AMERICAN CIVIL AVIATION SECURITY AND ITS CHALLENGES THROUGHOUT HISTORY: THE CASE OF 9/11

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Approval of the Graduate School of Social Sciences

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ABSTRACT

AMERICAN CIVIL AVIATION SECURITY AND ITS CHALLENGES THROUGHOUT HISTORY: THE CASE OF 9/11

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In this thesis, it is aimed to explain the effects of 9/11 international terrorist attacks on American civil aviation security in the USA and to analyze the security perception and discourse created after this date. Along with globalization, both the source of terrorism and the threat and security perception have changed. This thesis emphasizes the difference between security and safety, development of technology, the power of discourse and the media, and examines the development process of civil aviation security in the United States. The legal arrangements and the changes in the airport / flight security rules made after the September 11 attacks are explained in detail. This study, which investigates the challenges and measures taken by the US since the aviation activities started and the impacts and consequences of the September 11 attacks, is important for a clear understanding of the current civil aviation security practices in the US.

Keywords: Civil aviation, Securitization, US Aviation History, September 11 Attacks, Security Perception
ÖZ

AMERİKAN SİVİL HAVACILIK GÜVENLİĞİ VE TARIH BOYUNCA KARŞILAŞILAN ZORLUKLAR: 9/11 OLAYLARI

Adıgüzel, Ece
Yüksek Lisans, Latin ve Kuzey Amerika Çalışmaları Bölümü
Tez Yöneticisi : Assist. Prof. Dr. Bahar Gürsel

Şubat 2020, 109 sayfa

Bu tezde 11 Eylül 2001 tarihinde ABD’de gerçekleşen uluslararası terör saldırılarının Amerikan sivil havacılık güvenliği üzerindeki etkilerinin açıklanması amaçlanmaktadır ve bu tarihten sonra değişen güvenlik algısı ve söylem aracılığıyla oluşturulan güvenleştirmeye süreci analiz edilmektedir. Küreselleşmeye beraber gerek terörün kaynağından gerekse tehdit ve güvenlik algısında değişiklikler meydana gelmiştir. Tez; güvenlik ve emniyet arasındaki farka, teknolojinin gelişmesine, söylemin ve medyanın gücune vurgu yapmakta ve ABD’de sivil havacılık güvenliğinin gelişim sürecini incelemektedir. 11 Eylül saldırılarından sonra yapılan yasal düzenlemelere ve havalimanı / uçuş güvenlik kurallarındaki değişimlere detaylı bir şekilde yer verilmektedir. Havacılık faaliyetleri başladığından bu yana ABD’nin yaşadığı zorlukların ve bunlar karşısında alınan önlemlerin, 11 Eylül saldırılarının yaşadığı anın, etkilerinin ve sonuçlarının araştırıldığı bu çalışma ABD’de günümüzde uygulanan sivil havacılık güvenlik uygulamalarının daha net anlaşılabilmesi açısından önem arz etmektedir.

Anahtar Kelimeler: Sivil havacılık, Güvenleştirmeye, ABD havacılık tarihi, 11 Eylül Saldırıları, Güvenlik Algısı
To my mother, Serap Adıgüzel
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I wish to acknowledge the support and great love of my family, my father Ramazan Adıgüzel, my mother Serap Adıgüzel and my sister Eda Adıgüzel. They kept me going on and this work would not have been possible without their help and support.

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<td>Aviation Safety Analysis System</td>
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<td>ATSA</td>
<td>Aviation and Transportation Security Act</td>
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<td>Civil Aeronautics Authority</td>
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<td>Ground-Controlled Approach</td>
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<td>ILS</td>
<td>Instrument Landing System</td>
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CHAPTER 1

INTRODUCTION

Human beings have wanted to fly by emulating birds since the early ages. Even in the absence of motor vehicles, people got inspired by birds' flapping, made big wings and tried to comprehend the secret of flying by jumping from high points with these wings. In time, balloons, gliders and engine aircrafts were invented, air transportation was started to be provided by them, and consequently aviation activities developed. Although aircrafts were used primarily for military purposes in the United States (US), they became important instruments in terms of cargo and transportation in the 1920s, the golden years of aviation. Since aviation activities were regarded naturally dangerous, maximum attention to security issues have been given. In the US, aviation has faced many security and safety-related challenges and various institutions have been established to overcome these challenges. The US government with these institutions have become responsible for many security audits.

On September 11, 2001, an unimaginable sized attack was planned and implemented inside the US territory. During the attacks undertaken by al-Qaeda -- a multinational terrorist organization-- a total number of 19 hijackers kidnapped four airplanes departing at almost the same hours and opened the cockpit doors with utility knives. One of the planes hit the North Tower of the World Trade Center (WTC) in Manhattan, and the second one hit the South Tower. After the attacks on the WTC towers, a third plane hit the west side of the Pentagon building. The last plane crashed into an empty space in Pennsylvania shortly after taking off. Apart from being outrageous terrorist activities, those attacks highlight both US civil aviation security gaps and vulnerability of US intelligence services. The damage of the

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September 11 attacks were only observed in wars that took place among different states in global history.

The date of September 11, 2001 is a turning point in international relations history in terms of its effects. Security and threat views have changed as a result of the attacks, and new policies have been implemented. There were two important points of this incident: the fact that the attacks were undertaken by a terrorist organization, not by a state, and that the attacks targeted thousands of civilians. In this respect, September 11 attacks can be described as non-state incidents. Although the real target seems to be the United States, they were terrorist attacks organized against the civilized Western world. The effects of the attacks continued for a very long time, especially in the US and other states.

The changing view of threat and security after 9/11 attacks has enabled the implementation of new laws and policies. In addition to the measures taken within the US, a new security approach within foreign policy has also been adapted in the international arena. As it will be emphasized in the following parts of the thesis, President George W. Bush ensured the securitization of international terrorism with the discourses he developed. Hence, there are two important and interrelated concepts in this thesis: discourse and securitization. Securitization provides a space to understand how and why a particular public problem becomes a security problem. Any public problem can be taken from non-politicized place into the politicized place, and then into the securitized place.\(^2\) The politicization of the problem means its involvement in public policies, while the securitization of the problem justifies the acts that require urgent and extraordinary measures and presents this problem as an existential threat.\(^3\) Securitizing a problem is attained through discourse. In this thesis, the concept of discourse is important in this respect. The securitization actions formed within the framework of national security discourse create a deep sense of hostility towards the problem and its source, and legitimize the

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establishment of hegemony on it. In the post-9/11 period, terrorism, especially the claimed Islamic terrorism problem, was defined within the scope of securitization by utilizing the rhetoric which implies that the attacks were directed against Western values. The securitization process legitimized every move that the US made after George W. Bush’s speech⁴ that he gave on September 11, 2001 from his Oval Office. The effects of securitization can be observed in a wide range from the extreme tightening of security measures in the United States to the US intervention in Afghanistan.

In the first chapter of the thesis, the concept of security, the perception of security in international relations, and the meanings attributed to security by different schools will be explained. In this context, the concept of securitization will be highlighted due to its connection with September 11 attacks. After focusing on general security discussions, the distinction between concepts of security and safety in civil aviation will be explicated, and the civil aviation security problems that have been encountered throughout history will be examined. As it can be understood from the following parts of the thesis, the laws and measures taken in the field of civil aviation security have started to be implemented as a consequence of experienced problems. Prior to September 11, 2001, there were also repeated hijackings and bomb attacks. For every new problem, international conventions were organized, and new rules were added to the previous regulations. In the last part of this chapter, these international conventions are also going to be scrutinized.

The second chapter of the thesis is about the history of American civil aviation and the background of September 11 attacks. How aviation activities, which started with the Wright Brothers in 1903, developed in the US, how the conjuncture of the period affected aviation will be brought forth. The change of aviation perspective with the changing presidents, the problems faced in US aviation history, which institutions were established to overcome these problems and how these institutions worked are also going to be indicated. The moment of the attack on September 11, 2001 and the reasons for this attack will be examined in detail. Undoubtedly, these attacks revealed the need for many changes in both US security policies and civil aviation

security measures. It is inevitable that security perception has changed since that date, given that the threats were originating from states. The last part of the chapter discusses the changing security perception under the Bush administration after 9/11 attacks.

In the last chapter of the thesis, the effects of 9/11 attacks on politics, economy and tourism will be examined. The laws and regulations put forward against the threats, new security measures and rules will be explained. The fact that aviation is a technology-related sector not only reveals its strengths, but also makes it vulnerable to new threats. For example, in recent years, technological innovations such as Wi-Fi service within the aircraft to ensure customer satisfaction also create the possibility to hack the systems from far away. There is always a need to be alert for such threats. Finally, at this point, the challenges for the development of civil aviation will be discussed.

Many different sources such as books, articles, news, speeches, videos and official documents are utilized for this thesis. In the chapter focusing on “The Notion of Security”, the studies of many scholars from different universities, the articles of Turkish academics who write about security, the studies of Barry Buzan --the London School of Economics professor and Copenhagen School representative who made a significant contribution to related literature-- and Ole Waever’s work that reveals the formation and structure of the securitization process are employed as secondary sources. In the “American Civil Aviation Security” chapter, various books, articles and official reports have been studied in order to explain the pertinent historical background in detail. As the topics in the thesis approached today, the sources used also changed mostly to internet news, official websites, published videos and speeches. The most important sources utilized in the chapter titled “The Effects of 9/11 Attacks on Civil Aviation” are official sites such as the ones of the FBI, CIA and the White House Archive. In the last section, although the works of different authors constitute an important place, it is aimed to keep the official documents and resources in the foreground.
CHAPTER 2

THE NOTION OF SECURITY

The concept of security is visible at every point of life from the first moments of the history of human kind. While people gave importance to security in order to live peacefully, states attached more importance to security to protect their borders and maintain their existence. While the security of people generally means physical security, in the international system, security is based mostly on power policies, and it is usually related to the survival of states.

The concept of security, which is one of the basic elements that determine international relations throughout history, varies according to time, place and conditions. With the advancing technology and changing conditions, the tools and equipment used in this scope are changing and progressing over time. While human beings secured themselves by using fire, stone and sickle against external dangers in the primitive times, the defense tools and strategies that are used against risks and threats have changed over time.

In 16th century, the concept of “security” was derived from French and Latin words (“securete” and “se-curus”) which mean “freedom from care”. Although there is no common definition for this notion, there are many definitions brought forth by various scholars. The traditional approach of security underlines the protection of territory, and states’ main values against other powers. Barry Buzan, who is a well-known, international relations professor in London School of Economics, defines security as “taken to be about the pursuit of freedom from threat and the ability of states and societies to maintain their independent identity and their functional

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integrity against forces of change, which they see as hostile”.⁶ According to Arnold Wolfers, a scholar of security studies and international relations, “security measures the absence of threats to acquired values in an objective sense and absence of fear of an attack on these values in a subjective sense”.⁷

All these above-mentioned definitions bring some specification questions to the stage such as “how much security”, “security for whom”, “from what kind of threats”, “in what cost and for how long time period.”⁸ The question of “security for whom” underlines the importance of either continuity of the state, or citizens of the state. While the measures taken for natural disasters mostly cover the security of people, the precautions taken against terror include both states’ and people’s freedom and survival. The new security strategy of the US after 9/11 attacks answers all these questions above: They built a new strategy for all democratic and liberal states as well as for their people in order to prevent all kinds of threats that may derive from other nations and terrorist groups. The questions of to what extend and how much security may change in accordance with the possible threat. Since terrorism within the scope of aviation is connected with technology and its effects are very destructive, states have become responsible to implement top priority security rules, even these rules are against the comfort of air transport.

The concept of security has changed during the course of the history according to the general characteristics of societies, values, cultures and geography of each state and at the same time creates a conflict-reconciliation relationship between individuals, groups and states, which is directly related to the security-threat relationship.⁹ Before the modern era, in the Middle Ages, when the concept of

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security was not a part of political discourse, security was regarded as protection against predators and invaders. The first recorded formal form of concern of establishing security was in the 16th century BCE when the first monarchical structure was shaped by the Hittites.\textsuperscript{10} Border security was ensured with the Kadesh Treaty, the first written agreement after the Kadesh War due to the conflicts that occurred between Egypt and the Hittites in 1340 BCE.

Sovereignty wars emerged within the Neolithic period while having settled life and surplus product. Man’s domination over man and nature continued for the purpose of holding the surplus product and defending it against other communities. The discovered underground resources made important contributions to the development of civilizations and sovereignty wars in terms of economy, society and politics. For instance, discovering iron helped agriculture to grow more with new tools as sling and sickle. These new tools brought different productions and created the first settled agricultural societies.\textsuperscript{11} Besides, discovering iron mines led economy develop more, and provided the opportunity to produce advanced weapons. At that time, the military balances in the world changed radically, and the techniques of war evolved.

There have been many key points in the historical development of security. In the early years of security, wars occurred to keep the surplus product. With the introduction of the monotheistic religions, a security phenomenon caused by religious wars developed. The wars that were related to religious concerns such as—jihad and crusades—which focus on religion, started to bring the issue of security to the forefront. The phenomenon of religion became an element of international security with interreligious wars and sectarian wars that especially took place in Eastern Europe and Africa.\textsuperscript{12} Today, in many contexts, religion is still regarded as

\textsuperscript{10} Beril Dedeoğlu, Uluslararası Güvenlik ve Strateji, 3rd ed. (İstanbul: Yeni Yüzyıl, 2016), 15-16.

\textsuperscript{11} William Hardy Mcneill, Dünyा Tarihi, trans. Alaeddin Şenel (Ankara: İmge Yayınevi, 2008), 83-84.

an important threat and one of the sources of terrorism.\textsuperscript{13} In the following chapters, that how the phenomenon of religion comes up in creating the discourse of security will be explained.

20th century witnessed many sovereignty wars such as World War I, World War II and the Cold War. These wars have become manifestations of how different states desiring to have more resources can be cruel to reach their goals. This struggle has made the world an insecure place, and even the states that were not directly threatened were affected by the spread of ideologies.\textsuperscript{14} World Wars showed that the states needed to turn their faces to cooperation in the system, and it was understood that no actor could be completely in power. After the World Wars, the concept of security developed in two different dimensions: nation-state and global.

The 1648 Treaty of Westphalia, the date when the concept of nation began to emerge, was a turning point in terms of inter-state relations; the emergence and prominence of national identity also led to conflicts of interest among states. The concept of discourse in the international arena became a very significant aspect.

Security issue can only be highlighted through discourse. Without discourse, it is impossible for the public to know whether something is secure or insecure. The US is developing its security policies through political discourses given by state responsibles. It conducts all of the United States’ security strategies and policies developed from the first years of its establishment through the discourse. For example, Woodrow Wilson’s Fourteen Points during World War I determined how states should act in the international arena and strengthen their security with concepts like the war-free environment and free trade. Within the framework of economic and political interests, the United States has added concepts such as democracy, fundamental rights and freedom to its security discourses, and intervened in other states' internal affairs with these justifications. Thus, its internal policies have become international strategies.


\textsuperscript{14} Dedeoğlu, \textit{Uluslararası Güvenlik ve Strateji}, 26.
After the Second World War, the world was divided into a bipolar structure by the United States and the Union of Soviet Socialist Republic (USSR). Alongside the American and Soviet blocs, the states and international organizations involved as parties of one bloc, and the international system became bipolar. During the Cold War, the ideological dimension was at the forefront for the security threats and political policies. The ideologies advocated by the blocs determined the Cold War strategies, and shaped political and social life. During this period, the leaders of both blocs transmitted their policies to the public and international arena through discourses, and created an atmosphere of common fear and threat.

The US was the victorious side of the Cold War, the Soviets collapsed and the system evolved into unipolarism. After the Cold War, when the US emerged as the only rising power, the globalization process accelerated. The improvement of technology, the advancement of communication compared to the previous periods, the growth and development of economic, political and social relations among countries, and the collapse of the polarization based on ideological distinctions were among the factors that accelerated globalization.\(^\text{15}\) One of the consequences of globalization was the change of the concept of security. While the concept of security was previously subject to military threats, in the globalized world terrorism, drug trafficking and environmental threats became the subjects of security.

Today, the debate on security involves two poles: the traditional realists who argue that the international system is anarchic, and those who defend new security approaches arguing that the field of security is expanding due to globalization. According to the traditional security approach, state and security are directly related to each other, and they focus on the state and evolve around the concept of military-based security. There are five significant points of traditional security: the reasons of threats, the nature of threats, how to respond to threats, who will provide security, and what will be classified as subject of security.\(^\text{16}\) According to this approach, the


source of the threats is mainly the states, and these states that constitute the threat are generally revisionist actors, which are not satisfied with status quo. Concerning this view, in the international relations system, states are constantly aiming to ensure their security because there is no superstructure to control these states. That is, the international system is anarchic in terms of its actors, and states do not know about the intentions of other states.\(^\text{17}\) This situation constantly pushes states to increase their military power and other factors to ensure their own security.

While the traditional security approach claims that the state is the only institution responsible for national security; according to new security approaches, security is common for all people and can be ensured in interdependence.\(^\text{18}\) The globalization of threats and ever-changing common sense of security attach importance to interdependence and international cooperation, contrary to the understanding of traditional security strategies.\(^\text{19}\) After the Cold War, capitalism emerged as the effective economic system in the world. With the increase of the influence of globalization and interdependence, the traditional military balance of power was replaced by the economic balance of interest.\(^\text{20}\) Increased interdependence commenced to cause some problems concerning each actor in the system. Thus, as Buzan states, the concept of security entered a process of widening and deepening.\(^\text{21}\) Barry Buzan's book titled *People, States and Fear* was the first step and the first study regarding security’s deepening and widening progression. According to Barry


Buzan, security should be considered out of the narrow space.\textsuperscript{22} From his perspective, the traditional understanding of security with a focus on state and military should be revised, widened and deepened in term of military, political, social, economic and environmental security.\textsuperscript{23} The military sector is related to force-based relations; political sector is related with authority and management status; economic sector is related to trade, production and finance relations; social sector is related to collective identity relations and environmental sector is concerned with human activities and the biosphere of the planet.\textsuperscript{24} Barry Buzan advocates both a state-oriented approach and the idea that threats are not only military. As well as military issues, the effect of economic and environmental issues on the concept of security yields the process of “widening” the notion of security; in addition to the states’ security, the inclusion of people and society’s security constitute the process of “deepening” the notion of security.\textsuperscript{25}

With the end of the Cold War, one of the most important concepts added in security studies was the “securitization” in the wake of new security discussions. The concept of securitization was first introduced in Ole Wæver’s famous article named “Securitization and Desecuritization”, published in 1995.\textsuperscript{26} Wæver defined security as an act of speech, and described securitization as a verbal introduction that turned a topic into a threat.\textsuperscript{27} The act of securitization refers to one issue as a threat, which gives it absolute priority over other issues. If this problem cannot be solved, there

\textsuperscript{22} Buzan and Hansen, \textit{The Evolution}, 189.

\textsuperscript{23} Buzan, "Is International Security Possible?," 36.

\textsuperscript{24} Buzan and Hansen, \textit{The Evolution}, 1.


comes a perception that no other issue will matter. Thus, the actors try to solve this issue by using extraordinary tools or taking precautions. There are three main elements in the securitization action: the reference object (the element that is currently threatened and must survive), the securitizing actor (the element that declares a subject as a security problem because it threatens the reference object), and the functional actors (the elements that affect the dynamics of the relevant sector). The reference object is the object, which is declared to be the target of the security threat. According to the writers of the Copenhagen School, the object of reference is the object that is claimed to be necessary to protect and rescue, as it has to live. To illustrate the reference object, the securitization made by the Bush Government during the 2003 Iraq War can be given as an example. In that securitization practice, the Bush administration declared the reference objects at three levels to secure Saddam Hussein's administration: Saddam administration was a threat to world peace at the macro level, it posed a threat to both Iraqi people and people living in the US and other Western societies at the micro level, and a threat to the United States and Western civilization at the middle level.

The securitizing actor is the person or group that performs the act of speech. The main players of this role are political leaders, bureaucrats, governments, lobbies and pressure groups. According to the same example, it is not easy to identify the securitizing actors during the securitizing of the Saddam regime. These actors can be sorted as the US as a state, the government of the time, and the important people such as George W. Bush and Donald Henry Rumsfeld who was Secretary of Defence.


29 Copenhagen School is a part of the post positivist movement in the international relations emerged after Cold War. The most well-known scholars from Copenhagen School are Ole Wæver and Barry Buzan. This school brings a critical approach to security studies. For detail, see Scott Nicholas Romanuk, "Copenhagen School," in *The SAGE Encyclopedia of Surveillance, Security, and Privacy*, ed. Bruce A. Arrigo (Thousand Oaks: SAGE Publications, 2018), http://dx.doi.org/10.4135/9781483359922.n95.


while 9/11 occured. Functional actors differ according to the sector in which the securitization action is carried out, and even without other actors, they greatly affect security decisions. In the case of the 2001 attacks and the War in Iraq in 2003, the media can be portrayed as a functional actor.

Securitization has to be regarded as a process. The process starting from discourse needs to reach the point of identifying the threat and persuading the target audience to the existing situation. In this process, it is not only important to express the security discourse but also the identification of a threat that requires extraordinary measures and the acceptance of this situation by the target group is extremely critical. In the following chapters of the thesis, the changing security policies in the US within the framework of 9/11 attacks and the security activities carried out after the attacks will be explained.

Although an important concept like “securitization” appeared in literature in 1995 as an outcome of new security debates, the US also used discourse policies before the Cold War in order to build and develop her own interests. In an inverse logic, one of the reasons that the United States’ entering the Second World War was to keep its financial interests, claiming that its security and the survival of the state were in danger. In 1938, Germany had only one percent of the world's gold and money reserves; on the other hand, the United States held 54% of these reserves, and each of France and Britain had 11% separately. In this respect, the US entered the Second World War with the discourse that a military base was attacked in Hawaii, which is a US territory, and that this attack could never be acceptable. While struggling with the threats of globalization, the US developed and used tools that were different from the ones of the Cold War era. In this context, the United States refrained from using military force unless it was directly related to its vital interests. As will be explained in the next chapter, it is an undeniable fact that there

32 Ibid., 81.


34 Ibid., 16.
has been a change in the US perception of threat and security with the 9/11 attacks. Nevertheless, as a consequence of these attacks, it became impossible to get away from the traditional understanding of security while trying to explain the security and foreign policy measures that the US was trying to reshape.

2.1. Civil Aviation Security and Safety

While security can generally be defined as the condition or feeling of being free from fear and danger, the concept of security in aviation brings special explanations to the field of aviation. The names used in the aviation security are basically the same, but the fields and definitions indicate different activities or methods. For this reason, the concept of security used here in the sense of general aviation security, and security is defined as “safeguarding civil aviation against acts of unlawful interference by a combination of measures and human and material resources”. Before the World Wars, aviation was more prominent in the military sense, but it gained commercial importance with the effect of globalization. With the Chicago Convention held in 1944, standards and procedures were determined for peaceful global air navigation, so that the foundations of civil aviation security were laid down by the Chicago Convention and the establishment of ICAO.

There is a likelihood of confusion between two terms in aviation: security and safety. For example; searching and screening of a passenger at the airport is security-related, but the safety requirement is that the passenger must fasten his seat belt while take-off and landing. Aircraft accidents are considered in scope of “air safety”, while incidents including aircraft hijacking and terrorist acts organized in the terminal and aircraft are considered within the scope of “air security”. The scope of aviation security is very wide, covering every moment of the flight experience from

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airport security to baggage security. The 17th annex of the Chicago Convention, signed in 1944, identifies the situations that endanger civil aviation security:

- Aircraft seizures
- Giving harm to an operating aircraft
- Hostage-taking actions on board,
- Armed intrusion on an aircraft or to an airport
- Carrying weapon or dangerous device intended for illegal actions,
- Using an operating aircraft for the purpose of kill, injure or giving serious harm to the environment,
- Transferring false information in order to endanger the safety of the aircraft, passengers, ground services personnel or crew.  

However, it would not be right to limit the situations that threaten civil aviation security to the above-mentioned articles. The development of technology and the change of the security problems encountered have led to the creation of the updates in the 17th annex. Three major issues that threaten civil aviation security are sorted on below titles: attacks on aircraft and airports, hijacks, cyber sabotage to aviation systems.

2.1.1. Attacks on Aircrafts and Airports

Bombing activities are the main and well-known attacks on aircraft and airports. A bomb threat is a threat that indicates the security of an airplane in flight or on the ground, at any airport, at any civil aviation facility and any person may be in danger because of an explosive or any instrument that may give harm. It is critical that passengers and aircrafts’ protection should be provided effectively and relatively, and cheaply against any possible damage of baggage-borne bombs could cause. Among the bombing activities that have occurred so far, two have caused enormous damage: On June 23, 1985, a bomb was planted and exploded on an Air India 747 resulting in 329 fatalities. On December 21, 1988, a bomb exploded on a Pan Am 747 resulting in 259 fatalities aboard the aircraft and 11 fatalities on the ground. 

38 ICAO, Annex 17, 1.

After the attacks, the US Department of Transportation improved the explosive detection systems at the American airports.

In addition to carrying out an action by placing bombs in the aircraft, attacks with missiles and weapons while aircraft was in the air or on the ground were also recorded in history. For example, the date of October 4, 2001 witnessed an air crash on the Black Sea. Sibir Airlines departed from Israel to Russia was shot down by the Ukrainian military by mistake during training, 78 people aboard died as a result of this mistake.41

Armed and bomb attacks on airports are just as vital as attacks on aircraft. Some of the most recent events are Brussels Zaventem Airport attacks on March 22, 2016 and Istanbul Atatürk Airport attacks on June 28, 2016. At Atatürk Airport, three terrorists wrapped their bodies with bombs in addition to the weapons that were used for the attack. Apart from the financial and material aspects of the Atatürk Airport attacks, which ended with 42 casualties and 238 wounded people,42 and the Brussels Airport attacks that killed 32 people and injured 320 people,43 the emotional and psychological aspects are also important.

2.1.2. Hijacks

The most common form of unlawful action against civil flight security is aircraft hijacking. These actions, which are also coined as “air piracy”, can be defined as the capture of an aircraft by gun or by force. Terrorists often have two main motivations for hijacking: The first is to escape from a particular country when an air hijacker

forces an aircraft’s crew to change the direction of a flight to land in another country, and the second is to have ransom by seizing the aircraft, its crew and passengers. However, the fulfillment of these demands depends entirely on the government, not on crewmembers or individual aircraft owners.

The first commercial hijacking in civil aviation took place on July 16, 1948. An armed man hijacked a plane carrying 23 passengers from Macau to Hong Kong. When the airplane crashed into sea, only one survived from the plane’s crash. Over the next 30 years, hijackings became increasingly frequent. If 10-year averages are examined, number of aircraft hijackings rose to 41 per year between 1968 and 1977 while between 1948 and 1957, the average was only one per year. Since the number of hijacking aircrafts has increased drastically, security measures have been improved in order to ensure completely secured flights. The security measure became successful, and the number of hijackings in a year never reached those numbers again.

The objectives of aircraft hijacking have changed throughout history. In the history of civil aviation, aircraft hijacking activities were initially made for ransom, fraud and escaping from a crime. During the Cold War, the blocks hijacked the plane of the opposite block and made this crime a mutual race, giving it a political dimension. With the events of 9/11, the crime has reached a level that caused the death of thousands of people with the suicide attack.

2.1.3. Cyber Security on Aviation

In our time, one of the most important crimes that define danger is cybercrime. The fact that aviation is at the center of technology makes it vulnerable to these crimes. What is important in cybercrime is that the offender has the advantage of anonymity; this makes it difficult to find the machine or any physical evidence that the hacker


46 Ibid.
committed. Although cybercrime is associated with cyber terror, there is a fundamental difference between them: Cybercrime can be defined as computer crimes or computer-related crimes, while cyber terrorism is an attack on networks and electronic systems that aim to destroy a system.\textsuperscript{47} However, the common point of cybercrime and cyber-terrorism activities is to destroy or sabotage a system so that the perpetrator can achieve its original purpose.

Cyber-attacks have been on the agenda of the US Department of Transportation since the development of communications networks. The development of technology and the intensification of globalization reveal that the damage caused by cyber-attacks will have more impact than in the past. During the final stages of the production of the Boeing 787 Dreamliner in 2008, the Federal Aviation Administration announced that this type of Boeing could be vulnerable to cyber-attacks, as the computer systems of the aircraft were linked to the internet system that was going to be provided to the passengers.\textsuperscript{48} In addition, in 2010, the Federal Aviation Administration in the United States revealed that air traffic control system was vulnerable to cyber attacks, some support systems had been breached, and hackers were able to access personnel records and network servers.\textsuperscript{49} International and supranational organizations have collaborated to address all of the concerns that could affect global security. Especially the study published in 2001, “United Nations Manual on the Prevention and Control of Computer Related Crime”, is an important work in the fight against cybercrime.\textsuperscript{50} In the mentioned study, it is stated that cybercrime could affect the relationship of aviation sector with international


\textsuperscript{50} Abeyratne, “Cyber Terrorism,” 344.
communication networks, and necessary precautions should be taken in the following years.\textsuperscript{51}

2.2. International Regulations on Ensuring Civil Aviation Security

Since hijackings, bombings and armed attacks are the main causes of the problems that have been regarded as dangerous since the beginning of civil aviation, many conventions have been signed in order to prevent them in the international arena. Although countries have enacted laws regulating aviation activities at the national level, regulations have been moved to an international dimension since the sector generally does not involve problems originating only from one country. Since the first moments of civil aviation activity, many international agreements have been made to ensure overall order and security.

Air navigation regulation has started to be discussed with the Paris Convention in 1919, however, it became one of the subjects of a general peace conference at the end of World War I.\textsuperscript{52} New Aeronautical Commission’s establishment was decided during the convention, and the Commission started to work on March 17, 1919. On October 13, 1919, the Aeronautical Commission prepared a “Convention Relating to the Regulation of Aerial Navigation”, which was signed by the 27 states.\textsuperscript{53} This new Convention is made of 43 articles that dealt with all operational, technical and organizational parts of civil aviation, and foresaw the establishment of International Commission for Air Navigation (ICAN) in order to monitor changes in civil aviation and to offer actions to States to keep up with developments.\textsuperscript{54} Undoubtedly, the establishment of the ICAN was important point in the history of aviation since the commission and its sub-committees played a major role in the development of the


\textsuperscript{52} "The 1919 Paris Convention: The Starting Point for the Regulation of Air Navigation," Postal History of ICAO, ICAO, accessed September 13, 2019, \url{https://applications.icao.int/postalhistory/1919_the_paris_convention.htm}.

\textsuperscript{53} Ibid.

\textsuperscript{54} Ibid.
Chicago Convention (International Civil Aviation Convention) that was signed on December 7, 1944. Until the Chicago Convention, the ICAN had made significant contributions to international civil aviation regulations, and held several international meetings like the Ibero-American Convention in 1926, the Havana Convention and the International Civil Aeronautics Conference in 1928, the Inter-American Technical Conference on Aviation in 1937.

2.2.1. Chicago Convention (December 7, 1944)

Between the two world wars, civil aviation developed and outperformed its predicted potential. This shows that the role of civil aviation in international relations can be very strong. Advances in war technology such as the use of nuclear weapons and the attack with long-range missiles during World War II caused fear and anxiety in civil aviation, and commercial flights were interrupted. A much larger convention was needed, involving more countries, and focusing on civil aviation issues. On September 11, 1944, the United States sent an invitation to 53 governments for an international civil aviation conference to be convened in the United States on November 1, 1944. The main aims were to improve air service and international air routes, and to collect, record and study international aviation data for development and discuss principles and measures for the new convention.

The Chicago Convention is a basic text that regulates the principles of international civil aviation at the universal level and sets the current rules of international air law. This agreement introduced the basic regulations that are still valid such as air navigation, nationality and registration of air transport vehicles, licenses and certificates, measures to facilitate air navigation, accident detection, international standards and procedures and general and non-commercial issues. The Provisional

55 Ibid.


58 Ibid.
International Civil Aviation Organization (ICAO) was established in 1945 as a result of the Chicago Convention. It worked very well so that the permanent organization came into force on April 4, 1947. The ICAO invalidated the Paris Convention of 1919 and the subsequent international conventions, and became the only universal institution of international public aviation rights. The Chicago Convention was initially signed by 52 states, and as of April 13, 2019, there is 193 member states of the ICAO.

2.2.2. Tokyo Convention (14th September, 1963)

Although the Chicago Convention was a crucial step in regulating civil aviation activities, a new regulation was necessary to prevent attacks and actions against aircraft. For this reason, during the conference held in Tokyo on September 14, 1963, it was decided to sign the Tokyo Convention, and in 1969, it entered into force permanently. The first article of “the Convention on Offences and Certain Other Acts Committed on Board Aircraft” explains which crimes are covered by this agreement, in which situations, where and for which types of airplanes are specified. According to the first article of the Convention, crimes against penal law and any action that may give harm to safety of aircraft, people or property therein is the subject of the Convention. On the same article, in order to implement the contract, the aircraft must be in flight status and must have the registration of the participant State. The aircraft must be located on the high seas, in an area where there is no


60 ICAO, “1944: The Chicago.”


63 For the purposes of this Convention, an aircraft is considered to be in flight from the moment when power is applied for the purpose of takeoff until the moment when the landing run ends.
sovereignty or on the territory of a state. This article is quite comprehensive, and shows that the states had worked diligently on the crimes that can be committed in aircraft.

Though this Convention’s main aim is to cover most of the aspects of aviation crimes, there is not an exact definition for crimes committed in an aircraft. In the 11th article, seizure of aircraft is defined as an unlawful act, but the Convention did not consider aircraft hijacking as a crime, and did not mention the punishment for the person who committed the crime, and did not impose any obligation on states to punish those who committed such acts. Contracting states were regarded to be responsible of maintaining the control of the aircraft and all appropriate measures in order to restore the aircraft to its previous status before the crime. This agreement did not deal with offenses in aircraft serving military, custom and police services. In this respect, the Tokyo Convention can be regarded as an important milestone in ensuring the security of civilian aircraft, as there are 183 member states that are party to this convention today.

2.2.3. The Hague Convention (December 16, 1970)

Although the Tokyo Convention provided a broad framework for offenses committed on board, the penalization of aircraft hijackings was left to the hands of contracting states, which rendered the Convention inadequate. This deficiency made it inevitable to sign a new convention that covered aircraft hijackings. With this purpose, various states gathered for the conference held in Hague, Netherlands between December 1 and 16, 1970, and the Convention for the Suppression of Unlawful Seizure of Aircraft was opened for signature by all states. The increasing incidents of hijacking in the 1960s had a high impact on this Convention.

Contrary to previous conventions, the Hague Convention made a clear definition of aircraft hijacking. According to the first article,

64 Convention on Offences and Certain Other Acts Committed on Board Aircraft.

65 Ibid.

Any person on board an aircraft in flight; seizes, attempts to control or attempt to act unlawfully, by force, by threat or by any other means of intimidation; or is an accomplice of a person who performs or attempt to perform any such act commits an offence.67

The first and third articles of the Hague Convention clearly states that in order for an act to be considered as hijacking, it must have the following characteristics: Action must be illegal, there must be force or threat of force, the illegal action must be carried out on board, aircraft should be in flight status68, the aim of person should be taking over the aircraft or its control, the person may work with another person to seize the control of the aircraft.69

Since the second article indicates that contracting states are responsible of implementing severe punishments for the hijacking actions,70 the punishment and judgement of the defined actions have become universal. The explicit mention of punishable acts in the agreement also emphasizes that states must not remain uninterested in these crimes. On the other hand, the Convention does not explain what “severe punishment” is, and states have the freedom to choose which punishment would be appropriate for those who commit such offences. As stated in Article 13, any state which did not sign the Convention before it entered into force may adopt it at any time. In this direction, the Hague Convention has 185 parties within today.71


68 An aircraft is considered to be in flight at any time from the moment when all its external doors are closed following embarkation until the moment when any such door is opened for disembarkation. This means that even if an aircraft is on ground, it may be considered as in flight status.

69 Convention for the Suppression of Unlawful Seizure of Aircraft.

70 Ibid.

The resolution of some issues that were excluded from the Convention are left to the national laws of the states. The crimes committed before the doors were closed for take-off or after the doors were opened while landed were not included in the Convention. In this case, the settlement does not cover external attacks to an aircraft. If there is an accomplice in the hijacking crime, they must be in the aircraft in order to be punished. If the second persons who assist in hijacking are outside the aircraft, punishment of those persons shall be under the responsibility of the contracting states. Considering rising unlawful seizure of aircraft actions happened since 1948, the meeting in Hague and its outcome were one of the most important developments in civil aviation security history.

2.2.4. Montreal Convention (September 23, 1971)

A new arrangement was required for the points where the aforementioned conventions were deemed inadequate. The attacks against the aircrafts did not occur in case the aircraft was not in flight position. Although hijacking activities were at the top of the offences committed against aircrafts, armed attacks or sabotage actions that could disrupt the technical parts of the aircraft needed to be dealt with in a new deal. To this end, on September 23, 1971, a more general agreement was signed in Montreal, which was called as the Convention for The Suppression of Unlawful Acts against the Safety of Civil Aviation. The Convention came into operation on 26 January 1973 and has 188 parties as of today.

The actions to be covered by the Convention are listed in the first article: A person’s unlawful and deliberate use of violence against another person in an aircraft and making the flight unsafe, destruction of an aircraft in service, causing loss of flight capability, placing a device or substance on the aircraft that is likely to destroy aircraft or safety in flight, damaging and destroying air navigation systems and

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73 Ibid., 140-142.

giving false instructions to other people that may endanger the safety of aircraft.\textsuperscript{75} Any person who is accomplice to commit mentioned offences is also a subject of the Montreal Convention. States that have signed this Convention indicate that unlawful actions against the security of civil aviation endanger the safety of life and property, seriously affect air services, and shake the confidence of world nations to the security of civil aviation. Such actions raise serious concerns and that urgent measures are needed to punish offenders for the purpose of preventing these crimes.\textsuperscript{76}

Similar to The Hague Convention, the Montreal Convention forces the parties to impose severe punishment of crimes committed against their regulations. However, the extent of the penalty has not been decided, which is left to the discretion of the countries. Unlike the Tokyo and The Hague Conventions, the Montreal Convention does not require that an offense should be committed on an airplane under its regulations.\textsuperscript{77} Yet, the service time is set; this means that it starts with pre-flight preparation of ground personnel and until twenty-four hours after landing\textsuperscript{78}. This time cannot be shorter than in-flight time of the aircraft. Sabotage acts are also included in this Convention. Still, according to Article 4, in order for the requirements of the contract to be valid during the service time, the airport or facility where the acts of attack or sabotage are organized must be open to international air transportation.\textsuperscript{79}

The Chicago, Tokyo, Hague and Montreal Conventions are very important regulations for taking civil aviation safety and security measures. The most


\textsuperscript{76} Ibid.


\textsuperscript{78} Ibid., 56.

\textsuperscript{79} \textit{Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation}. 25
important thing that should be underlined within the scope of these conventions is the attention that is given only to civil aviation. The aircrafts used for state, military and police service are excluded from these conventions. Yet the ever-changing civil aviation security issues have constantly pushed states to introduce new regulations. Ensuring the security of civil aviation activities that have become widespread with globalization and taking precautions against possible dangers have become the most important issues, and decreases have been observed in the illegal activities carried out in civil aviation. The US always signed these Conventions, and tried to implement all security measures that were stated as essential. However, the 9/11 Commission that emerged after the attacks revealed that the US had failed to take necessary measures to ensure aviation security.
As a consequence of the introduction of aviation activities to human life, there have been some developments in many areas like transportation, military aviation, airmailing and cargo. In order to increase and improve the utility of this invention which rapidly enriched humankind’s daily activities; it has become necessary to take some security measures over time.

The aviation industry varies from other transportation sectors with regard to speed and comfort that it provides. However, aviation has become a very attractive sector not only in terms of transportation ease, but also because of the many characteristics that it possesses. Contributing to countries’ international prestige, hosting an enormous economic sector inside, and being one of the most effective tools of globalization are among these features. On the other hand, the increasing importance of the civil aviation has brought about the reality that this specific industry has been threatened by illegal actions simultaneously. The fact that the aviation industry has become an instrument for reaching the aims of individuals and of groups or states that chase economic, political or personal interests has revealed the concept of civil aviation security, which has been one of the most controversial notions with the occurrence of the 9/11 attacks.

3.1. The History of Civil Aviation in the US

Until quite recently, the concept of aviation has been identified with the invention of the Wright brothers\(^\text{80}\), and the flight of the first plane has been accepted as a

\(^{80}\) Wilbur and Orville Wright were from Dayton, Ohio. The father of the children was intellectual and their mother was mechanically gifted. The brothers always liked mechanical stuffs from the young ages. With the intelligence that came from family inheritance, they achieved the first powered flight. For detail, see Roger Storm et al., *Learning to Fly: The Wright Brothers' Adventure A Guide for Educators and Students with Activities in Aeronautics* (Ohio: National Aeronautics and
milestone. However, there are several objections to this situation from many countries. Almost every country claims that they initiated the aviation activities in the past. For instance, the Europeans yield the tendency to accept specific Greek legends such as Icarus\(^{81}\) about the subject. Yet aviation has been an aspect from the humanity's common heritage. Numerous nations, especially the Sumerians, Ancient Greeks, Chinese, Hindus, Andalusians, and Turks have made important contributions to the idea of aviation. In Chinese stories, it is mentioned about those who drive cars in the sky as well as the Chinese general Han Sin is famous for calculating the distance by flying a kite to see the distance of city he is besieging. Indian legends include flying mechanical vehicles, in Shaykhnam, it is mentioned that Keyhussrev who was the ruler of Iran ascended to the sky by four crane birds.\(^{82}\) These kind of ideas triggered the need and desire of aviation. Modern aviation has started with the balloon, and has gained strength with the glider. Eventually, aviation sector has become so important with the aircraft’s invention in terms of a life-change experience of human beings.

On December 17, 1903, the Wright Brothers completed their innovation in powered flight. Consequently, a great transformation of aviation has been witnessed between 1903 and the end of the twentieth century when over four million passengers a year crossed the Atlantic.\(^{83}\) Significant developments related to airplanes commenced in Europe in the late 18\(^{th}\) century, many scientists worked through and made risky experiments on the prototypes of planes. Inspired by the flapping of birds’ wings, these intensive studies were undertaken to design an aircraft. The first serious

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81 According to the Greek myth, Icarus and his father Daedalus are known as the first humanbeings who flew with artificial wings. See "Icarus in Greek Mythology," Greek Legends and Myths, accessed September 18, 2019, [https://www.greeklegendsandmyths.com/icarus.html](https://www.greeklegendsandmyths.com/icarus.html).


aviation activities were conducted by Octave Chanute\textsuperscript{84}, Otto Lilienthal\textsuperscript{85} and Samuel Langley\textsuperscript{86} who provided the starting point for the Wright brothers.\textsuperscript{87}

Wilbur and Orville Wright studied all their accumulation of aviation, wrote numerous letters to important scholars of their time such as Octave Chanute, and achieved their first flight experience in 1903. The Wright Brothers' first flight test, which lasted 12 seconds, became possible with a weight of 335-kilogram plane and a single pilot.\textsuperscript{88} More successful results were obtained with several flight experiences on the same day when it became possible to fly 284 meters in 59 seconds. It was the first time that a powered machine took off from the ground, flew through the air, and landed on the ground again under the control of a pilot. After this immensely important success, while carrying the plane back to campsite, a wind shook, and rolled the plane and made it unusable again.\textsuperscript{89}

These experiments brought a significant outcome in the development of aviation in the United States and in the world. Several examples include crossing a certain distance, ascending to a certain elevation, carrying mails and airdropping to settlement areas. Over time, the Wright Brothers opened a flight school. They also embarked the planes into ships and put the aircraft carrier concept into practice. These successes also brought some dangers with them. While aviation activities developed all around the world, accidents started to happen: 3 people in 1909, 29 in

\begin{itemize}
\item \textsuperscript{84} He designed and built gliders, he was a civil engineer and author of “Progress in Flying Machines” which was published in 1894. See Storm et al., \textit{Learning to Fly}, 2.
\item \textsuperscript{85} He was a German hang-glider and one of the most important authority on aeronautics. He died when he lost the control of his glider in 1896. See Storm et al., \textit{Learning to Fly}, 1.
\item \textsuperscript{86} He was an astronomer and physicist who flown with a steam-driven airplane in 1896 and he won a Congressional grant of S 50.000. See Storm et al., \textit{Learning to Fly}, 28.
\item \textsuperscript{88} Yalçın, \textit{Havacılık}, 192.
\item \textsuperscript{89} Valerie Moolman, \textit{The Road to Kitty Hawk} (New York: Time-Life Books, 1980), 153.
\end{itemize}
1910, and 100 in 1911 lost their lives in aircraft accidents. The experiments that have been carried out since the first flight experience of the Wright Brothers show that as a consequence of aircraft related accidents and loss of life, special importance have to be given to aviation security.

Once the Wright Brothers invented powered flying machine, Glenn Curtiss came to the stage as the brothers’ most important competitor. He was a motorcycle racer and engine builder, later he decided to join the Aerial Experiment Association and started to design aircraft models. While Curtiss managed to sell the first airplane in the United States in June 1909, the Wrights sold the world’s first military airplane to the US Army only two months later. The Wright Company was built in 1910, in order to deliver necessary amount of aircraft to the US Army. By 1915, 14 planes were completed and delivered to the army. The Wright Brothers and Curtiss started to work together with the aim of inventing an aerial bomber. After many experiments, the first attempt was made on June 30, 1910. Two months later, Curtiss made a second shot on his own. The long-running patent battles between the Wright brothers and Curtiss began, and this situation caused the decrease of military aircraft production.

Shortly after the achievement of the Wright Brothers, aviation-related work began to expand and spread. The airplanes started to be utilized in a wide area of activity from air mailing to military service. In this context, the first military aircraft was in the US army in 1909, and it was designed by the Wright Brothers. As the aircraft began to be used in the army, differences began to emerge in the understanding and concept of warfare. Over time, countries like France, England, and the Ottoman Empire also used aircraft for military purposes.

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91 Before 1903, gliders were used and tried to be developed for flying. With the Wright brothers’ invention, the first successful airplane was introduced. See “Inventing a Flying Machine,” Smithsonian National Air and Space Museum, accessed December 28, 2019, [https://airandspace.si.edu/exhibitions/wright-brothers/online/fly/1903/index.cfm](https://airandspace.si.edu/exhibitions/wright-brothers/online/fly/1903/index.cfm).

World War I triggered nations to use aircrafts as effective instrument of military actions. All major countries, except for the US, developed their air forces at the beginning of the war years. In 1914, Germany had approximately 230 airplanes and 4 zeppelins; Great Britain had 110 airplanes and France had 130 airplanes. In contrast to these improvements, the US produced only 15 military and 34 civil airplanes. The production of the airplanes was delayed until the US entered the war. The main reason was related to the patent wars that occurred between the Wright Brothers and Curtiss. The need for the aircrafts was very essential in World War I, so the Aircraft Manufacturer’s Association was established in order to facilitate the cross licensing of patents for the duration of the war.

Although other nations found a chance to improve their air forces in the beginning of the war, the US could not contribute to World War I aviation as much as them because of entering the war later than these countries. Huge amounts of financial support was provided for training the pilots, aircraft engineering, testing, and repairing. Almost in nine months, the US Air Service gained 773 victories, flew more than 30,000 hours, and dropped 275,000 pounds of bombs. When the end of the war was near, thousands of workers were responsible for aviation along with pilots in the US. As a result, the US has made a major contribution to ending the devastating conflict during the war. By the end of the war, airplanes were being used in different areas. For instance, they were used for airmail services, and also for commercial and cargo practices. At first, the attempts of the army to fly the mail led to disaster. Military pilots were not trained to fly at night or in bad weather, and their aircraft did not have security features as commercial aircrafts had. During the trainings, more than five pilots lost their lives, six pilots were wounded and eight planes were destroyed. The main role of the state in aviation safety started with


96 Ibid., 94.
the foundation of the Air Mail Service on May 15, 1918. The establishment of the US Post Office Department to provide efficient national airmail service was the first spark of passenger airlines’ logic of today. The achievement of transporting goods and people from one place to another in a long distance led the civil aviation industry rise in the twentieth century.\textsuperscript{97} Starting with 1918, the Air Mail Service used state-owned airplanes and state-selected pilots because a great importance was attached to aviation safety. The elements of the safety program that was implemented by Air Mail Service contained some requirements such as having eliminative criteria to hire pilots, regular medical examinations, using a checklist of 180 items at the end of almost every flight, and regular checks of engines and aircraft for every 100 and 750 hours.\textsuperscript{98} Considering the fatality rate, which was one per 789,000 miles in the Air Mail Service between the years of 1922-1925, the safety benefits were apparently evolving.\textsuperscript{99}

The number of trained pilots, aircraft designs and the knowledge about aviation continued to increase in the post-war period. Trained pilots, engineers and ground personnel carried out many experiments and competitions to set records of speed, distance, attitude and duration by using new technologies. Such progress in the aviation industry resulted with the birth of a new economic sector, which had a significant potential of transforming the people’s lives. The United States’ growing aviation industry entered its “golden age” which is between 1920-1930 in terms of global exploration, expansion of airline routes and different methods of aircrafts’ usage.

In the early 1920s, aviation activities began to develop and accelerate, but were still not regarded as a reliable means of transportation for most people. Consequently, the aviation industry remained small, and could not draw the attention of the US


\textsuperscript{98} Mark Hansen, Carolyn McAndrews and Emily Berkeley, \textit{History of Aviation Safety Oversight in the United States} (Virginia: U.S. Department of Transportation Federal Aviation Administration, 2008), 1.

\textsuperscript{99} Ibid.
Congress to pass a bill. In February 2, 1925, with increasing need of a legislation, Congress passed the Kelly Air Mail Act, which turned over the mail service to private independents.\textsuperscript{100} This act gave rise to American domestic commercial airlines, and necessitated preparing a new federal air regulation. The Air Commerce Act (ACA) was passed by Congress accordingly in 1926. This law initiated the establishment of the Aeronautics Branch (AB) of the Department of Commerce. The AB was in charge of the registration of aircraft in terms of airworthiness licenses, development of air traffic rules and the maintenance of navigation facilities.\textsuperscript{101} Within the AB, the Air Regulations Division became responsible for carrying out safety oversight activities with six divisions: inspection, licensing, medical, engineering, statistical, and enforcement sections.\textsuperscript{102}

The aim was to increase safety and to avoid bringing overwork to the industry. Meeting the government cost was also a significant objective. During this period, budget pressures due to New Deal\textsuperscript{103} were applied to the AB. When Franklin D. Roosevelt became the US President in 1933, he gave a specific importance to the aviation industry. Alfred Mahan’s canonical work, “The Influence of Sea Power upon History 1660-1783” had a significant impact on Roosevelt in terms of strategic thinking.\textsuperscript{104} Mahan was one of the best naval strategist of his time. England's influence on the world attracted Mahan's attention, so he explored and discovered the power that sustained this effect. Mahan is the architect of the theory of “who dominates the seas, dominates the world” and the person who put forward the

\textsuperscript{100} Ibid., 2.


\textsuperscript{102} Hansen, McAndrews and Berkeley, 2.

\textsuperscript{103} The New Deal is made of domestic programs series with an emphasis on the economic restrictions experienced between 1933 and 1938. The aim of the New Deal was to provide economic development after the 1929 Great Depression.

concept of naval power. Although Roosevelt followed the general principles of Mahan, he often changed his ideas on specific policies to deal with difficult situations like economic restrictions. For example, in 1933, as an outcome of the New Deal Program, the Roosevelt administration implemented a budget cut of $500,000 and a labor reduction of 15 percent in the Air Regulations Division. With these pressures faced, the AB’s leading leaders attempted to develop some procedures that would move security measures further without having the need for a large government workforce and budget, but at the same time also satisfying the sector’s shareholders. For example, the Ministry of Commerce set minimum engineering standards for aircrafts airworthiness. Aircraft manufacturers sent blue prints and engineering data to the AB. If they met the standards, an inspector would visit the factory in order to determine whether the manufacturer followed the approved design. It was first followed by the flight tests being performed by a company test pilot, and then by a federal inspector. When the tests became successful, the AB issued an aircraft type certificate that gave the manufacturer the authority to produce aircrafts possessing the same characteristics.

The ACA made pilots’ regular medical examinations compulsory. Again, the AB followed an approach to implement this provision, which avoided large state costs. The solution was to designate the doctors in private practice to make the examinations and leave it to the examinees to cover their fees. This brought a more manageable option for doctors instead of using many medical personnel in the AB.

Although all these precautions were taken, the budget that was spared for AB security oversight was not adequate for the duty. All kinds of practices for inspection and certification services overloaded over time. The AB started a new policy of granting temporary certificates and licenses in order to avoid the problems due to the accumulation of works. However, these temporary licenses turned out to be the main reason for the accidents that occurred later. The pilots who were not flightworthy and the invalid engineering activities were licensed with these temporary documents. Although its increased budgets in the following years helped

105 Hansen, McAndrews and Berkeley, 2.

106 Ibid.
strengthen the AB’s staff, the AB could not overcome its workload since the aviation enthusiasm continued to increase.

After the accumulation issue was solved and economy improved, certification and license requirements started to be extended in terms of aviation staff and aircrafts.\textsuperscript{107} The companies that carried out scheduled flight operations had to have a certificate of authority based upon the lessons taken from serious accidents in the 1920s. In order to get this certificate, companies had to meet some requirements like having a sufficient number of pilots and engineers with license, satisfactory ground organization, and aircrafts that had to be appropriate for the government’s scheduled inspection and maintenance requirements.

Until World War II, American civil aviation continued to develop and flights between the continents began. Most of the aircraft supporters believed that owning an airplane would become as usual and reasonable as the automobile in the future. During the golden age of aviation between 1920 and 1930, people started to become interested in air races in the US. In history, for the first time, female pilots were invited to the transcontinental race of Women’s Air Derby from California to Ohio.\textsuperscript{108} Women pilots took a step ahead and finished their first air race in 1929. This race gave them a great opportunity to show their success in aviation industry. Ninety-nine licensed women pilots formed a union, called Ninety- Nines. They became very popular, sponsored many air races and showed their strength to the entire country. The Ninety- Nines provided scholarships in order to inspire and place women as pilots in both commercial and military aviation, established humanitarian assistance projects such as shipping medical materials and sponsored pilot safety and security programs in order to indicate the importance of safety.\textsuperscript{109} Although safety measures were increased, air racing was dangerous indeed. At the end of the

\textsuperscript{107} Ibid., 4.


1930s, the popularity of air races started to decrease because of high numbers of deaths.

As the aviation activities developed, the AB changed its structure, redesigned its name as the Bureau of Air Commerce. The Bureau underlined the necessity of Air Traffic Control areas around the airways. American Airlines, TWA, United Airlines, and Eastern Airlines were encouraged to construct ATC towers. The first ATC was built in Newark Metropolitan Airport in 1935 and followed by Chicago and Cleveland.

Civil aviation industry in the US continued to grow during the years between the Air Commerce Act of 1926 and the Civil Aeronautics Act of 1938. The revenue gained from aviation in 1938 had reached 17 times more than in 1926. In 1927, Pan American Airways started to operate their flights in terms of mailing and commerce. Pan American was defined as a chosen instrument by the government for their foreign policy. Pan American was very important for economic development and expansion towards South America and the Caribbean. The company was not only the first airline to fly to the South America but also the first transoceanic airline in the world. Pan Am offered commercial service to the North Atlantic region. In San Francisco-Hawaii flights, which lasted more than 18 hours, many aspects were taken into consideration in order to satisfy the passengers like lounge service and dinner tables on board. On May 6, 1935, a horrible air crash occurred in the north of Kirksville, Missouri. Because of the intense fog, pilots of the aircraft could not see anything but they needed to land as the plane was out of gasoline. The aircraft crashed with zero visibility and caused five deaths including

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110 Air Traffic Control Towers are located at every airport which has scheduled flight operations. These towers are responsible from the traffic during take off, taxi and landing.


112 Lord, 120.

113 Ibid., 99.
US Senator Bronson Cutting from New Mexico.\textsuperscript{114} The Department of Commerce investigated the area, measured the reasons and decided that the crash's responsible units were both the Weather Bureau and the Bureau of Air Commerce. The Weather Bureau was supposed to search and report the weather change; in this case, they failed to detect the change and became one of the reasons of the crash. Three years after the accident, in order to emphasize federal interest in aviation safety, Congress passed the Civil Aeronautics Act which established the Civil Aeronautics Authority (CAA) in 1938. The CAA took care of the complaints, arranged routes for airlines with scheduled service, published security rules, and formulated some policies for improving the efficiency of the industry.\textsuperscript{115}

In 1940, the CAA was divided into two agencies by President Roosevelt: The Civil Aeronautics Administration and the Civil Aeronautics Board (CAB). While the Civil Aeronautics Administration took the responsibility for ATC towers, pilots and aircraft certifications, safety implementations, and airway improvements, the CAB became responsible of safety rulemaking, accident investigation, and economic regulation of the airlines.\textsuperscript{116}

The golden age of aviation (1920-1930) in America brought great progress in both civil and military aviation industry. Not only the design but also operational changes effecting performance had improved their quality. As World War II was approaching, warplanes turned into all metal monoplanes with closed cockpits; these new airplanes were able to reach speeds of up to 400 miles per hour and run at altitudes of 35.000 feet and higher.\textsuperscript{117} Roosevelt emphasized the need to accelerate and increase aircraft production and set the target to produce 50.000 aircraft

\textsuperscript{114} “Senator Cutting N. M. Dies in Plane Crash,” \textit{The Healdsburg Tribune}, accessed October 25, 2018, \url{https://cdnc.ucr.edu/cgi-bin/cdnc?a=d&d=HT19350506.2.20&e=-------en--20--1--txt-txIN----1}.

\textsuperscript{115} Hansen, McAndrews and Berkeley, \textit{History of Aviation}, 5.

\textsuperscript{116} “A Brief History of FAA,” Federal Aviation Administration, last modified January 4, 2017, accessed October 19, 2018, \url{https://www.faa.gov/about/history/brief_history/}.

\textsuperscript{117} Lord, 137.
annually. Even though it appears to be an astronomic figure, there had been a large increase in production with the attack on Pearl Harbor in 1941. Aircrafts were produced not only for the allies, but also for the needs of the American Army. Roosevelt wanted to increase the military capability, but he also had a different motivation to increase aircraft production as a visible warning to Hitler. The rise of Adolf Hitler in Europe made the allies of the United States anxious, and before 1939 Great Britain and France ordered 1.5 billion dollars worth of aircraft and additional supplies from the United States. Increased aircraft production required more pilots, aircrafts and training facilities.

President Roosevelt's insistence on spending money only for airplanes blocked practical training programs for the Air Corps. However, General Henry H. Arnold, who was one of the passionate defenders of aircraft production, claimed that aircrafts could not be functional without aircrews. This situation had a vital importance both for the safety of the pilot and for the most proper use of the aircraft. Yet the outcome could have caused plane crashes and deaths. Because of the initiative that was taken by General Arnold, during the war not only pilot training programs but also bombardier trainings were provided. Between 1939 and 1941, ten flight schools were opened, and trainings for Air Corp, including navigators and bombardiers, were delivered.

Before and during World War II, the President and his instruments had given all decisions related to aviation. Hence, aviation became a commercially dominant sector. Roosevelt, who thought beyond commercial issues after the war, was fully

118 Dobson, 112.


120 Lord, 156.


122 Lord, 159-166.
aware of the security aspect of civil aviation. He was more sensitive to the dangers of US power that could create insecurity for other countries. Eventually, he did not oppose liberal internationalism in the field of civil aviation.

Until 1943, civil aviation policy matters were disregarded and underestimated, so military aviation became the most vital issue because of the Pearl Harbor attack and its outcomes. After the war, the thoughts regarding civil aviation policies started to rise. The groups that were influential in American politics had different civil aviation perspectives. A small group of extreme nationalists wanted to dominate the sky after the war in both commercial and military terms; on the contrary, the idealists demanded the internationalization of civil aviation for the complete elimination of the state power. Despite many different views on policies, the majority found a middle way between the nationalists and idealists. There was a consensus that the United States had to have a “leading position” in air trade, but the leading position was not going to be as dominant as extreme nationalists’ desire. There was no commonly accepted policy, but instead there were groups that wanted to change at least one aspect of what appeared at a certain moment.

From the commercial perspective, Pan American dominated the industry in the US, but there was no leading policy of the company. Pan American chose different routes, gave different supports, and provided different rates. Economic advantages and disadvantages were shaping the rules and policies. The flights to Europe and Asia had to be through Canada. Even though Pan American began its Trans-Atlantic flights, the two countries had to have a settlement to pass through Canada. For this reason, Canadian and American officials should have signed an agreement on security and technical issues. As a result of the negotiations that were held in 1938, the US accepted the demands of Canada. These negotiations continued in the post-war years. Adolf Berle, Assistant Secretary of State, played a great role in post-war international civil aviation plans.

123 Dobson, 136.

124 Ibid., 139.

125 Ibid., 140.
World War II proved the importance of civil and military aviation along with international cooperation for their development. In November 1944, the International Civil Aviation Conference was held in Chicago and the International Civil Aviation Organization (ICAO) was formed in order to re-establish the air regulations and handle security concerns.\textsuperscript{126} The victors of World War II directed the ICAO when it first emerged, then it evolved into a large global international organization.

After World War II, many cities in the US started to improve their civil air travel. The US city officials were concerned about federal funds to be invested, since they wanted to use these funds for major airports.\textsuperscript{127} They lobbied in order to design a federal aid program for airports, and their efforts resulted in the Federal Airport Act in 1946. Some specific factors shaped the Federal Airport Act. The act required the construction of smaller airports around the cities rather than big major airports. This reflected the increase on private flights during the post-war era. The negotiations about the relationship between the federal government and cities made a great contribution to designate how funds were going to be distributed.\textsuperscript{128}

Congress appropriated $500 million over 7 years- $71 million per year- within the 1946 Federal Airport Act. Although the support lasted until 1969, the budget for aid program was not stable every year. In 1947, Congress supported only $42.75 million, and then the number decreased to $30.4 million in 1948. In 1949 and 1950, spending started to arise, but by 1953, it dropped again to $10.2 million. During the Korean War, Congress granted $500 million for airport developments for the purpose of supporting military actions.\textsuperscript{129}

\textsuperscript{126} David Mackenzie, \textit{ICAO: A History of the International Civil Aviation Organization} (Toronto: University of Toronto Press, 2010), xi.

\textsuperscript{127} Lord, 200.

\textsuperscript{128} Ibid.

\textsuperscript{129} The information on this paragraph has been taken from Lord, 201.
During the Cold War period, the federal government attached importance on improvement of aviation procedures, aircraft and flight conditions. In 1947, the CAA decided to test Ground-Controlled Approach (GCA) radars on four airports: Washington National Airport, Chicago Municipal Airport, and New York’s LaGuardia Airport. This radar system did not only allow the ATC staff to contact pilots during descent, but also provided the pilots successful landing opportunity with low visibility in bad weathers. The GCA radar system, which was designed by British in order to be used for military purposes, was also modified for civilian use. On February 4, 1949, the CAA authorized commercial aircrafts to use the GCA radar as a primary aid for landing in bad weather conditions. Although the GCA brought many benefits to civil aviation, the Instrument Landing System (ILS) was used in 1950s. The ILS was designed by the end of 1920s, but its usage was limited because of the expensive tools that were needed to insert it in aircrafts along with safety concerns. The ILS’ working principal was creating the safety concerns since it could be used only a short distance from airport.

A group of aircraft engineers made some developments on the ILS, and modified it to the system called “air track”. Both commercial airlines and the army started to use the ILS after the first landing experiment in 1938. The ILS was installed in many airports, and it has been developed in terms of military usage as well as commercial. In 1949, the ICAO adopted the air track system for its member countries. With the ILS’s improvements, the GCA remained installed in four airports.

Even though landing systems were improved, aircraft crashes increased in the 1950s when they were in midair. On June 30, 1956, the two biggest commercial aircrafts (TWA and United Airlines) crashed with each other at 21,000 feet around Grand Canyon, Arizona and the accident resulted with 128 casualties. More than 50 aircraft accidents happened between 1950 and 1955, and that became the wake-up

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130 “When Radar Came to Town,” Federal Aviation Administration, accessed October 22, 2018, PDF file, https://www.faa.gov/about/history/milestones/media/radar_departure_control.pdf.

call for American civil aviation authorities. After the accident, automatic crash avoidance systems called Traffic Collision Avoidance Systems were commenced to be installed on all commercial aircrafts and in 1957, the Airways Modernization Act, which set the traffic control facilities and navigation, was ratified.

According to the current Federal Aviation Administration, although US air traffic increased more than 100% with the end of World War II, this accident in 1956 demonstrated the lack of security measures and inefficiency of aviation rules that were implemented. In July 1958, US President Dwight D. Eisenhower passed the new Act called the Federal Aviation Act of 1958. This act repealed previous regulatory acts such as the Air Commerce Act (1926), Civil Aeronautics Act (1938) and Airways Modernization Act (1957). The bill gave the CAA’s functions to the newly established Federal Aviation Agency (FAA) that emerged as an independent group, transferred security rule making from the CAB to the new FAA, and gave the FAA all responsibility for a common civil-military system of air traffic control and air navigation.

In the same year, Eisenhower formed the National Aeronautics and Space Administration (NASA). In the middle of the Cold War, the Soviet Union launched the Sputnik, the first artificial satellite, on October 4, 1957. This development became the driving force of establishing the NASA in 1958. Forming the Federal Aviation Agency and NASA, being sponsor to the safety rulemaking conferences in aviation industry, determining retire age of pilots, increasing pilots’ training requirements and safety campaigns were the innovations in terms of aviation during the Eisenhower presidency.

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132 Ibid.

133 Lord, 208.

134 Federal Aviation Administration, “A Brief History.”

As the FAA’s tasks expanded during John F. Kennedy’s presidency, the Agency needed a head office. The Agency worked a lot to find a headquarters building to move all the employees. On November 22, 1963, the FAA started to move their employees to the new headquarter in Washington, D.C. However, the assassination of John F. Kennedy in Texas in 1963 was shocking news for everyone, and the happiness of being moved to their permanent office lasted short.

During Kennedy’s presidency, the first series of aircraft hijacks were experienced. The first aircraft hijack attempt in the US happened on May 1, 1961. A male passenger came in the cockpit, pulled a knife and a gun to the pilot’s throat in order to threaten the crew. The person who commandeered the aircraft, Antulio Ramirez Ortiz, wanted to migrate to Cuba and made pilots divert to Havana. This was the first time for a US airline company to be forced to fly to Cuba. Both homesick Cubans and Cuban leftists attempted four other hijacks to Cuba in 1961. Although the most skyjack attempts was directed toward Cuba, Arabian hijackers commenced to follow this kind of actions, and hijacked the first US aircraft outside the Western hemisphere in 1969. The Increased numbers of hijacks caused the FAA to form the Task Force in order to deter air piracy in 1969. The Task Force created a potential hijacker profile by screening passengers via metal detectors, but these precautions stayed weak to prevent all hijack attempts. Although President Richard Nixon pronounced a new anti-hijacking program on September 11, 1970, hijacks with violent attacks did not stop, and this situation triggered an important change in aviation safety measures in the US. In December 1972, the FAA issued an

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136 Hansen, McAndrews and Berkeley, 14.


138 During the Cold War, in 1961, the US broke its diplomatic ties with Cuba because of the leftist Cuban regime.


140 Ibid.
emergency rule and started to make inspections of carry-on baggage and scanning of all passengers mandatory.

The FAA was developing, but still there were some problems. Safety measures were not enough and crashes were continuing also in the 1960s. The reasons of safety problems were based on two organizations: the CAB and FAA. While the CAB was handling economic regulation regarding aviation, all safety and security procedures were under the control of the FAA. The economic position of an airline determined its safety approach. That was why the FAA needed to consider the economic aspect of certifying supplements and managing airworthiness staff.

Several air crashes occurred in the 1960s. On December 16, 1960, United Airlines and TWA planes had a midair collision around New York. In 1963 and 1968, US witnessed three major airplane accidents due to the bad weather conditions (lightning struck) and turbulence, and in 1965, one of the commercial United Airlines aircraft crashed because of the risky sink rate\textsuperscript{141} while landing. In 1967, another midair impact was witnessed because of the lack of communication with the ATC and the pilot.\textsuperscript{142} All of those incidents proved that the FAA needed to develop air crash survivability by finding new funds or by taking direct responsibility, to change flight operation rules, to make sure pilots were aware of the procedures, and to provide pilots more assistance.\textsuperscript{143} After a series of crashes that occurred by the end of the 1960s, the FAA decided to change its safety attitude, and gave more importance to installing warning device equipment to aircrafts rather than landing systems and infrastructure improvements.

In 1967, a new Department of Transportation (DOT) was created in order to associate the main federal responsibilities for air, land and sea transport. The FAA’s name was changed to the Federal Aviation Administration. In the meantime, a new

\textsuperscript{141} Sink rate is a warning given to the pilot by the aircraft and indicates when the aircraft approaches the ground faster than normal service.


\textsuperscript{143} Hansen, McAndrews and Berkeley, 18.
National Transportation Safety Board (NTSB) took over the responsibility of investigating aviation accidents from the CAB.

The 1970s witnessed a new safety issue in US aviation: the dangerous materials that were carried on aircrafts. In the past, radioactive supplies were carried in passenger flights in order to provide quick delivery.144 People’s fears increase when a radioactive liquid leaked from the container of Delta Airlines’ aircraft in 1971. Although the FAA Flight Standards Director James Rudolf claimed that the Administration had been dealing with the problem by training programs and inspections of cargo materials, witnesses outside the FAA disaffirmed these claims and underlined the result of an inspection, which indicated that 80% of dangerous materials’ shipment was illegal.145 The Flight Standards Department raised its precautions; however, the main strategy continued to be to give more importance to education rather than penalizing actions. Congress passed a new act, called the Hazardous Materials Transportation Act in 1975, which gave regulatory authority to the Secretary of Transportation and restricted carrying radioactive cargo on passenger airlines.146

The airline industry in the US changed on October 24, 1978 when the Airline Deregulation Act was signed by President Jimmy Carter. This act provided the liberalization of regulation of fares. Before deregulation, the government, specifically the CAB, regulated fares and service was focused on transportation from somewhere to another. During the 1970s, people were widely using airlines but the prices charged by government posed an obstacle to the growth of domestic air transportation.147 The deregulation gave birth to a new kind of airlines: low cost

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145 Ibid., 90.

146 Ibid., 94.

As free competition increased in civil aviation industry, carriers either started to improve their service quality or decreased the costs. Although the deregulation’s effects were visible, the economic recession in the 1980s and the increase in fuel costs resulted in bankruptcies of a number of airlines such as Eastern, Pan Am and TWA.

The Airline Deregulation Act brought a new challenge in terms of safety like increasing number of carriers and its consequences. The FAA’s workload also increased with low cost carrier’s entrance in the market. The maintenance and inspection processes were more complicated in low cost carriers. Since the FAA needed to meet all of the safety requirements, the Administration initiated the Aviation Safety Analysis System (ASAS) in order to help the FAA’s safety oversight by using computer technology. With this development, the FAA finally managed better all the workload emerged from deregulation act.

The 1980s faced a struggle between Ronald Reagan government’s FAA and a labor union called the Professional Air Traffic Controllers Organization (PATCO), which was established in 1968. In 1981, the contract that signed between the FAA and PATCO was going to be renewed. After the contract renewal gatherings, which included thirty-seven negotiations and informal meetings, the PATCO did not accept the contract proposal. Its aim was to obtain better working conditions, better payment and 32-hour workweek, but the FAA did not meet its demands. This approach of the FAA resulted in the PATCO’s turnout on August 3, 1981. Ronald Reagan declared this strike as a threat to national safety, and ordered PATCO members to get on with their job. As most of the air traffic controllers did not obey Reagan’s call, he asked the FAA to fire 11,345 strikers out of approximately 13,000 PATCO members, and they were not allowed to work for federal service after the

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149 Hansen, McAndrews and Berkeley, 25.

turnout. This situation also made the FAA’s task harder than before because it was the responsible unit to hire new air traffic controllers and educate them. The federal service ban on the PATCO members was abolished during Bill Clinton’s presidency.

The reason of the accidents that occurred in the US in the 1980s mainly originated from crewmembers’ faults despite the fact that the FAA gave a significant importance to pilot and flight crew trainings. On January 1, 1982, an aircraft that belonged to Air Florida crashed into the Potomac River because of the flight crew’s failure of usage anti-icing system during take-off. In 1987 and 1988, two aircrafts crashed due to improperly set flaps and slats.

One of the other safety issues in the 1980s was the aging of the aircrafts. Airlines did not want to renew their fleets, and tried to provide lower costs in order to continue to be active in the free market. The aged aircrafts and their inspections were challenging issues for the FAA since their maintenance and repair procedures were more complicated and harder than young aircrafts. The FAA implemented a new program called Supplemental Structural Improvement Program (SSIP), which required additional inspections for aged and mostly used aircrafts. Despite the FAA’s effort, in 1988 Boeing 737 type aircraft of Aloha Airlines had a structural error that was experienced during the flight, and the NTSB explained the incident as a failure of maintenance and repair program caused by aging. After the crash, the FAA implemented new requirements in the program for aged aircrafts.


153 Ibid.

154 Hansen, McAndrews and Berkeley, 26.

155 Ibid.
The terrorist attacks on flights continued all over the world during the 1980s. A hijack operation happened in the Athens-Beirut flight of TWA in 1985 brought several US actions including the International Security and Development Cooperation Act that made Federal Air Marshalls become a part of the FAA.\textsuperscript{156} In spite of these precautions, on December 21, 1988 a bomb destroyed one of Pan Am aircrafts and the incident resulted with 270 casualties.\textsuperscript{157} This incident opened the way for the enactment of a new act called the Aviation Security Improvement Act of 1990, which included two main titles: Aviation Security and US Response to Terrorism Affecting Americans Abroad. From 1991 to 2001, the US did not experience any airline hijacking and canalized to improve the need of further safety measures. Although the legal infrastructure was developed, passenger-screening methods were improved, passenger luggage and cargo were tracked more carefully; the world witnessed a horrible terrorist attack in the US on September 11, 2001. This attack showed the world that even the most secure countries can become victims of terrorism as an outcome of the development of technology. The perception of security started to change in the US, and a lot of new notions regarding security has entered in literature such as “pre-emptive” and “preventive war”. Before the security discussions, it is better to look into the attacks and their background in order to understand the reasons and results.

3.2. 9/11 Terrorist Attacks and Background

Terrorism is a concept that almost every country defines differently. While the US Code of Federal Regulations defines terrorism as "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives," the FBI has broadened its definition by dividing the term as domestic terrorism and international terrorism.\textsuperscript{158} The violence, attack or threat should come from a person or a group based and operated in the US borders and Puerto Rico in

\textsuperscript{156} Rumerman, “Aviation Security.”

\textsuperscript{157} Ibid.

domestic terrorism. On the other hand, international terrorism contains violent and dangerous acts to human life that are against the criminal laws of the US or any state.\textsuperscript{159} In order for a violent action to be international terrorism, the attacks should occur outside of the US or there should be foreign intervention on the attack happens in the US.

Terrorism has experienced three important stages throughout history: The first stage was the propaganda activities of the local groups against the central authority in the years following the 1789 French Revolution, and the second stage was in the period during the Cold War when both sides avoided the use of nuclear weapons. The USSR provided weapons and logistical assistance to terrorist groups to weaken the West Block and strengthen the East Block, and the third stage came into front with the September 11, 2001 attacks in result of globalization.\textsuperscript{160}

Before the September 11 attacks, the United States had faced terrorist activities many times. The bombing of the World Trade Center in 1993, the bombing of the Oklahoma City State Building in 1995, the bombing of US embassies in Tanzania and Kenya in 1998, or the attacks on the USS Cole and US war ship in 2000 can be cited as examples. However, any terrorist act has never caused as material and moral impact as the attack on the twin towers and the Pentagon in 2001.

On September 11, 2001, the entire world witnessed an unprecedented terrorist incident involving both airplane hijacking and suicide attacks. The United States, the target of the attack, emerged as the only force rising from the Cold War and was at the center of globalization by imposing its own ideals all over the world. These attacks, which killed thousands of civilians, have never had such an impact in a war.

The 9/11 attacks were a series of airline kidnappings and suicide attacks in 2001 by 19 terrorists linked to the Islamic extremist al-Qaeda group. It was the most deadly terrorist attack on US territory; 2,973 people were killed. The attacks involved the hijacking of four planes, three of which were used to hit major US territories.

\textsuperscript{159} Ibid.

American Airlines flight 11 and United Airlines flight 175 flew to the north and south towers of the World Trade Center, respectively, and American Airlines flight 77 hit the Pentagon. United Airlines 93 crashed into an area near Shanksville, Pennsylvania, while passengers were trying to suppress the pirates. The plane was believed to be going to the Capitol building in Washington, USA.161

At 8:46:40, American Airlines Flight 11 stroke the upper section of the North Tower, cutting a wide swathe through floors 93 to 99.162 Hundreds of civilians stuck in large and small groups on or above the 92nd floor, mostly between the 103rd and 106th floors.163 Many people were also stuck in elevators. Other people who stayed below the impact zone—between the floors of 70 and 80, and people who trapped between 47th and 22nd floors—were died or waited long time for assistance.164 At first, many civilians in the South Tower were unaware of what was happening in the other tower. Some believed that an incident had occurred in their building; others were aware that a huge explosion had occurred on the upper floors of the North Tower. Many people decided to leave, however, an announcement indicated that the accident occurred in the northern tower and everyone should stay in their offices. At 9:03:11, the United Airlines Flight 175 crashed second WTC tower from the south, cutting through the 77th to 85th floors.165

Half an hour later, at 9:37, American Airlines Flight 77 hit the west wall of the Pentagon. The crash initiated fast and terrible damage. 64 people in the aircraft were died, as well as 55 military service members and 70 civilians inside the Pentagon.166


163 Ibid., 286.

164 Ibid.

165 Ibid., 293.
All Federal agencies and state units in the US directly responded to these attacks. Compared to WTC attacks, the Pentagon attack was easier in securing the location and starting the rescue efforts because the aircraft crashed on the ground. In his interview with the *National Geographic*, President Bush stated that when the first plane crashed into the WTC North Tower, he thought it was an accident. When the second plane hit the South tower, he thought that it was an attack and the third plane crashed into the Pentagon, he believed that all these attacks were declarations of war.\(^\text{167}\) A few minutes after the attacks, the FAA decided for the first time in its history to stop all US flights and also shut down air traffic over the United States.\(^\text{168}\) The first decision taken by President Bush at Airforce 1 was to force airplanes to land, and it was decided to shot down commercial airplanes that did not respond to this order.\(^\text{169}\) The US air traffic stopped with with this decision.

**3.2.1. The Reasons of the 9/11 Attacks**

Ever since it started to produce and develop weapons, the US has supported wars to continue to keep his economy alive. In the two world wars, there were two enemy blocks consisted of different countries. In the Cold War, this situation changed a little bit towards the Communist Eastern and Capitalist Western blocks.\(^\text{170}\) The enemy of the United States was communism and communist states during the Cold War; the fact that the United States emerged as the only rising power drew attention to the formation of a unipolar system in the world. However, even if the USSR was erased from the stage of history, the United States kept intervening in wars in some

\(^{166}\) Ibid., 314.


\(^{169}\) Documentary World, “The 9/11 Interview.”

\(^{170}\) Karakaya, 37.
regions to develop the arms industry and contribute to its economy. While doing so, it referred to global values - human rights, democracy, free trade etc. The biggest example of this can be seen in the 1999 US attack with NATO to end ethnic issues in Kosovo. It also had to sell arms to the underdeveloped countries in order to benefit from the arms industry, thus it would both strengthen its economy and get its share of the wars from the regions such as the Middle East. Thus, the economy of the underdeveloped countries would weaken more and become dependent on the US while the US has enriched its wealth.

The four target points of the attacks--two towers of the World Trade Center, the Pentagon and the US Capitol Building--show that these attacks were against globalization and the leading role of the US. At the same time, the attacks showed that the security of even the most powerful country in the world could be fragile. In particular, the attacks on the WTC towers in Manhattan point out that these actions were taken as anti-globalization events because the towers were the symbol of capitalism. The US Department of Defense, which is located within the Pentagon, is one of the most important governmental units that ensure the security of the United States. The attacks on this point draw attention to the weakness of the US defense force and intelligence service. In this case, the real aim is to unsettle or even destroy the global hegemony of the US.

In his video conferences with the CIA, President Bush learned that the first suspect was the al-Qaeda organization, but that was not a definite conclusion. On September 15, it was debated whether Iraq had any place in these attacks, but Bush decided to focus on al-Qaeda in Afghanistan. The foundation of this terrorist organization dates back to 1978, when the Soviet occupation of Afghanistan started. During this occupation, Osama bin Laden joined the resistance movements and ten years after the occupation, he founded Al Qaida, which means “basic” in Arabic. The main aim of the organization is to expel all Western values and beliefs from the Muslim world, to destroy the Western leaders in all Muslim countries, and to govern the

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171 Ibid.

172 Ibid., 41.
states according to Islamic rules.\textsuperscript{173} Therefore, it should be underlined that the 9/11 attacks were actually a message not only to the US but also to the all-Western world.

While the CIA claimed that al-Qaeda was responsible for the attacks, this claim was based on strong suspicion. In the testimony of the CIA on June 18, 2002, Director George J. Tenet stated that they had been following Osama bin Laden since 1991, Laden had been financing terrorist attacks between 1991 and 1996, Laden had published a \textit{fatwa} calling on all Muslims to kill Americans and their allies, both civilian and military worldwide and the CIA had several missions to prevent these activities of Laden until the September 11 attacks.\textsuperscript{174}

\section*{3.3. Change in the Security Perception during George W. Bush’s Presidency}

During the Cold War period, the US leaders gave importance mostly to fighting against communism, improved their security against the communist threat, and took measures to strengthen their civil and military aviation within the scope of the Cold War atmosphere. As it is indicated above, some terrorist attacks were experienced in aviation before the incident of 9/11. When US aviation became a target for the terrorists, the most preferred way was hijacking the aircrafts. Their main aims were to collect ransom and to force the pilots to go to requested destinations.\textsuperscript{175} From the end of the Cold War until September 11, 2001, the US did not faced a significant terror attack in her homeland, and improved its military, economic and political power.

During this period, the United States held onto the four basic rule of global power. These are to have a global field in terms of military power, to become the engine of global economic growth, to retain leadership in technological innovation and to have

\textsuperscript{173} Ibid., 42.


incomparable charm in terms of culture. Possessing all of these features provided the US the political power that no other state had. While the US managed to keep the war and war threats away from her own territory, US came to the stage as the world leader. With the 9/11 attacks, it experienced such a huge terrorism and war in its homeland for the first time. The fact that the source of the attacks was not a state, but an international organization have shown that the traditional military threat perception was changed. It has been seen that not only the source but also the way of the attacks have changed.

With globalization, it has become noteworthy that three different parameters have changed in terms of security: the emergence of new threats in the security field (cyber terrorism, aviation related terrorism etc.), the introduction of non-security issues into the security area (individual and environmental security) and the transformation of traditional security threats (international terrorism). Another point to be added to these parameters is the increasing role of globalization and the development of media’s impact on world politics. The September 11 attacks are good indicators of the changed parameters mentioned above. The attacks were at the top point of the international terrorism through advanced communication systems. The hijackers could defeat all security layers that was put forward in US to prevent hijacking actions.

Change in the security concept and perception experienced a milestone with the 9/11 attacks. These attacks against the Pentagon and the World Trade Center showed that terrorism can be anywhere at any time as well as the threat is multidimensional. These attacks led to the globalization of terrorism and insecurity by the effect of the media. The created climate of insecurity required regulations in many areas, including aviation at first. The effects of discourse and its distribution through media are key points for the new aviation security regulations that started to be implemented after 9/11.


Changing security perception can also be seen particularly in the Bush doctrine, which defines the US’s foreign policy during his presidency. While American foreign policy was based of ballistic missile concern in the Cold War years, it has undergone a major change with the attacks of September 11 and turned its area of interest from ballistic missiles to the fight against terrorism. The most important change in President Bush’s security perception was the origin of threat. While the threats were coming mainly from states, this situation has changed in the new era. International terrorist organizations, small groups or drug gangs become the actors of new threats. George W. Bush, nine days later the attack on the World Trade Center skyscrapers, proclaimed the US’ new enemy with this discourse: “You are either with us, or you are with the terrorists” including states and international organizations.\(^{178}\)

With the formation of the new enemy concept with September 11 attacks, some notions such as unilateralism, preemptive strikes, spreading democracy and fighting against terrorism have been included in the components of the Bush Doctrine. The statements above should be explained in order to specify the changing security perception more clearly.

The concept of “unilateralism” is reflected in the explanations as to the necessity of being on the side of US interests. The security perception and the President Bush’s announcement as “either you are with us or with the terrorists” have revealed the necessity of the Bush Doctrine to be with American interests. The other component of Bush Doctrine can also be referred to as “preemptive strikes”. The concept first gained attention in 2002 when George W. Bush spoke at the West Point Military Academy:

> Our security will require the best intelligence, to reveal threats hidden in caves and growing in laboratories. Our security will require modernizing domestic agencies such as the FBI, so they are prepared to act, and act quickly, against danger. Our security will require transforming the military you will lead -- a military that must be ready to strike at a moment's notice in any dark corner of the world. And our security will require all Americans

to be forward-looking and resolute, to be ready for preemptive action when necessary to defend our liberty and to defend our lives.\textsuperscript{179}

This speech is clearly made with regards to failure of intelligence service on 9/11 and security precautions at airports. The US, which has been dealing with the attacks of September 11, has begun to follow this new security strategy “preemptive strike” that can be explained as a replacement of the deterrence policy of the Cold War with making threat or attack inactive before happening. The United States intervened in Afghanistan and Iraq in this direction. The US stated that it acted within the framework of “spreading the democracy” while leading the aforementioned interventions and claimed that it was bringing freedom to these countries. The concept of spreading of democracy has been defined as the liberation of the Islamic geography and this actions and rhetoric resulted in a strong negative view against the US in this geography.

Bush’s Doctrine and his discourse on terrorism are the key points for understanding changing security and threat perception during post September 11 era. One of the well-recognized feature of American exceptionalism is that the belief of the US government that it owns, or at least represents, the future of humankind, and therefore has the right to speak and act on behalf of humanity. September 11 re-exposed the universalizing tendency that was more prevalent during the Cold War with new focus points. This tendency is very evident in the ultimatum of President Bush “you are either with us or you are with the terrorists” as well as one of his discourse on National Security Council “[…] our responsibility to history is already clear: to answer these attacks and rid the world of evil”.\textsuperscript{180}


CHAPTER 4

EFFECTS OF 9/11 ATTACKS ON CIVIL AVIATION

On September 11, 2001, professionally coordinated terrorist actions, which turned an aircraft to mass destruction weapon, posed a new threat to aviation security in the world. This was an aviation security incident indeed, but the results emerged as a condition affecting world history within the scope of economic effects to security perception. The material and moral effects of the attacks were felt in many areas. Although their impact on the United States was addressed in three separate titles, they were all interconnected and they affected more than one country at the same time due to the nature of civil aviation. When talking about international flights, factors such as different states, airspaces, departure points, arrival destinations, cabin and cockpit crew’s citizenship, aircraft certificates and where the certificates are taken play a major role in security issues. An explosion at an airport or an airplane anywhere in the world can cause damage to any country’s citizen.

The effects and consequences of these terrorist attacks without the use of weapons of mass destruction led the US government to make structural changes and to introduce new regulations. What is interesting at this point is that radical Islamist terrorists had previously carried out a bomb attack on the WTC towers on 26 February 1993, and there had been no strong precaution against this terrorist act. In 1993, 6 people including one pregnant woman were killed in the attacks, more than a thousand people including 88 fire brigades, 35 police officers, many first aiders and doctors were seriously injured, and 50,000 people were evacuated from the WTC towers.181 Despite the intense hijacking ratio in the past and the increasing number of bomb attacks in the 1990s, a number of innovations had been made, but

the ultimate strong and powerful changes and regulations took place after the 9/11 attacks.

In this chapter of the thesis, the effects of one of the biggest terrorist attacks on the WTC towers and the Pentagon on political, economic and tourism in the United States are examined. The new regulations, rules and security improvements that occurred after the incident are addressed, and finally the challenges that prevent the improvement of civil aviation in the United States are discussed.

4.1. Effects on

4.1.1 Politics

The attacks on the Pentagon and the World Trade Center on September 11, 2001 did not only aspire to destroy the symbols of US military and economic power, but they also deeply affected international politics, decision-makers and the concept of terror as it was one of the most horrible terrorist acts in human history. As a result of the attacks, the loss of property and life became almost equal with the damage that would result from a state’s war with regular troops. In this respect, security measures were increased all over the country (airports, hospitals, public buildings, etc.), and President Bush called for troops of the militia to declare an emergency. The deaths of 2973 people and the wounding of 2383 people at the September 11 terrorist attacks highlighted the fear of being a victim of terrorism in the US. However, the spread of this fear into political life influenced the government to take new security measures, and this tendency of the government continued in the future. Where the terrorist attacks took place, the fear created by the incident was effective on a local scale at first, but later this fear spread through national media and politicians inside and outside of the country, creating a perception of national threat.

Terrorist attacks that lead to the perception of national threats also lead to racial segregation of society. Also, they encourage ethnocentrism. Ethnocentrism expresses the human tendency to divide the social world into virtuous groups and unreliable, treacherous external groups. See Cindy D. Kam and Donald R. Kinder, "Terror and Ethnocentrism: Foundations of American Support for the War on Terrorism," The Journal of Politics 69, no. 2 (2007), 320.

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of September 11, anti-Islamic views increased.\textsuperscript{183} While terrorist acts affect the political life of states, politicians also instrumentalize the fear of terror. They try to create an atmosphere of constant fear by exaggerating the possibility of any terrorist incidents and keep this atmosphere in order to get support from citizens and reach their goals in political elections. The discourse of politicians and decision-makers is one of the most important tool in the process of securitization and creating this atmosphere.

The risk and fear of terrorism have been used as a tool for the US to declare the “war on terrorism” policy on a global scale.\textsuperscript{184} This policy was designed to eliminate the sources of global terrorism, and to end the possibility of external attacks on the country. In fact, there have never been so many policy and institutional structure changes aimed at preventing national terrorist acts. The changes made after September 11 were undoubtedly in direct proportion to the changing nature of terrorism and the US government’s risk perception.

Nine days after the September 11 attacks, in the joint session with American people and the Congress, President Bush announced that they had discovered that the Al Qaida was responsible for the attacks, and it was the group that had also attacked American embassies in Kenya and Tanzania on August 7, 1998.\textsuperscript{185} In his speech, Bush stated that although the US was the focus of unfaithful attacks, they were against all Western values and freedom, and that those who were not with the United States would share the same fate with the terrorists in the war with Al Qaida.\textsuperscript{186}

President Bush asked the Taliban administration to hand over all terrorists hiding in Afghanistan to the United States, to shut down terrorist camps in the countries, to

\textsuperscript{183} Ibid., 325.


\textsuperscript{186} Ibid.
protect American citizens and foreigners, and to authorize the US to make terror
training camps unfunctional. The Taliban government rejected the demands of the
US administration for lack of evidence. On October 7, 2001 the United States, with
the support of the United Kingdom launched Operation Enduring Freedom, the
Taliban and Al Qaida forces were bombed. After this period, the US carried out
several operations in Afghanistan, Iraq (Operation Iraqi Freedom) and Pakistan; in
2011 Al Qaida leader Osama bin Laden was killed by US forces.

The National Security Strategy document, published on September 20, 2002, draws
attention to the following details: There is now an order in which absolute control
comes to the fore, in terms of defense the strategy is changed from prevention to
preemption, and the values of the United States should be adopted by the entire
world. The September 11 attacks did not only make its impact felt in terms of
aviation security, but also became a worldwide issue with the size of the attacks,
discourses and strategies put forward. After this date, the US approached its enemies
more sharply and hard. In the international environment, different perspectives
against the US sanctions have been arose: there have been countries that have
unconditionally supported the US, and there have been countries that find these
sanctions unfair in Latin America and the Middle East.

The most important issue that needs to be emphasized in this process is how US
policymakers, decision-makers and managers can influence the public opinion by
using the discourse and documents issued. The magnitude of the attack, loss of
properties and lifes, the pain and anger it brings deepened through the discourse and
helped US to get the essential support in order to achieve its goals. In this respect,
the impact of the attacks has an important role both in the announcements and
speeches made to the American people and in determining the steps to be taken in
international politics and providing security. Influence of prominents on the public


188 The White House, The National Security Strategy of the United States of America (Washington:
not only served the US interests in political world but also provided a strong basis to security measures to be implemented in aviation.

4.1.2. Economy

The terrorist attacks of September 11, 2001 had a great impact on the US economy. Several things such as the damage caused by the attacks, damages caused by the halting of civil aviation activities for a short period, the cost of the measures taken to strengthen the security caused the economic recovery of the US to take a long time.

While on September 10, 2001, American airports carried out 38,047 flights, on September 12 the number of commercial flights dropped to 252 and rose again to 34,743 a week later. However, the fact that 3,304 flights could not be carried out also means the loss of a lot of revenue for both airlines and airports. Just after the attacks, the airports were closed to international flights by the US government for three days.

As stated in IATA's 9/11 Report and in the Federal Bureau of Labor Statistics, global airline profits dropped from 8.5 billion USD to 3.7 billion USD in 2000 compared to the previous year. The fact that the terrorist attacks were carried out through aviation stroke a huge blow to the already declining industry. The US airline revenue declined from 130.2 billion USD to 107.1 billion USD between 2001 and 2002. This swift decline shows the great impact of the 9/11 incident over the aviation industry in the US.

Aviation industry’s loss was at the highest level. American airline companies lost a lot of revenue due to shut down of airports for three days, in order to compensate this gap the government provided 5 billion USD to American carriers for their loss within the scope of the US Air Transportation Safety and System Stabilization Act,

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190 Ibid., 3.

191 Ibid.
entered into force on September 23, 2001.\textsuperscript{192} Although the aviation sector and economy recovered in 4-5 years and started to gain profit again, the global economic crisis faced in 2009 caused the airlines to suffer within this period.

Another issue that emerged after 9/11 was the increase in the unemployment rate. Immediately after the attacks, cost reduction measures began to be taken in many business areas in the US. According to the information taken from PWC database, most common cost saving measures taken by US companies were counted out: employee elimination, reduction in working time, advertising and marketing fund cuts, cancellation of training programs, decrease supplies etc..\textsuperscript{193} An article from \textit{NY Times} written in 2004 reveals that more or less 70\% of the jobs and 86\% of the wages were lost, mostly in sectors of banking, insurance and finance due to WTC attacks.\textsuperscript{194} Although these attacks affected most of the well-known industries in the US, airlines suffered the most in terms of employment rate. Compared to 2000, employment rate of American passenger airlines fell by 14.6\% in 2001, and this rate continuingly decreased in the next ten years.\textsuperscript{195}

By its nature, insurance industry was also one of the most affected sector in terms of costs. Insurance companies set some insurance rates in order to help protecting people’s lives, belongings and losses. Before signing coverage contract, all risks are calculated and the professionals decide on the cost. Insurance companies collect specified amount of money from their customers and save all the money in the insurance pool together in order to use them to pay for their clients’ losses. Because September 11 caused a lot of revenue loss, insurance companies were tentative to continue implementing coverage for possible terrorist attacks in future.

\textsuperscript{192} Ibid., 4.


\textsuperscript{195} IATA, 3.
One year later the attack, on March 26, the National Bureau of Economic Research announced that the US economy was under recession starting from March 2001.\textsuperscript{196} In fact, the already weak US economy began to collapse more rapidly with the attacks.

4.1.3. Tourism

There is no doubt that terrorism have many effects on states’ tourism sector. Terrorism is one of the most dangerous thing for tourism in terms of its outcomes. In societies where the media is developed and free, there is a high potential for terrorist attacks. Because the higher the freedom of mass communication and the broader it is, the more effective the discussion of terrorist activities will be\textsuperscript{197}. The terrorist attacks aiming at spreading fear and horror will have a higher social, political and economic impact. This is the reason why air transport and airports are preferred for these attacks, 2016 Brussels and Atatürk Airport incidents may counted as good example. In other words, the risk is in direct proportion to the level of democracy of states.

The effects of September 11 on tourism should be studied both on the US and worldwide. Because economic consequences are explained, the terrorism’s effects on tourism and psychology of the tourists are underlined on this title. Until September 11, the annual growth rate of travel and tourism worldwide was 3.8% and it was foreseen that this rate would remain throughout the year.\textsuperscript{198} After the attacks, at the end of the year, this rate was -1.3% and compared to estimated growth rate – if there was not September 11 attacks- the real growth loss was -5.1%\textsuperscript{199}.


\textsuperscript{197} Veronika Bysyuk, "\textit{Impact of 9/11 Terrorist Attacks on US and International Tourism Development}" (Bachelor Thesis, Modul University Vienna, 2010), 8.

\textsuperscript{198} Belau, 7.

\textsuperscript{199} Ibid., 8.
The arrival number of international tourists dropped by 0.6% in 2001. Of course, the most suffered and affected country was the US in terms of international tourist arrivals. In North America including Canada, there was 6.8% loss on international tourist rate in 2001 from January to December. Compared to the previous years’ last quarter there was 22.6% loss on international tourist arrivals. In case of the US, international arrival rate fell by 11% in 2001. According to the International Trade Administration, on September 2001, the major decline (about 40%) in arrivals to the US was from Germany, Brazil and Japan. Total economic damage to the US was nearly 5 billion USD.

After the incident, international tourists’ first reaction was to go back home as soon as possible. Other tourists who had not arrive in the US yet cancelled their flights because of security reasons. While international long-haul flights were affected most, domestic tourism did not suffer that much: Travelling by cars, busses or trains even gained popularity during this time. Travels to the US began to improve from the beginning of November, but the impact of the attack on tourism and the economy was so strong that it took long time to recover completely.

Although September 11 attack happened in the US, its effects echoed throughout the world. Tourism activities started to shift destinations. For instance, European tourists started to travel more to Eastern Europe, the Balkans, and Mediterranean countries because those places were geographically away from terrorism and conflicts. The number of international tourists increased by 12% in Turkey, 12% in Croatia and 14% in Bulgaria after the attack.

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200 Ibid., 10.

201 Ibid., 13.


203 Belau, 15.

204 Bysyuk, 11.
As it is stated above, the US was the most suffering country regarding international tourist influx, but Middle East countries were also hurt by the incident as well as the US. Because Western people are very sensitive to political conflicts and security issues, the fear of the US response to these attacks affected them about not traveling to especially Arabic countries for a long time. Egypt, Jordan and Saudi Arabia were affected most, and there was nearly 50% decrease of tourist influx to Egypt and nearly 20% decrease in Saudi Arabia.\textsuperscript{205} The statements of American politicians and the spread of powerful media all over the world also influenced people’s decisions over tourism destinations. The Arab countries, which depended on Western tourists, suffered the greatest loss. However, some Muslim countries gained more popularity than they had before. Arab tourists made Dubai one of the favorite tourism place in the Middle East, this situation continued after September 11, and international tourists joined this trend.

Tourism and international terrorism have common characteristics such as involving more than one country, crossing borders, utilizing travel and communication services. Thus, tourism activities are related to terrorism in some aspects.\textsuperscript{206} When there is a terrorist attack, tourists create their own behavior accordingly. In case of 9/11, they turned back their home countries, started to use road transport more, cancelled their bookings on flights and decided not to go regions with political conflicts. If a terrorist attack takes place in a country or city, some tourists assume that other places around it are at risk of terrorist attacks and act in view of that. This attitude comes from fear and concern. Though the chance of being a terrorist attack victim is very low, this type of fear always stays in tourists’ mind. Specifically on September 11, the fact that the attacks were carried out by civil aviation aircrafts did not help to exterminate all those fears and opened a new era for the US’ security challenges.

\textsuperscript{205} Ibid., 33.

4.2. Changes in Civil Aviation Security Measures in the US

September 11 attacks and their effects show that there was a huge security gap although there were many legislative settlements among states. The fact that these attacks took place revealed that the US did not have a comprehensive policy on aviation security. In fact, after the attacks, new strategies for civil aviation security were determined as priority issues, new units were established, and some legal regulations were introduced. Although European countries and international organizations also introduced a number of legal regulations, this section covers the security issues and measures taken by the US especially after the attacks.

4.2.1. Legislative Regulations

The first thing addressed after the September 11 attacks was the federalization of aviation security issues. The US government has adopted two important laws to ensure security by Federal forces: the Aviation Security Act (October 11, 2001) and the Airport Security Federalization Act (November 1, 2001). These laws guarantee that the influence of federal officials in ensuring the safety of passengers and baggage, as well as airline / airport personnel to undergo a rigorous inspection before entering security areas. Federal Air Marshall (FAM), a specially trained armed policeman was also employed in order to take charge in all aircraft.207

The most comprehensive law on civil aviation security in the United States is the Aviation and Transportation Security Act (ATSA), which entered into force on November 19, 2001. Together with this law, the Transportation Security Administration (TSA) was established, and this unit was declared as responsible for all transport safety in the country. The main objective of the TSA was to ensure the determination of general security policies and to take over responsibility for aviation security at FAA. The establishment of the TSA has changed relations with airlines and security authorities, because all inspections need to be provided by federal agencies.

When the September 11 incident took place, the points that FAA was insufficient to provide security were discussed. According to the report of the 9/11 commission

207 Previously, Federal Air Marshalls used to be assigned only on long international flights.
established immediately after the attacks, some security weaknesses were mentioned about the US civil aviation security. The details of the report are as follows: more importance was given to the inspection of luggage and belongings than people, so the security infrastructures were insufficient for the hijacking, the controls at the security checkpoints were carried out carelessly, and the coordination with the FAA and other security units in the state was insufficient and security gaps were observed in aircrafts too.\(^{208}\) Although the security measures introduced by the FAA were adequate, these measures were not implemented diligently, and the state investigation on security authorities was hampered.\(^{209}\) This situation has caused such a security vulnerability.

The federalization of the responsibility for aviation security incurred some additional costs. Considering the need for federal officials at 429 airports in the US, the applicability of this method began to be questioned over time. Three years later, airports abandoned to implement the law and agreed with private companies providing audit services.\(^{210}\) Thus, although the task of providing security personnel was also transferred to private companies, the inspection and administration of this implementation was left to the responsibility of the federal units.

The Homeland Security Act, adopted on November 25, 2002, established the Department of Homeland Security and stated its objectives in the first chapter of the relevant law. The task of the department is to prevent terrorist attacks in the country, to strengthen the United States for such situations and to prevent them from being weak, to minimize the damage of attacks in the US, to identify the crimes and relations with each other, and to eliminate or reduce potential problems.\(^{211}\) Within the scope of this law, efforts have also been made to ensure aviation security. A new

\(^{208}\) National Commission on Terrorist Attack, 98.

\(^{209}\) Ibid., 11, 77.


program called the Federal Flight Deck Officer (FFDO) was introduced on November 2002 depending on the Homeland Security Act, Title 14.\textsuperscript{212} In this program, pilots are authorized to carry weapons in order to prevent terrorism on flight. Class trainings and practices are essential for educating the pilots to defend themselves when they encounter any terror attack.

Not only passenger precautions but also air cargo security issues were attached importance to. On May 8, 2003, the Air Cargo Security Act entered into force. This law gives responsibility to the Secretary of Transportation for Security to ensure that the necessary systems are installed to scan, screen or secure in anyway all the cargos to be transported.\textsuperscript{213}

In addition to these regulations, President Bush set out a strategic vision for aviation security in the NSPD-47 and HSPD-16 directives\textsuperscript{214} by the following supporting plans: The Aviation Transportation System Security Plan, Aviation Operational Threat Response Plan, Aviation Transportation System Recovery Plan, Air Domain Surveillance and Intelligence Integration Plan, Domestic Outreach Plan and International Outreach Plan.\textsuperscript{215} Even when the names of the plans are examined, it is understood that these are very comprehensive projects that touch many points. Many different departments have carried out these plans, which require communication and coordination among domestic, international institutions and Secretaries of Homeland Security and Transportation in order to ensure security in terms of aviation systems.

\textsuperscript{212} Ibid., sec. 1402.


4.2.2. Airport and Flight Security Regulations

The laws mentioned in the previous section, which came into force after 9/11, indicated the need for improvement at many points in order to improve security especially at airports. People experienced a new era regarding the security procedures implemented at US airports. The most important change reflected to travelers was that people should be at the airport at least 2 hours earlier even on domestic flights. One of the most important features that made air transportation preferred was that it was fast and reliable, but due to tightened security measures, the boarding process naturally extended. Restrictions have been imposed on items that can be carried on airplanes, people have been requested to remove their shoes while passing checkpoints, and even new rules have been introduced, such as another screening of suspicious people during checkpoints.²¹⁶

There has been an increase in the security funds provided to strengthen all these security measures at the airports. This budget has been spent on increasing security personnel and federal officials, increasing working hours and newly purchased screening equipment. While there were approximately 16,200 employees for private screening, this number has increased to 56,000 by the end of the 2002.²¹⁷ Not only employee number is increased but also screeners were developed. All the staff who work on security points for both luggage and passenger need to receive the training that includes more than a hundred hours.²¹⁸

In scope with the passenger screening, the Terrorist Screening Center (TSC), emerged in 2003, and the Center runs the operation called “Terrorist Screening Database” (TSDB), which is well known as “the watchlist”.²¹⁹ The database contains information about the identities of people who are known or reasonably

²¹⁶ Blalock, Kadiyali, and Simon, 734.

²¹⁷ Ibid., 735.

²¹⁸ Ibid., 736.

suspected of involvement in national security and terrorist acts. The people on the
database who are known as terrorists or suspected terrorists are chosen by different
US agencies: the intelligence community, law enforcement, US embassies and
consulates, and homeland security. Once a person’s name is indicated, the relevant
agency should report to the National Counterterrorism Center (NCC) in order to
determine if the information is worthy or not. After the NCC’s decision, the
information flows to the Terrorist Identities Datamart Environment to be passed to
the TSC. A couple of reviews later, the information of the terrorist or suspected
terrorist is mentioned in the watchlist.220 Thus, various cameras define the people
entering the airport whether they are potential terrorists or not, and necessary
information about these people is provided to the relevant departments. Although
the TSDB has been condemned by the defenders of freedom because it has became
against to constitutional rights,221 still it has been an important database managed by
the FBI in the US after the September 11 attacks.

On August 26, 2004, the TSA announced that they would start to test a new
passenger screening program which is called Secure Flight. Under the program, the
TSA took the responsibility of checking the names of airline passengers, which was
a function that each airline had managed individually, to compare them with terrorist
watch lists.222 Within the scope of this program, every airline that has a flight abroad
is obliged to send the list of passengers and flight personnel to the Customs
Commission before landing. It is aimed to compare the obtained lists with the names
under monitoring. In this list, each passenger’s and flight crew’s name, date of birth
and nationality, passport number and place of residence, United States visa number,
and all necessary information are given. Hence, the first screening is completed

220 “Terrorist Screening Center - FAQs”, Federal Bureau of Intelligence, last modified January
frequently-asked-questions.pdf/view.

watchlist-constitution.html.

222 “TSA to test new passenger pre-screening system,” Transportation Security Administration, last
before people’s arriving at the airport, and fewer names are sent for the secondary screening.

Another security measure put forward to prevent terrorist activities at the airports has been taken on baggage of the passengers. There was not any regular luggage control system before September 11. Congress made mandatory to screen all the bags either manually or automatically in all US airports. There have been five main methods to screen the bags: manual searching by hands, using explosive detection dogs, automatic X-ray machines, explosion detection systems (EDS) and explosion trade detection (ETD).\(^{223}\) Sniffing dogs and hand searching methods are very old fashioned. X-Ray machines, compared to EDS and ETD systems, are cheaper and they can search approximately 1350 baggages in an hour.\(^{224}\) A trained staff should watch the screeners in order to detect if there is any explosive material, so this option’s reliability is arguable. EDS and ETD machines have been very useful to screen the luggages without touching them. The TSA built more than 18,000 EDS and ETD machines in all the US airports, since the usage of automatic X-Ray machines was not licensed in US airports.

The EDS and ETD machines are very expensive devices, but still allow bags and baggages to be checked without opening, and to determine whether there are any explosives and chemicals in them. EDS devices are used to control the baggage by sending X-rays, which is similar to the tomography devices used in hospitals. This system can control 150-200 baggage per hour and the false positive\(^ {225}\) rate is 30%.\(^ {226}\) ETD devices are smaller but require more labor. These machines can detect even small explosive residues collected on a stick. Sample swabs are taken from people’s hands, clothes and baggages to be placed in ETD machine. The sample is heated and

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\(^{224}\) Butler and Poole, 3.

\(^{225}\) While screening luggages, system detects some problems which is false alarm. Since it gives an alarm, the luggage needs to be screened for the second time.

\(^{226}\) Butler and Poole, 3-4.
the resulting vapor is examined. Thus, the presence of explosives is determined. This method does not apply to all passengers at the airports because it takes longer to process, but it is applied randomly chosen passengers.

New security implementations have also been discussed in the US such as Israeli airport security model, because it may be counted as one of the most reliable security model in terms of aviation sector. Although Israel airports and aircrafts are main target for radical Islamists, no hijack and attack have experienced seen since 1970.\textsuperscript{227} For the passengers who travels to Israel, different security implementations are applied as well as the security measures at Tel Aviv Ben Gurion Airport. Their gates, check in desks and security company that is responsible for screening passengers are different in foreign countries. According to Isaac Yaffet who was the head of security department in El Al Airlines, they managed to prevent terrorism by interviewing all the passengers by well-trained agents.\textsuperscript{228} It is known that Israeli government and carriers pay a lot for the security implementations. The fact that Israeli security system does not rely on technology and requires more labor may not be applicable in US airports due to high number of passengers. Rather than hiring professionals for security, US government gave more importance on screening devices at the airports.

The security measures taken after the September 11 attacks did not only cover the airports, but also there were several measures to strengthen the inflight security. In order to prevent hijacking activities, new security measures such as reinforcing the cockpit doors, which cannot be opened from the outside, were started to be taken. All flight decks were redesigned with bulletproof walls and doors.\textsuperscript{229} In order to be prepared for the terrorist attacks to be carried out in the aircraft, various trainings have been given to the cabin and cockpit crew. The pilots are now able to carry weapons with them after having undergone some training. Meanwhile, security

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keypads were inserted in the cockpits and the start code has been shared with a couple of flight staff. The cabin crew began to learn the secret codes that they would transmit to the other staff for any danger they noticed via the Passenger Address (PA). Moreover, cabin monitors have been installed to observe what is happening in the cabin and new security systems have been installed to alert the entire crew in case of any security breach. All these innovations were implemented in 2001 with the Airport Security Federalization Act. In addition to these new implementations, the law enlarged the scope of the FAMs; it required more FAMs to be trained and employed, as well as it required to reserve seats for FAMs on selected flights.

All new security measures manifest that developing technology and facilities are also effective for terrorist attacks. It proves that the security measures taken by the FAA are insufficient, and that security is an area that needs to be continuously improved.

4.3. Challenges to Development of Civil Aviation Security

Since the beginning of civil aviation, security measures taken in line with threats have also varied. International conventions have been organized for all attacks that occurred until the September 11 attacks and certain regulations have been put forward for these attacks. With the advancement of technology, X-Ray and full-body scanners were installed at the airports in order to prevent bomb attacks in aircraft, but terrorists were able to carry out their actions with new ideas against this developed technology. Terrorists planned their actions, such as putting explosives on aircrafts by means of small items such as lipsticks and necklaces, carrying bomb equipment separately and putting them together in aircraft toilets, carrying

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232 Ibid., sec. 105.
explosives in shoes as the example of Richard Reid\textsuperscript{234} despite all the security measures taken throughout history. In time, security measures were extended to include such cases. While international legal regulations that were developed prior to 9/11 were reactive to the attacks, the Beijing Convention and Protocol (2010) and the Montreal Protocol (2014) started to contain pre-emptive measures. With development of technology, it has been seen that any problem may occur any time. That is why the need of new conventions and protocols is increased.

As it is constantly emphasized in this thesis, the usage of civil aviation aircrafts as a weapon of mass destruction was a turning point in terms of aviation security. At this point, the transformations in the concept of terrorism should be closely observed and studied in order to achieve the desired level of aviation security capacity. It should not be denied that the measures put forward before September 11, 2001 were not sufficient, but new regulations will become insufficient in time. Aviation has faced a new generation threat as terrorist organizations surprise public authorities by using ever-growing technology. Although it is very difficult to identify these new threats, and it brings a great risk for the development of security, it is possible to work on the regulations that will minimize their effects. It is not possible to protect aviation security completely from external threats, but it is necessary to identify the best practices, to attach maximum importance to cyber security, to strengthen intelligence, to search and evaluate passenger information, to monitor next generation security devices and to investigate risk management practices.

The fear of terrorism through civil aviation raises the issue of whether the terrorists or the instruments they use should be emphasized more in security activities. There are various debates on both issues. The perpetrators of terrorist acts often have the


\textsuperscript{234} On October 2002, a terrorist attack attempt was stopped on American Airlines flight from Paris to Miami. Richard Reid who hid some explosives on his shoes, tried to detonate during flight and he was noticed by passengers. After his failed attempt, Reid was found guilty and sentenced to life imprisonment. See "Shoe Bomber: Tale of Another Failed Terrorist Attack,” CNN, accessed November 23, 2019, https://edition.cnn.com/2009/CRIME/12/25/richard.reid.shoe.bomber/index.html.
same physical appearance and characteristics, but there is no guarantee that this will not change in the future. When checking the photos of the 9/11 hijackers, it is clearly seen that citizenships, age range and physical characteristics of the perpetrators of the attacks against the US are generally close to each other. Precisely for this reason, a new application, Screening Passengers by Observational Techniques (SPOT), was launched to detect suspicious people at US airports. Nevertheless, as it is mentioned before, there is no guarantee that future threats will come from similar origins and sources. Therefore, the SPOT program will not be adequate to detect terrorists at some point. The detection of destructive items used by terrorists is carried out with full-body scanners, and X-Ray devices for baggage control at the airports. With the improvement of technology, these screening processes have become more effective.

Another challenge to the development of civil aviation security is what kind of and to what extent measures should be taken against terrorist attacks. The diversification of the tools and equipment used by the terrorists has led to the expansion of security controls. The removal of shoes at checkpoints was made compulsory after the Richard Reid’s shoe bomb incident. Such additional measures prolong the transition to the boarding process, and cause the airline to lose demand. The measures taken to ensure security lead to an increase in financial cost as well as time cost for a sector that promises to transport people from one point to another as soon as possible. In other words, although increased security measures decrease potential threats to a minimum, they require passengers to arrive at airports sooner and causing them to spend more time at the checkpoints. Therefore, people’s decision

235 Oster, Strong, and Zorn, 160.


on air transport, especially on short-haul flights maybe affected negatively. The inverse proportion here should meet at the optimal midpoint.

When thinking about terrorism and civil aviation together, the impact of globalizing media can have both positive and negative consequences. It is the duty of the state to publicize how to take measures against attacks and ensure transparency. However, while doing this through the media, it can cause the relevant measures to be heard and known around the world. Yet, for terrorists, it can be a guide for new attacks.\textsuperscript{239} At the same time, however, state representatives regard the media as a platform for their discourse, and they can build security policies on it. The statements made by President Bush after the September 11 attacks convinced the entire Western world that they were on the side of the United States and justified all the US interventions in this way. At this point, media emerges as a positive tool for creating security discourse. While informing the public about the measures taken against terrorist attacks, they provide information for terrorists.

One more challenge for the development of aviation security is the difficulty of quickly adaptation to technology. In aviation sector, the integration of technology in security systems is challenging at many levels. Taken at the administrative level, the integration can change future employments and needs.\textsuperscript{240} The integration of technology affects many aspects at the administrative, organizational, security and passenger level.

Measures against threats so far have always been taken in line with policies developed based on previous experiences. Arrangements have been made to improve and expand security for each different threat. The time it takes to implement these new regulations at airports can also be considered as another challenge. Laws to be enacted, long-lasting bureaucracy, adaptation of new systems can slow down processes. Considering the rapid development of technology, the fact that these

\textsuperscript{239} Oster, Strong, and Zorn, 160.

processes do not result fastly is a disadvantage for the development of aviation security.
CHAPTER 5

CONCLUSION

In this thesis, which discusses the development of American civil aviation security, the difficulties experienced throughout history and the attacks of September 11, the changing security perception and the new security measures developed within the scope of civil aviation are explained within the scope of securitization, which is an important concept in the international arena. The concept of securitization came into the literature with the end of the Cold War. According to this approach, as security problems are the problems that rapidly and strikingly threaten the sovereignty or independence of a state, it interrupts the functioning of the regular political order and requires maximum effort against these threats. Discourse is the most important tool of the securitization process. When a problem becomes a security issue through discourse, it turns into action, and the resolution of this problem becomes to be above all other issues. According to the Copenhagen School, a government official pronounces the word “security” and moves a particular issue to a specific area, thus claiming an exceptional right to use whatever means are necessary to overcome the security issue. Thus, when determining its policies, the state will prioritize the solution of the problem that has entered into the field of security.

Since the September 11 attacks were organized by a radical international terrorist group, the religion of Islam and Muslims became the main subject of securitization. Immigrants, Middle Eastern students and Muslim passengers at the airports were started to be considered as potential threats. A general image of the potential threats has been created from the physical appearances, religious beliefs and

241 Wæver, 44-45.

nationalities of terrorists. This image is still influencing the US and European citizens. This may lead Muslim passengers to have more strict security screening at the airports. As a result of the September 11 attacks, xenophobia has become stronger, and Muslims have been excluded from society. Given the fact that many of the current terrorist attacks are rooted in radical Islamist organizations such as Al-Qaida and ISIS, it is natural that this approach emerged as a result of such a large attack occurred on September 11, 2001. However, the extreme discourses of the state authorities and the elites, and the actions they take accordingly, create an environment for these organizations to plan new attacks. Despite the increased security measures, both sides provoke each other in various ways and cause problems not to be solved.

Bush, who took the office as the president of the United States on January 20, 2001, faced such an unfortunate event nine months after he took the position. In his Address to the Joint Session of Congress on February 27, 2001, Bush outlined the government's new approach and new budget. He underlined the areas in which the budget that was increased by 4% would be used: The budget would be mostly used for the education of children in the country, for fighting against unemployment, for providing Medicare and social security, for environment, poverty and disadvantaged people; it is also stated that the necessary budget would be distributed for free market, free trade, freedom from oppression outside the country and for protecting the US people against tyrants and terrorism in rough states.\(^\text{243}\) In his speech, Bush stated only one sentence about the terrorism. Although he mentioned the increasing investment in defense spending and emergency funds for future threats, there was no emphasis on terrorism.\(^\text{244}\) With the September 11 attacks, President Bush's rhetoric became more aggressive with concepts such as war on terrorism, preemptive strikes and American unilateralism. Not only security perception changed in international politics, but also the measures taken in the field of civil aviation security were maximized. With these discourses and the strong influence of the media, Bush legitimized every action that he would take both at home and abroad.


\(^{244}\) Ibid.
Even if the United States was at the center of the September 11 attacks, its purpose, planning and consequences were global. Not only the United States, but also all countries have increased the measures taken in the field of aviation security, but the United States has made much stronger changes in this regard. In the report completed in 2004 by the 9/11 Commission, which was established on November 27, 2002, it pointed to inadequacy and negligence of the US to implement the security measures that had existed before September 11, and stated that the attacks could not be prevented due to the existing security gaps.245 These security gaps were not seen only at one airport, the terrorists used four different airports as starting point. Both the aviation security authorities and the intelligence services received many threats including airplanes and airports, but they did not analyze these threats in detail, did not extend the security protocols, and refused to take responsibility.246 In this way, it was seen by the whole world that the US, which prevailed as a hegemonic power from the Cold War, was fragile in some respects.

Security measures taken on civil aviation mostly focused on passengers’ screening as well as their luggage screening. Although the attacks of airports and hijacking constitute the most important security gaps, there was not new measures regarding some other security issues after the attacks. For example, no new arrangement has been made for external attacks on aircraft. However, airport and apron environmental security have been very important issues. It was recorded that three unauthorized people walked on one of the runways at the Kennedy International Airport in 2003.247 In addition, it is very likely that fires can be carried out at a point near the airport. National media have reported that since September 2001, al-Qaeda has attempted twice to drop planes outside the United States with shoulder-struck missiles.248 The security of the airport and apron environment is difficult to ensure, but with the cooperation of the necessary units, the budget and equipment, it is not

245 National Commission on Terrorist Attack, 77.

246 Ibid., 347.


248 Ibid., 17.
impossible. However, since the terrorist act of September 11 was a hijacking and the terrorists were radical Islamists, securitization was designed in this framework and security measures were taken accordingly. The emphasis on passenger, and baggage screening process has caused 6% drop in the number of passengers at all airports in the US, and people have begun to opt for road transportation, especially because they do not want to be subjected to long security measures for short-haul flights.\textsuperscript{249}

The TSC that emerged in 2003 and the Secure Flight program which came into implementation in 2004 were not only important tools to detect the potential threats/terrorists, but they were also against the protection of personal data. These programs allow to receive the names of the passengers from airline companies, to share these names with the relevant units, and to enable the identification of passengers by monitoring them at the airports through cameras. Therefore, these programs are available to pose problems with regard to human rights. This issue is also important today as it is a period in which the GDPR discussions are gaining importance.

As a result of the September 11 attacks, security measures were not only increased at the airports, but also many new security measures were introduced in the aircraft, especially in order to prevent external interference in the cockpit. One of the most important examples of this is the redesign of doors as bulletproof so that they cannot be opened from the outside. Since the terrorists who carried out the attacks of September 11 entered the cockpit with a cutting tool such as a utility knife, special attention was given to the strengthening of the doors. An article in the \textit{Los Angeles Times} in 2003 stated that the new cockpit doors caused multiple problems like suddenly opening overweight panels from the doors, overheating electrical components and causing toxic gas release, and the security gap that pilots may encounter when they open the door to use the sink in long flights.\textsuperscript{250} Although the new doors provided security, they were ineffective to provide safety.

\textsuperscript{249} Blalock, Kadiyali, and Simon, 755.

After the renewed and reinforced cockpit doors were started to be used, many problems were reported to the related units and the problems were solved later. It should be noted that even measures to prevent cockpit doors from opening from the outside could cause new safety problems. Although it did not happen in the US, an example of this is the GermanWings Airline accident on March 24, 2015. On the flight from Barcelona to Dusseldorf, the captain handed over the authority to the co-pilot, Andreas Lubitz, for going to restroom and left the cockpit. After a while, the co-pilot cut the radio communication, reduced the altitude of the aircraft from 38,000 feet to 100 feet and increased speed. As the co-pilot Lubitz locked the cockpit door from the inside, despite all attempts, the cabin crew and the captain pilot could not enter and led to the accident that killed 150 people. Therefore, the fact that the completely blocked outside access to the cockpit does not completely solve the security problems.

The security measures taken after the September 11 attacks clearly reveal that although several measures have extremely been tightened and expanded, new practices and resolutions have been identified after the attacks, as all the conventions made throughout history. The United States has contributed to all international civil aviation safety rules adopted at the Chicago, Tokyo, The Hague and Montreal Conventions, but had not carried out inspections in a well-disciplined way before experiencing this major attack. In the globalizing world, the perception of security and threat has changed and a special importance has commenced to been given to civil aviation security. Since 2001, billions of dollars have been spent for the development of civil aviation security, thousands of staff have been allocated, and many new procedures have been introduced. Although the security measures already implemented are far more advanced than they were in 2001, with the advancement of technology, states can become vulnerable at any time. For this reason, the aviation authorities need to be in constant communication, follow all innovations and potential threats, cooperate with intelligence services, and observe human rights at the maximum level.


252 Ibid.
Books, Theses and Reports


**Journal Articles**


**Electronic Sources**


https://www.youtube.com/watch?v=8FmUT3tt_2I.


https://www.faa.gov/about/history/brief_history/.

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Legal Regulations


11 Eylül 2001 tarihinde ABD toprakları içinde daha önce eşi benzeri görülmeyen bir saldırı planlanmış ve gerçekleştirilmiştir. Toplamba 19 teröristin dört uçağı yanlarında getirdikleri maket bıçağı gibi kesici aletlerle kaçaşarak ABD’deki en önemli noktaları hedef alması ve kaçırları uçakları imha silahı olarak kullanması sonucu büyük bir saldırı meydana gelmiş, binlerce kişinin ölmüne ve yaralanmasına sebep olmuştur. Çok uluslu bir terör örgütü olan El Kaide bu saldırıların sorumluluğunu üstlenmiştir. Kaçırlan uçaklardan biri Manhattan’daki Dünya Ticaret Merkezi’nin kuzey kulesine, diğer ise güney kulesine çarpmıştır. İkiz kulelere yapılan saldırıının ardından üçüncü bir uçağ Virgina’da Pentagon
binasının batı bölgesine çarpmıştır. Sonuç ise kalkışından kısa bir süre sonra, uçağındaki yolcuların ve kabin ekibinin müdahaleleriyle herhangi belli bir noktaya çarpmamış Pennsylvania’da boş bir araziye düştü. Aşırı saldırgan terörist faaliyetlerin yanısıra, bu saldırılar havaçılık güvenliği açıklarını hem de istihbarat servislerinin savunmasızlığını vurgulamaktadır. 11 Eylül saldırılarının zararı tarihi boyunca farklı devletler arasında meydana gelen savaşlarda gözlenmiştir.


yasalar çıkarmış olsalar da, sektör genel olarak sadece ilk ülkeden kaynaklanan sorunlar içermediğinden düzenlemeler uluslararası bir boyuta taşınmıştır. Sivil havacılık faaliyetinin ilk anlarından bu yana, genel düzen ve güvenliği sağlamak için birçok uluslararası anlaşma yapılmıştır.


değişmekle kalmadı, aynı zamanda sivil havacılık güvenliği alanında alınan önlemler de en üst düzeyeye çıkarılmıştır. Bu söylemler ve medyanın güçlü etkisi ile Bush, yurtiçinde ve yurtdışında atacağı her eylemi meşrulaştırmıştır.


bir çok güvenlik denetiminden geçmelerini gerektirmektedir. Siyasi liderlerin söyleyeleri sayesinde yolcuların büyük bir kısmını yeni önlemlerin güvenliğini daha çok sağladığına inanmakta ve bu önlemlerin havacılığın hızlı bir sektör olmasına olumsuz anlamda etki etmesine rağmen olumlu yaklaşmaktadır.


Saldırıların turizm üzerindeki etkileri incelendiğinde, terörist saldırılarnın ve turist psikolojisinin birbirleri ile yakınlaşılı olduğu söylenebilir. Bir terörist saldırısı
olduğunda, turistler buna göre kendi davranışlarını yaratırlar. 11 Eylül'den hemen sonra ABD’deki turistler ülkelerine geri dönmek istediler, karayolu taşmacılığını daha fazla kullanmaya başladılar, uçuş rezervasyonlarını iptal ettiler ve siyasi çatışmaların yaşadığı bölgelere gitmemeye karar verdiler. Bir ülkede veya şehirde bir terörist saldırı gerçekleşirse, bazı turistler çevresindeki diğer yerlerin terörist saldırı riski altında olduğunu varsayar ve buna göre hareket eder. Bu tutum korku ve endişeden kaynaklanmaktadır. Terörist saldırı kurbanı olma şansı çok düşük olmasına rağmen, bu tür korku her zaman turistlerin zihinde kalır. Özellikle 11 Eylül'de, saldırıların sivil havacılık uçakları tarafından gerçekleştirilmesi, tüm bu korkuları ortadan kaldırmaya yardımcı olmuş, aksine ABD'nin güvenlik zorlukları için yeni bir dönem açmıştır. ABD'ye seyahatler Kasım ayının başından itibaren iyileşmeye başladı, ancak saldırıların turizm ve ekonomi üzerindeki etkisi o kadar güçlüydü ki tamamen iyileşmek uzun zaman aldı.


11 Eylül saldırıları ve etkileri, devletler arasında birçokysal düzenleme olmasına rağmen, büyük bir güvenlik açığı olduğunu göstermektedir. Bu saldırıların gerçekleşmesi ABD’nin havacılık güvencesi konusunda kapsamlı bir politikasının olmadığı ortaya koymuştur. Aslında, saldırıdan sonra sivil havacılık güvencesi için yeni stratejiler öncül klık konular olarak belirlenmiş, yeni birimler ve bazı yeni düzenlemeler getirilmiştir.

11 Eylül saldırılarından sonra ele alınan ilk ve en önemli şey havacılık güvencesi konularının federalleştirilmesiydi. ABD hükümeti Federal güçlerin güvencesi sağlanması için iki önemli yasa kabul etmiştir: 11 Ekim 2001 tarihli Aviation Security


Havalimanlarında artan güvenlik önlemlerine bir diğer örnek yolcuların bagajlarına yönelik aramalar konusundaki yeniliklerdir. 11 Eylül'den önce düzenli bir bagaj kontrol sistemi yoktu. Kongre tüm çantalarda manuel veya otomatik olarak tüm çantalara taramanın zorunlu olduğunu bildirmiştir. Birçok havaalanında EDS ve ETD sistemleri kurulmuştur, böylece bagajlara dokunulmadan aranması sağlanmıştır.

11 Eylül saldırılardan sonra alınan güvenlik önlemleri sadece havaalanlarını kapsamakla kalmamış, aynı zamanda uçak içi güvenliği güçlendirmek için de çeşitli


Küreselleşen medyanın etkisinin de olumsuz sonuçları olabilir. Saldırılara karşı nasıl önlemler alınacağını ve şeffaflığın nasıl sağlanacağını duyurmak devletin görevidir. Bununla birlikte, bunu medya aracılığıyla gerçekleştirirken, ilgili önlemlerin dünya çapında duyulmasına ve bilinmesine neden olabilir. Bu durum da teröristler açısından yeni saldırılar için bir rehber olabilir.

Şimdiye kadar teröristleker karşı önlemler her zaman önceki deneyimlere dayanarak geliştirilen politikalar doğrultusunda alınmıştır. Her farklı tehdit için güvenliği artırmak ve genişletmek üzere düzenlemeler yapılmıştır. Bu yeni düzenlemelerin havaalanlarında uygulanması için geçen süre de bir başka zorluk olarak görülebilir.
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