agencies; creation of clear guidelines and pre-requisite budgets; enhancing screening gadgets, procuring sufficient explosive detector canines; availing enough funding which should be channeled direct to the tactical MAC center through one player; enhancing joint training program on MAC delivery to all members highlighting on its importance and developing a training manual to guide the same. Other suggestions included having team building activities among members of MAC, motivate and enhance team work. Employment of more security support officers and coming up with one office with a well-defined MAC unit having clear communication structures.⁴⁹



⁴⁹ Interview with BMC Secretariat Member Representative.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter four of this study discussed both primary and secondary data collected. This chapter presents a summary of the findings made by the study and draws a conclusion from the findings and suggests recommendations. The conclusions and recommendations are focused on addressing the main objective of the study. This chapter also discusses suggested areas for future research.

5.2 Summary of the Key findings of the Study

The general objective of the study was to establish how Kenya's aviation industry has adopted a MAC approach to meet its aviation security needs. The following is the summary of the key findings of the study organized in terms of the specific objectives.

5.2.1 The Universal Development of the Aviation Industry and Terrorism

The first objective sought to examine the historical development of the aviation industry and the evolution of the terror threat within it. Through literature review, the study established that since its inception, the aviation industry has intensively developed and continues to grow both in technology and in interconnectivity. The global advancement has further permeated to the local aviation industry to become national symbols of their respective countries. This achievement has in turn provided a "soft" spot for the terrorists to make their statement globally through execution of violent attacks. Lastly, the study established that terrorism in the aviation phenomenon remains sustained and therefore effective measures need to be adopted to prevent its successful occurrence.

5.2.2 Responses to Terrorism in the Aviation Industry

The second objective sought to analyze the development of the responses adopted to combat terrorism in the aviation industry. The findings established that the failure by many states to unilaterally and bilaterally combat the problem, led them to cooperate particularly under the auspices of ICAO and established international legal and regulatory standards applied uniformly; as measures to address the threat. The adopted legal and regulatory measures were largely reactionary and were equally proven ineffective following the happenings of the most fatal terror event in the industry, the 9/11 US attacks. A new thinking that embraces proactive approaches, and whose implementation called for a multi-layered working structure requiring all security supporting agencies deployed in the industry to jointly work together in a MAC framework was adopted. The study found out that Kenya has not only domesticated the revised measures, but has also operationalized them under the framework, “Border Control and Operations Coordination Committee (BCOCC).”

5.2.3 Multi-Agency Cooperation in Combating Terrorism in the Kenyan Aviation Industry

The final objective sought to examine how the multi-agency cooperation strategy is functioning to enhance and facilitate effective counterterrorism strategies in Kenya’s aviation industry. The general findings indicate that majority of the respondents had a good experience in their practice of multi-agency working. Majority also agreed that MAC had succeeded in combating terrorism and related activities in the industry.

The study further established that the aviation security MAC initiative has put in place a clear governance structure with established accountability structures inclusive particularly at the strategic and operational levels. Except for JKIA and Wilson airport, the framework is yet to be operationalized at the tactical security levels of the other international airports in Kenya.

Additionally, the aviation security MAC has documented its goals and objectives and has clearly defined roles for each agency in terms of their specialized mandate, and their contribution to the MAC. It has also appointed Kenya Airports Authority as a lead agency to coordinate and facilitate MAC activities in the industry. It however missed out on establishing critical operational procedures which include protocols on information sharing, communication, and resource sharing.

The findings further indicated that although there was improvement in information sharing among partner agencies during joint operations and meetings, information sharing still suffered insufficiency. Some agencies were found to be reluctant to share security information due to their work culture restrictions. Sharing information was also difficult due to inaccessibility to partner agency information databases which were yet to be interlinked.

Coupled with information sharing is the aspect of quality and timely communication which the study found to be highly insufficient. The study found out that there was too much control of information from the headquarters and this hindered smooth and timely decision making at the operational and tactical levels. At administration levels, a public affairs officer whose duties are to link communication to all points of entry and exit within the industry was yet to be appointed.

Further, the study found out that joint trainings on MAC delivery were equally highly insufficient. Although top management were highly committed to joint trainings, opportunities for the same were limited. By the time of research, many officials were yet to be trained on MAC delivery. The major reason for this state of affairs was lack of adequate finances to facilitate trainings to reach all the officials supporting security at the aviation industry. The study also established that the initial training strategy that randomly picked officials to be trained at regional level was insufficient to reach all MAC officials. The study also established that the high turnover rates of MAC trained officials due to job related transfers also hindered MAC's smooth

functioning. Additionally, it was established that even with the transfers, proper handing over of MAC delivery was not ensured.

The study findings also suggested very low satisfaction levels regarding the extent to which the lead agency facilitated MAC affairs to make it easy for the different agencies to work together. The MAC initiative suffered technical, financial, human and time resource inadequacy. This was so largely because of limited MAC budgets which could not allow purchase of more efficient and modernized equipment like scanners and detectors among other tools of work. The analyzed results also indicated that although agencies were required to pool and share resources, challenges were experienced due to lack of a clear protocol detailing modalities of resource sharing among partner agencies.

The research study findings also pointed out to the following as inhibitors to MAC; unhealthy competition among member agencies, mistrust within MAC, superiority mentality by some agencies that were financing most of the MAC activities and lack of recognition of the lead agency.

5.3 Discussions of the Findings

In this section, the study will examine whether the findings met the study objectives and whether the study assumptions were right. To do this, reference will be made to the conceptual framework and to literature in the previous chapters. The first objective sought to examine the evolution of the aviation industry and the terror threat over time while the second objective sought to analyze the development of responses to combat terrorism within the industry over time. The third and last objective sought to examine the multi-agency approach and its role in counter terrorism in Kenya's aviation industry. On the other hand, the first assumption this study made was that there is no relationship between international aviation security law and domestic aviation

security while the second assumption stated that there is a relationship between international aviation security law and domestic aviation security.

Generally, a majority of the respondents (84.6%) agreed that MAC approach to aviation security had so far been successful in combating terrorism and related activities in Kenya's aviation industry. The respondents observed that there had been an increase in the number of arrests of suspects, improvement in response time to terror threats and the increased levels of joint decision making. This finding falls within the expectations of objective three that sought to examine multi-agency approach and its role in counter terrorism in Kenya's aviation industry.¹

The findings also fall within objective two which is comprehensively discussed in chapter three² of this research study; that adoption of proactive security measures offers a better solution to combating terrorism in the industry. The findings therefore affirm the second assumption that stated that there is a relationship between international civil aviation law and the domestic aviation security.³ This result is compatible with the globally accepted assertion held by others in the aviation industry, that the multilayered approach to aviation security forms a defensive mechanism that improves chances of intercepting a threat in stages of an ongoing attack.⁴ The study findings have therefore demonstrated that the change in the response approach from reactionary to proactive has consequently tightened the security levels in Kenya's aviation security owing to the success factors discussed below.

¹ Chapter One, p. 8

² Chapter Three, p. 58

³ Chapter One, p. 29

⁴ Jacques, D., and Maxime Langlois. "Airport attacks: The critical role airports can play in combatting terrorism." *Journal of Airport Management* 11, no. 4 (2017): 342-354.

5.3.1 Success Factors

The study established that the success of Kenya's aviation security MAC is attributed to myriad factors: First, it has put in place a shared goal which is clearly understood and accepted by majority of the partner agencies. Secondly, it has established clearly defined roles in such a way that every partner agency knows what is expected of them. Third, the MAC has put in place clear lines of accountability which work and so each partner agency is held accountable to its role.⁵ Additionally, the high commitment level from the strategic management which is equally cascaded to the operational and tactical level officers. This attitude is demonstrated by the study findings which indicate that 71.8% of the senior and middle level officials were positive about their experience in the aviation security MAC initiative.

These findings relate to objective two⁶ which sought to analyze the development of responses to combat terrorism within the aviation industry overtime, as well as objective three⁷ that sought to examine the multi-agency approach and its role in counter terrorism in Kenyan's aviation industry. The above factors have contributed to the functioning of the aviation security MAC which in turn has offered a better response to mitigating terrorism and related activities in the industry. The finding also affirms the assumption that there is a relationship between international law on civil aviation security and domestic aviation security. An improvement in the international law consequently leads to an improvement in the aviation security at the domestic level. This finding is also consistent with a number of literatures globally concerning the factors that enhance MACs as established and discussed in the literature review section of chapter one of

⁵ Border Management Committee and Joint Operations Centre Standard Operating Procedures (Revised Edition) pp. 19-22

⁶ Chapter One, p. 8

⁷ Ibid

this research study.⁸ However, the study also identified the issues discussed here below as factors that inhibit effective operationalization of the MAC initiative.

5.3.2 Factors Inhibiting Multi-Agency Working Operations

The number of respondents who registered their dissatisfaction on the extent to which information is shared, extent to which they receive quality and timely communication, extent to which they received joint trainings and the extent to which the team is facilitated to work together effectively, was significant and cannot be ignored.

Although majority indicated that they were satisfied with the extent to which information was shared among the MAC team, 33% dissatisfaction rate is still a significant finding that if neglected, can render the security of Kenya's aviation industry vulnerable to terror attacks. Literature reviewed generally agrees that hoarding of information by some agencies within MAC set up creates cracks that provide an avenue for successful terror attacks in the industry as it happened in the US 9/11 attack.⁹

The study findings also established that more than half (56.4%) of the respondents were dissatisfied with the extent to which quality and timely communication was shared among the MAC team. Successful MACs require transparent communication structures and maintenance of regular and timely communication.¹⁰ The absence of timely and quality communication would severely hamper timely response to risk factors that render aviation industry susceptible to terror attacks. which consequently will result to a possible breach of aviation security.

⁸ Chapter One p. 10

⁹ Bogdanos, Matthew F. "Joint Interagency Cooperation: The First Step." *Institute for National Strategic Studies*, No 37 (2005):10-18. p.10

¹⁰ Atkinson, Mary, Megan Jones, and Emily Lamont. "Multi-Agency Working and Its Implications for Practice." *CfBT Education Trust* (2007). P. 50

The findings further pointed out that close to sixty percent (56.4%) of the respondents were dissatisfied with the extent to which regular joint trainings were offered. Insufficient joint trainings would likely lead to knowledge gap amongst the partner members as well as to gaps in integration, cohesion and coordinated responses to aviation security threats. Joint multi-agency training is a key factor in the success of multi-agency working. The trainings provide a greater opportunity to enhance partner agency's knowledge sharing and understanding of other agencies' way of operation. Joint trainings also serve to demystify "silo" working mentality into embracing a multi-agency working culture. The absence of this integral aspect of multi-agency working largely explains the findings that pointed to the presence of mistrust, unhealthy competition, agency superiority, and lack of respect and recognition for the lead agency within the aviation security MAC team. High turnover rates of the few staff trained on MAC delivery also challenges the building of a resilient and sustainable MAC culture.¹¹

Lastly, the findings of the study revealed perennial constraints on funding and staffing as factors that threaten MAC working in the aviation industry. Lack of funds inhibits effective multi-agency working due to incapacity to procure sufficient and modern tools that facilitate efficient delivery of aviation security services.¹² The resultant gaps create vulnerabilities that can lead to security lapses in the industry. As the study found out, necessary operational equipment such as modern scanners, metal and canine detectors were lacking. Lack of sufficient finances also explains the thin and overstretched number of employees in the MAC team.

¹¹ Winters, Joanna Gutierrez. "Establishing a Conceptual Framework for Interagency Coordination at US Southern Command." *PRISM* 5, no. 1 (2014): 136-153. p 146

¹² Sloper, Patricia. "Facilitators and Barriers for Co-Ordinated Multi-Agency Services." *Child: Care, Health and Development* 30, no. 6 (2004): 571-580. p. 576

Generally, the factors identified above as inhibiting effective operations of the aviation security MAC team in Kenya fall within objective three¹³ of this research study that aimed to examine the multi-agency approach and its role in counter terrorism in Kenya's aviation industry. Given that the structural factors of MACs, the findings also align with objective two which sought to analyze the development of responses to combat terrorism within the industry over time.¹⁴ The findings point out that although the MAC initiative has contributed to strengthening the industry's security architecture, its structures need to be strengthened further for optimal delivery. The findings support the generally agreed literature that inadequacies in information sharing, quality communication, joint trainings and resources threaten multi-agency working.¹⁵

5.4 Conclusion

To better respond to terror threats within her aviation industry, Kenya has indeed adopted and operationalized the proactive measures advanced by the current international civil aviation security law through a MAC framework. The approach to security has played a key role to enhance and facilitate effective counter terrorism strategies in the industry. The study finds the approach the most suited mechanism to respond to aviation terrorism which is transnational in nature given the approach's global and local linkage in sharing information and other resources. It affirms the assumption that improvement in the international civil aviation security law consequently results into improvement the domestic aviation security structure. However, being a rather new initiative, the approach faces certain teething challenges both legal and structural that if not well addressed will water down the gains made and hinder it from realizing its full potential in combating terrorism

¹³Chapter One p. 8

¹⁴ Ibid

¹⁵ Atkinson, Mary, Megan Jones, and Emily Lamont. "Multi-Agency Working and Its Implications for Practice." *C/FT Education Trust* (2007). pp. 43-57

in the aviation industry in Kenya. The challenges need to be fully addressed in order to enhance the existing MAC efforts towards combating terrorism in the aviation industry in Kenya.

5.5 Recommendations of the study

Based on the study findings, the study makes the following policy and research recommendations.

5.5.1 Policy Recommendations

The National Security Advisory Council needs to ensure that protocols to guide operations on communication, information and resource sharing are established and implemented. These will clearly spell out the rules and modalities in which these critical aspects of MAC will be operationalized to enhance MAC working in combating terrorism in the state's aviation industry. Agencies respond better when they are better guided and contractually bound to share information, disseminate quality and timely communication, and pool resources.

The Ministry of Interior needs to facilitate for more and regular joint training programs on multi-agency delivery targeting all staff deployed in the various agencies that support security at the aviation industry. The programs should detail the importance of multi-agency cooperation towards efficient delivery of security services.

In addition, the Ministry of Interior needs to inject more funding to the MAC initiative which should trickle to the operational and tactical levels where actual MAC working is experienced. The funds will facilitate operational activities and acquisition of modern equipment such as enhanced screening gadgets and sufficient explosive detector canines to aid actual operations in MAC working towards combating terrorism in the aviation industry.

5.5.2 Recommendations for Further Research

While this study sought to establish how the Kenyan aviation industry has adopted a MAC to meet its aviation security needs, it is clear from the findings that there existed some significant shortcomings mainly; information sharing, quality and timely communication, joints trainings on MAC deliver and insufficient resources. Given the centrality of information sharing in the execution of security operations in the aviation industry, this study recommends a further detailed interrogation as to the extent to which information sharing or a lack of it adversely affects multi- agency working in the general security sector.



APPENDICES

Appendix I: Questionnaire

Dear Respondent,

RE: Research Dissertation

My name is Edna Omweno. I am a postgraduate student at Strathmore University. I am currently working on my research dissertation which centers on “Functioning of Multi-Agency Cooperation in Enhancing Security in Kenya’s Aviation Industry.” As you are aware, the success of aviation security in thwarting terrorism threat is in multi-agency cooperation (MAC). This research aims to establish the functionality of MAC and therein identify factors that either support or undermine effective MAC in the security of Kenya’s aviation industry. The success of the research substantially depends on your cooperation. I hereby request you to respond to the questionnaire as honestly as possible and to the best of your knowledge.

Privacy, protection and consent

For respect of your personal privacy and to allow you to express your personal opinions freely without fear of repercussion, please be assured that your identity and responses will remain anonymous and purely for academic purpose. Collected raw data from this study will be disposed after submission of the final recommendations of the study.

Instructions: Please **fill in** the provided spaces or **tick** the most appropriate response where necessary. Be, specific and elaborate accordingly.

PART A: Demographic information

1. Please specify your position:
 - a) Middle level Management ()
 - b) Senior management ()
2. Gender? _____
3. Which age group below best describes you?
 - a) 30 and under ()

- b) 31 to 40 ()
- c) 41 to 50 ()
- d) 51 and above ()

4. What is the highest level of education you have completed?

- a) Less than high school ()
- b) High school ()
- c) College certificate ()
- d) Bachelors Degree ()
- e) Master's degree ()
- f) Doctorate ()

g) Other _____ (Specify)

PART B: Respondent's experience on multi-agency cooperation in the aviation industry

5. For how long have you been involved in collaborative work with other agencies on matters of aviation security?

- a) Less than 3 years ()
- b) 3-5 years ()
- c) 5-10 years ()
- d) 10+ years ()

6. In general, how would you describe your experience with multi-agency cooperation at your work station?

- 1 = Extremely poor (very negative experience) ()
- 2 = Somewhat poor (not very positive but there are some good outcomes) ()
- 3 = Moderate (no strong feelings either way) ()
- 4 = Good (overall positive with room to improve) ()
- 5 = Excellent (extremely positive) ()

Please explain your answer above:

7. What is your overall perception concerning the success of multi-agency cooperation initiatives in combating/thwarting terrorism and related activities in your work station?

- 1 = Negative (collaboration initiative has made things worse) ()

- 2 = Insufficient (insufficient outcome has been achieved) ()
- 3 = Partial/complete (a bare minimum number of outcomes been achieved) ()
- 4 = Successful (most outcomes have been achieved) ()
- 5 = Very successful (all outcomes have been achieved) ()

Please explain your answer above:

PART C: Enablers of multi-agency cooperation

8. Please indicate the degree to which you are aware of the existence of the following multi-agency enhancing factors at your work station.

Question (1)	Yes	No (2)	Don't Know (3)
Support of the multi-agency initiative from senior/political leadership/management			
A clear governance framework that makes it clear how decisions can be made			
A lead agency with accountability for facilitating/managing the processes			
Accountability mechanisms that ensure that all of the required participants in the process contribute to the success of the framework			
The multi-agency includes all state agencies supporting aviation security			
The multi-agency team includes non-state actors with an interest in the security of Kenya's aviation industry (e.g. Airlines' security, representatives of other states)			
Your agency's role in the multi-agency partnership is clearly defined			
There exist structures detailing how resources should be shared			
A schedule for regular joint trainings with other partners on multi-agency delivery			
A clear protocol on communication and information sharing modalities within the multi-agency			
The multi-agency team is sufficiently resourced			

9. If "No" to the above question, kindly specify the resource inadequacy.

10. in your opinion, what standard operating procedures necessary to enhance MAC working are lacking?

PART D: Staff practices and perceptions on multi-agency cooperation

11. Please indicate the degree to which you agree with the following statements

Question Disagree (1)	Strongly		Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)
Multi-agency cooperation is highly prioritized in my agency						
My agency leaders often meet with leaders of partnering agencies to deliberate on pertinent security issues						
My agency finds it difficult to engage in cross sector cooperation due to my its unique requirements						
Conflicting organizational policies make it difficult for my organization to cooperate with partner agencies						
The staff under my leadership clearly understand their role in the multi-agency partnership						
My agency easily provides information to partner agencies whenever they need information that is relevant to their work						
Partnering agencies easily provide information to my agency whenever we need information that is relevant to our work						
My leadership commits to joint training with other agencies						
My agency works with partner agencies to identify lessons learnt to improve cooperation						
Our sister agencies often view my organization as competitors						
Staff under my supervision recognize the importance of working with other sectors to achieve objectives						
My agency staff are aware of the capabilities of other agencies we work with						
Staff in my agency have a positive attitude towards collaboration with other organizations						

Staff members of my agency are willing to share decision making authority with other organizations when addressing cross-cutting security issues					
Members in my organization respect the expertise of staff members of agencies we work with					
My agency staff members tend to be suspicious and distrust staff from sister agencies					

12. Please indicate your level of satisfaction to the following statements

Question Dissatisfied (1)	Extremely		Dissatisfied (2)	Satisfied (3)	Extremely Dissatisfied (4)
Extent to which my agency participates and contributes to setting multi-agency objectives					
Extent to which member agencies cooperate					
Quality and timely communication between member organizations					
Extent to which information is shared between and among partner agencies					
Contribution multi-agency cooperation has made to increasing my agency outcomes and output (e.g. in detecting, intercepting and seizing terror related activities)					
Regular joint training of staff within the partner agencies on multi-agency delivery.					
Extent to which the team is effectively facilitated by the lead agency making it easier for the different agencies to work together effectively					

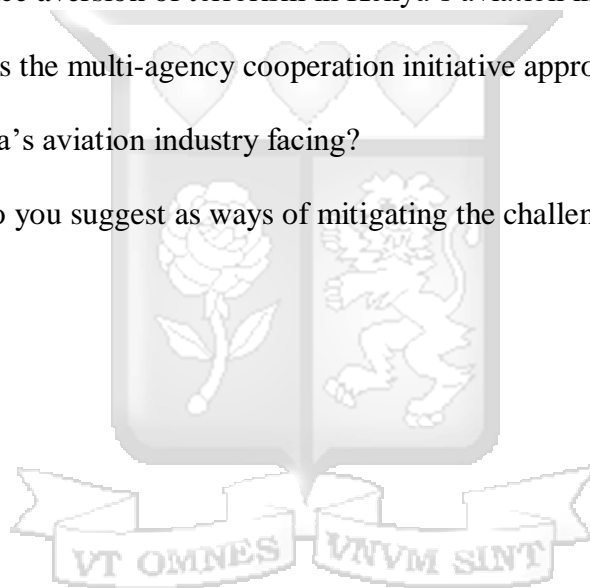
13. What other factors would you identify as inhibiting MAC in your work place?

14. What recommendations would you suggest as ways of reducing barriers in multi-agency working?

Thank you for completing this questionnaire!

Appendix II: Interview Schedule

1. How is the multi-agency cooperation approach to combating terrorism in Kenya's aviation industry structured?
2. Other than being constitutionally instituted, what other frameworks/protocols/processes exist/have been formulated to support multi-agency cooperation functioning to curb terrorism in Kenya's aviation industry?
3. In your opinion, what factors so far have supported application of multi-agency cooperation initiative to enhance aversion of terrorism in Kenya's aviation industry?
4. What challenges is the multi-agency cooperation initiative approach to combating terrorism in Kenya's aviation industry facing?
5. What measures do you suggest as ways of mitigating the challenges faced?



Appendix III: Ethics Letter



31st March 2020

Mrs Omweno, Edna
edna.omweno@strathmore.edu

Mrs Omweno,

RE: Multi-Agency Cooperation in Combating Terrorism in the Aviation Industry in Kenya


This is to inform you that SU-IERC has reviewed and **approved** your above research proposal. Your application approval number is **SU-IERC0689/20**. The approval period is **31st March 2020 to 30th March 2021**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

for: 
Dr Virginia Gichuru,
Secretary; SU-IERC

Cc: Prof Fred Were,
Chairperson; SU-IERC



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Email info@strathmore.edu www.strathmore.edu

Appendix IV: Plagiarism Report

MULTI-AGENCY COOPERATION IN COMBATING TERRORISM IN THE AVIATION INDUSTRY IN KENYA

ORIGINALITY REPORT



PRIMARY SOURCES

1	espace.rmc.ca Internet Source	1%
2	Submitted to American Public University System Student Paper	1%
3	pdfs.semanticscholar.org Internet Source	1%
4	epdf.tips Internet Source	1%
5	Submitted to Coventry University Student Paper	<1%
6	repository.out.ac.tz Internet Source	<1%
7	Submitted to Kenyatta University Student Paper	<1%
8	Submitted to Eiffel Corporation Student Paper	<1%

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