Non- Proliferation Treaties between the USA and USSR after the Cuban Missile Crisis

A dissertation submitted in Partial Fulfillment of The Requirements for Master's Degree in Literature and Civilization

Submitted By: BELHADI Maroua  SAKRI Islam

Supervisor: Mr. YOUMBAI Mohammed Yacine

Board of Examiners

Chairman: Mr. CHOUCHANI A.Mouhammed  University of Eloued
Supervisor: Mr. YOUMBAI Mohammed Yacine  University of Eloued
Examiner: Dr. FETHIZA T.Mouna  University of Eloued

Academic year: 2019-2020
Dedication 1

I dedicate this work to my beloved parents specially my father Dr. Belhadi Ahfoudha without his help, support, cooperation, motivation and prayers I would not have taken up this study nor completed it.

I also dedicate this work to my grandmother who passed away three months ago.

This was her dream; dear grandmother I did this work just for you

Also, this work is dedicated to my friend “Alia Abdelbasset” who supported me throughout the process

Thank you all

*Belhadi Maroua*
Dedication 2

I dedicate this work to the dearest and closest person to my heart, to my dear mother and my father who passed away twenty years ago.

I dedicate this work to my wonderful brothers Abdel Ouahab Nessrat, Abdallah Sakri and my uncle Saci Chelalba.

Also, this work dedicated to a special person in my life Nabil Jasser who has supported and encouraged me throughout the process.

I also dedicate this dissertation to my friend Zakaria Hassani who has supported and helped me.

Thank you all

*Sakri Islam*
Acknowledgements

First and foremost, all our gratitude, gratefulness, and thankfulness are directed to “ALLAH” for enabling us to complete this work

We would like to express our deepest gratitude to our supervisor “Mr. YOUMBAI Mohammed Yacine” who has gone with us through the ups and downs of this work and been an invaluable source of knowledge and thoughtful advice. Thank you for giving us a wealth of ideas and generosity of time.

Our utmost gratitude goes to Dr. GHEDIR Ibrahim Mohammed for his support and help. we would like to thank him for his encouragement and due to his motivating words we reached this stage of success.

Special thanks go to our teacher Dr. ZELLOUMA Ahmed for his assistance and guidance.

We would like to thank Mr. CHOUCHANI A Mohammed and Dr FETHIZA T Mouna for evaluating our research

Finally, we would like to thank our beloved friends and families for their support and their prayer for us without forgetting any one of them, thank you all.
Abstract

This dissertation attempts to study the agreements signed between the United States of America and the Soviet Union about nuclear disarmament after the Cuban Missile Crisis. This investigation will be used to understand the policy pursued by the USA and USSR to decrease the use of nuclear weapons after the Cuban Missile Crisis which led to the signing of the Non-proliferation treaties. This dissertation aims to identify the origins of the Cuban Missile Crisis and its events. Besides, the study is analytically based on the analysis of the non-proliferation treaties texts and their interpretation. The results of the current investigation can be used to clarify the content and the nature of these treaties between the Soviet Union and USA and their role in settling world peace. The study reveals the most important nuclear non-proliferation treaties during the Cold War.

Keywords: the United States of America, the Soviet Union, nuclear disarmament, the Cuban Missile Crisis, nuclear weapons, the Non-proliferation treaties, the Cold War.
List of Figures

Figure 01: Missile range map........................................................................09
## Table of Contents

Dedication 1........................................................................................................................................................................... I
Dedication 2............................................................................................................................................................................... II
Acknowledgements .................................................................................................................................................................. III
Abstract ......................................................................................................................................................................................... IV
List of Figures ................................................................................................................................................................................. V

### General Introduction

1. Statement of the problem ...................................................................................................................................................... 1
2. Research Questions .............................................................................................................................................................. 1
3. Hypotheses ............................................................................................................................................................................... 1
4. Aims of the study .................................................................................................................................................................. 1
5. Research Methodology ......................................................................................................................................................... 2
7. Significant of the Study .......................................................................................................................................................... 2

### Chapter One: The Cuban Missile Crisis

List of Abbreviations .............................................................................................................................................................. 5

1. The origins of the Cuban missile Crisis .............................................................................................................................. 5
   1.1 The Bay of Pigs invasion ................................................................................................................................................. 5
   1.2 Operation Mongoose .......................................................................................................................................................... 6
   1.3 Operation Northwoods ..................................................................................................................................................... 7

2. The beginning of the missile crisis: .................................................................................................................................... 8

3. Key moments in the Cuban missile crisis: .......................................................................................................................... 10

4. Resolving the crisis ............................................................................................................................................................... 14

Conclusion ....................................................................................................................................................................................... 14

### Chapter Two: Non-Proliferation Treaties between the USA and The USSR

List of Abbreviations .............................................................................................................................................................. 18

1. Terms to be clarified: "Non-proliferation" and "Treaty"...................................................................................................... 18

2. The non-proliferation treaties: ............................................................................................................................................. 18
   2.1 Nuclear Test Ban Treaty .................................................................................................................................................... 18
   2.2 The Outer Space Treaty .................................................................................................................................................... 20
   2.3 The Nuclear Non-proliferation Treaty ............................................................................................................................. 23
   2.4 The Strategic Arms Limitation Talks ............................................................................................................................. 29
      2.4.1 The Anti-Ballistic Missile Treaty ............................................................................................................................... 30
      2.4.2 the Interim Agreement on Offensive Arms ............................................................................................................... 35
   2.5 The Strategic Arms Limitation Treaty (SALT II) ............................................................................................................... 38

VI
2.6 The Intermediate-Range Nuclear Forces (INF) Treaty

3. The impact of Non-proliferation Treaties between USA and USSR after the Cuban Missile Crisis on the International peace

Conclusion

General conclusion

References

Résumé
List of Abbreviations

ABM  Anti-Ballistic Missile

ASBM Air-to-Surface Ballistic Missiles

CIA  Central Intelligence Agency

DOD  Department Of Agency

ENDC Eighteen Nations Disarmament Committee

EX-Comm Executive Committee

IAEA International Atomic Energy Agency

ICBM Intercontinental Ballistic Missiles

INF  Intermediate Nuclear Forces

IRBM Intermediate Range Ballistic Missiles

GATT General Agreement on Tariffs and Trade

GLBM Ground-Launched Ballistic Missile

GLCM Ground-Launched Cruise Missile

EX-Comm Executive Committee

JFK John Fitzgerald Kennedy

MAD Mutual Assured Destruction

MIRV Multiple Independent Re-entry Vehicles

MRBM Medium Range Ballistic Missiles

NNWS Non-Nuclear Weapon States
NPT  The Non-Proliferation Treaty

NTM  National Technical Means

NWFZ  Nuclear Weapon-Free Zones

NWS  Nuclear Weapon States

OAS  Organization of American State

OST  The Outer Space Treaty

PTBT  Partial Test Ban Treaty

SALT I  The Strategic Arms Limitation Treaty I

SALT II  The Strategic Arms Limitation

SCC  Standing Consultative Commission

SLBM  Submarine Launchers Ballistic Missiles

UK  United Kingdom

UN  United Nations

USA  The United States of America

USSR  The Union of Soviet Socialist Republic
General Introduction

During the Cold War, the relationship between the USA and USSR was very tense: the placement of the Soviet missiles and many other conflicts between the two countries led to the most dangerous cold war confrontation known as the Cuban Missile Crisis. Moreover, the superpowers feared that this crisis would lead to a nuclear war. The leaders of the Soviet Union and the United States made communications to prevent future crises. The Cuban missile crisis was considered a turning point that led to the signing of several treaties and agreements that would help to slow the pace of the arms race and to limit competition in strategic weapons development between the USA and USSR.

1. Statement of the problem

There were various conflicts during the cold war period between the two camps. One of these conflicts was the Cuban missile crisis which resulted in the signing of non-proliferation treaties between the USA and USSR.

2. Aims of the study

The study aims to show how the Cuban missile crisis changed the course of the Cold war, to investigate the non-proliferation treaties between USA and USSR, and to identify the impact of these treaties on the spread of nuclear weapons and international peace during and in the aftermath of the Cold War.

3. Research Questions

The current study attempts to answer the following key questions:

1- What were the driving forces that pushed the USA and USSR to sign the non-proliferation treaties after the Cuban crisis?

2- What was the impact of these treaties on international peace in that period?

3- Did non-proliferation treaties slow down arms race during and after the cold war?

4. Hypotheses
1- If the Cuban missile crisis was considered as a struggle that would lead to nuclear war then the two superpowers would have been pushed to sign the non-proliferation treaties.

2- If the non-proliferation treaties have reduced the arms race this would have helped to spread international peace over the world.

3- If the USA and USSR decreased their numbers of missiles and nuclear forces then the arms race between the two countries during and after the cold war would have been slowed down.

5. Research Methodology

The research methodology design of the current study is qualitative in which the researchers attempted to review, describe, and analyze the existing literature revolving around the research topic heading and scope. In this context, the non-proliferation treaties texts will be analyzed and interpreted, and several conclusions derived from this analysis will be presented. On the ground of these treaties different clauses, the study will assess whether the eastern bloc represented by the USSR and the western block represented by the US respect their agreements and whether they have a real impact in creating world stability and reducing tensions between the two rivalries.

6. Significance of the Study

The findings of this study will be used to understand the policy that the USA and USSR pursued to decrease the use of nuclear weapons after the Cuban Missile Crisis which led to the signing of the Non-proliferation treaties. Also, the study's results can be used to clarify the content and the nature of these treaties between the Soviet Union and USA and their role in settling world peace.

7. Structure of the Dissertation

This dissertation comprises two chapters. The first chapter deals with the Cuban missile crisis and the events which led to the outbreak of this crisis, concluding it with how the Cuban missile crisis resolved.
The second chapter attempts to study the non-proliferation treaties after the Cuban missile crisis. We start with the definition of non-proliferation and treaty. Also attempts to mention the treaties and analyzing its articles, concluding it with the impact of these treaties on international peace.
Chapter One:

The Cuban Missile Crisis
1. The origins of the Cuban missile Crisis

1.1 The Bay of Pigs invasion

Mooney (2006) noted that the anger of the Americans from Fidel Castro and the Cuban revolution made the Cubans closer to the soviet union, and these two reasons helped to create deep relationships between Castro and the Soviet leader Khrushchev, and as a result, soviet-style communism came to dominate Cuba.

John F. Kennedy argued that: “increasing economic growth would allow the United States to win the arms race and to demonstrate capitalism’s superiority over communism. Kennedy also harshly criticized Nixon and the Eisenhower administration for failing to support Cuban “freedom fighters” who wanted to return to Cuba and overthrow Castro”. (Watson Institute for International Studies Brown University[WIISB],2006, p.12). According to Zinn (1973), fifteen months after Castro became president of Cuba exactly in March of 1960, American president Eisenhower confidentially agreed with the CIA to prepare for the invasion of Cuba and this preparation was through training and arming the Cuban exiled persons in Guatemala. This point was not mentioned by the Watson Institute for International Studies at Brown University.

In 2005, Stern stated that it was just after the election of Kennedy as the US president and before he took responsibility, Kennedy learned about Eisenhower and the Central Intelligence Agency agreement which include the training of the exiles against Castro regime to invade their motherland. Specialists in American Intelligence anticipated that the idea of topping the Castro regime and installing a non-communist government friendly to the United States would be welcomed by many Cubans. On the other hand, JFK ratified the plan because he believed that the invasion could be interpreted as an action planned by gangsters supporting Cuban opposition to Castro.
Mooney (2006), argued that to overthrow the government of Castro, the United States gave money, weapons, and military training to anti-Castro Cuban exiles who were preparing for an invasion of Cuba. The objective of these exiles was to dethrone Castro and to free Cuba of communism. Oxley (2017), illustrated that after a series of planning and preparation that lasted a year or more, on April 17, 1961, the United States Central Agency (CIA) decided to invade Cuba with the help of exiled Cubans, who are against the president Castro and his regime in an attempt to overthrow the communist regime of Fidel Castro in what would come to be known as the Bay of Pigs invasion.

Mooney (2006) stated that the US government expected that this invasion of anti-Castro exiles would receive support from the Cuban population and they will help the invaders to depose Castro’s communist government, but the Americans were disappointed because the Bay of Pigs invasion was not welcomed in Cuba and the Cuban people did not rise against Castro, and the communist government easily defeated the invasion.

1.2 Operation Mongoose

Boot (2018) reported that Operation Mongoose as a secret program of the Central Intelligence Agency (CIA) that was authorized in March 1960 during the final year of President Dwight D. Eisenhower’s administration. Simkin (1997) claimed that the plan of the operation involved a budget of 13 million dollars to train a paramilitary force to carry out a guerrilla force outside Cuba. The strategy was organized by Richard Bissell and Richard Helms. Baggins (1998) stated that this secret operation happened on 30 November 1961 which was a prime focus of the Kennedy administration and was led by the United States Air Forces General Edward Lansdale who comprise a multiplicity of plans with wide-ranging purpose and scope. Also, it is including intelligence collection sabotage operations. Valdes-Dapena (2004) mentioned that US president Robert Kennedy called Operation Mongoose a “top priority” for the United States government. Its agents executed terror actions that included: the killing of more than 70 farmers, teachers, and workers; 4,000 canfield fires; and
the shelling of more than 30 civilian targets. Also Baggins(1998) claimed that US project aimed to remove Cuban’s President Fidel Castro and communist regime from power with which the US can live in peace. While the plot of Operation Mongoose was carried out, US administration attempted to assassinate Castro.

1.3 Operation Northwoods

Skakid (2007) realized that the Operation Northwoods was a secret plan on 13 March 1962, produced by United States Department of Defense (DOD) to carry out a false terrorist attack inside the US in Washington and Miami and against US interests to topple Castro from the Cuban government and to provoke “military intervention in Cuba”. Bamford (2001) stated that the Operation Northwoods invited the people to be involved in a terrorist explosion that they did not commit, and to shoot innocent people on American streets; planes would be hijacked, through these actions Castro would be blamed. In September 1997, Simkin indicated that the secret plan was a top-secret memo presented by General Lyman Lemnitzer to Robert McNamara, urging the president Kennedy to order a variety of horrific incidents to create a justification to invade Cuba. Simkin wrote that: “President John F. Kennedy summoned Lyman Lamnitzer to the Oval Office on 16th March 1962, where they discussed Operation Northwoods” (Simkin,1997, para.11). Through our study we conclude that the plans of Northwoods have been rejected by President Kennedy but Simkin neglected to explain the reason behind this rejection, he just reported that President Kennedy sent General Lyman Lamnitzer to Europe and he became the Commander of US forces in Europe. Bill (2009) claimed that “black propaganda” Operation continued to invade Cuba even Kennedy had rejected the Northwoods plans.
2. The beginning of the missile crisis

Brenner (1990) stated that after the Bay of Pigs debacle, the Cuban leaders were afraid of another attempt by the Kennedy administration to invade Cuba. The suspension of Cuba’s membership in the Organization of American States (OAS) in January 1962 affirmed the Americans’ intention to invade Cuba. Immediately after that, the Cuban leader received a report about an interview with the editor of Izvestia Aleksei I. Adzhubei had made with President Kennedy. From this interview, Adzhubei understood that America was planning an invasion. Other factors have made the Cubans believe an invasion was very close before the end of 1962. The first one happened on August 24 when Alpha 66, was a group of émigré
terrorists killed several Soviet technicians and Cubans through launching an attack on a hotel near Havana. Besides, the mock overthrow of Vieques leader named Ortsac or Castro in reverse this was a hint to the Cubans that the invasion and the overthrow of Castro were very close. Moreover; the United States tried to expend its economic blockade by using different strategies including the pressure of US allies to break up their commercial relations with Cuba. Also, the US intimidated the countries that traded with Cuba to cut off aid to these countries. The last American strategy against Cuba was rejecting the products that were manufactured in Cuba or that’s contained any Cuban materials. However, “An important one could have been Defense Department publicity about large scale military exercises off the coast of Puerto Rico planned for October” (Brenner, 1990, p.121). According to our opinion, this factor was the important one because the near distance between Puerto Rico and Cuba that’s made the Cubans afraid more about the idea of the American invasion. In one development study, Mooney (2006) stated that Fidel Castro asked the Soviet Chairman for helping him to prevent Cuba from the American invasion. In July 1962 he accomplished a secret agreement with the Soviet leader Nikita Khrushchev. This agreement has been declared to place the Soviet nuclear missiles in Cuba to protect Cubans from US potential invasion.

Cooper (1966) mentioned that before the arrival of the Cuban Minister armed Forces Raul Castro on January 2, 1962, the Soviet and Cuban governments made a decision which deals with placing privately the soviet missiles in Cuba in the fall. By the end of August Cuba’s Minister of Finance, Ernesto “Che” Guevara followed Raul Castro to contract a treaty considered as unique in Soviet history. Six months after this treaty, the USSR increased its exports to Cuba. The USSR-Cuba treaty was called unique because the Soviet was paid twice for its weapons, in money, and political concession. Allison (2012) considered that in April the soviet presidium confirmed Cubans demand further weapons, and the Soviet arms shipments witnessed a massive movement and an increasing pace in late July. “By 1 September, Soviet arms in Cuba included surface-to-air missiles, coastal defense Sopka cruise
missiles, patrol boats armed with anti-ship missiles, and more than 5000 Soviet technicians and military personnel” (Allison, 2012, p. 257). According to our humble opinion, the USSR sent a group of military equipment to Cuba to build a military base for defending the Island from the American invasion. Swift (2007) stated that after the USA placed Jupiter missile in Turkey with the scope of the Soviet target. On 8 September The USSR decided to follow them and sent three intermediate Range and two Medium Range Ballistic Missiles (IRBMS and MRBMS) a total of about 80 missiles in all to Cuba to be a direct threat to the American Continent. Allison (2012) mentioned that the operation of sending the missiles to Cuba, which was a part of Operation Anadyr, was a major organizational success. Furthermore, The Soviet Union concealed this Operation until the missiles were deployed in the field.

3. Key moments in the Cuban missile crisis:

Kiger (2019) claimed that on October 14 American U-2 spy plane flew over Cuba and took hundreds of photos of missiles sites that were being newly built by the Soviet Union. The missiles sites have been shown in figure 01.

On October 15 CIA analysts have discovered launchers, missiles, and transport trucks indicating that the Soviets are building missile launch sites capable of hitting targets nearly all over the United States. Whyte and Levi (1994) stated that On the morning of October 16 president Kennedy was informed of the discovery of both medium and intermediate-range nuclear missiles sites that the Soviet Union had been creating in Cuba. After that, the executive committee of the National Security Council (Ex-Comm) was formed to discuss what they could do to deal with the current situation in that period and how to respond to the missile threat. In 2019 Kiger mentioned that Kennedy’s advisers provided him options which are Do nothing, Pursue Diplomacy, Blockade Cuba, and an Air attack to destroy the missile sites.
Option 1: Do nothing

Allison (1969) stated that the Soviet capability to place missiles in Cuba did not attract much American’s attention because it was not a new thing since the U.S. already lived under the gun of missiles based in the USSR. The United States ’unthinkable reaction would cause more risks and problems. Wherefore, the U.S. should proclaim quietly the Soviet action. However; this discussion was not successful because it reduces the military power of the Soviet Union and the seriousness of what he did. Besides, the political importance of the Soviet's move was undeniable. The Soviet Union’s action was a challenge and a direct warning to the American president. If America did not succeed in responding, any American commitment, if any, would not be applicable.

Option 2: Diplomacy pursue

Watson Institute for international studies[WIIS] (2006) mentioned that the United States considered that any military action would have more risks than benefits and could cause a nuclear war. Wherefore, to push the Soviets to take off their missiles from Cuba and to avoid a military conflict with the Soviet Union, the US follow up on purely diplomatic procedures through the United Nations. For this, they decided to send envoys to both Cuba’s leader and the Soviet Union’s leader because they believed that this could help them to disclose the purposes and the intentions of Cuba and the USSR. Moreover; the US considered that diplomatic efforts would receive global consensus and help strengthen the US position in the United Nations and the Organization of American States. Also, it could give them time to estimate the situation, collect information, and make alliances with other nations. It prevents any reckless or hasty action that could cause risks later. Besides, the United States was ready to remove their Jupiter missiles from Turkey in return, the Soviets should take the same step and they should remove their missiles from Cuba. Allison (1969) illustrated that this option had its drawbacks. To accuse the Soviet Union before the U.N. Security Council held little
promise as the Soviets could veto any proposed measure. The missiles would become operational whilst the diplomats debated.

Option 3: An air attack to destroy the missiles

Watson Institute for international studies [WIIS] (2006) suggested that Surgical strike was another option had been proposed by Kennedy and his advisors to destroy the Soviets missiles. They expected that this option was an effective one and could eliminate the Soviets missiles. Also, there would be no possibility to be these missiles operational. Furthermore; military action against the missiles and Cuba put an end to a military threat to the U.S. and protects its position in the Western Hemisphere and it could be a quick response before the Soviets discovered that the Americans had known the missile sites. In another side, if the United States exactly US Air Force did not respond to the Soviet missile setting up in Cuba this would make the Americans lose their self-confidence also they would face the Soviets in another confrontation around the world and give the courage to the communists to spread communism in Latin America.

Option 4: Blockade

Allison (1969) clarified that the indirect military action, naval blockade, was the most suitable response and it could help prohibit the military shipment to Cuba. Also, the Americans said if they apply the other option, an airstrike, they cannot be sure that all the missiles have been eliminated or even the other suggestion, diplomacy, could take months and years would allow the soviet union to bring other batches of missiles and military weapons. Moreover; a naval quarantine is a peaceful solution not so impetuous as a strike and it is prohibited to enter any soviet ships carrying missiles or weapons to Cuba or carrying equipment to make these missiles practical.

Whyte and Levi (1994) illustrated that on October 22 Kennedy announced to impose quarantine of Cuba against offensive weapons only. Lebow (2000) noticed that American destroyers and submarines were standing five hundred miles distant from Cuba to stop any
transfer of weapons and military supplies to Cuba. Also, the armed forces equipped 140,000 troops and 579 ground and carrier-based combat aircraft to be ready for any military action. The Soviet missiles in Cuba and the Castro regime were not protected from the American attack. In 2019 Kiger realized that Khrushchev delivered a letter from Kennedy. In this letter, Kennedy told the Soviets that they did not understand the US plans and desires and the United States did not have any intention to engage in a nuclear war against the USSR.

On October 23 Khrushchev wrote to JFK a letter saying that Soviet ships will not observe the blockade and refusing to remove the missile from Cuba. Also, he told the USA that these missiles were used for defensive purposes. Kennedy replied to Khrushchev by another letter and told him that he began the crisis when he sent privately missiles to Cuba. Moreover, US ambassador Adlai Stevenson demonstrated the problem to the U.N. Security Council that the American ships moved towards the waters around Cuba. The Soviets tried to break the quarantine through sending submarines into the Caribbean.

On October 24 Khrushchev sent a letter to Kennedy “You are no longer appealing to reason, but wish to intimidate us”. In this letter, the Soviet president was accused of threatening USSR. Mooney (2006) stated that the blockade began when twenty (20) Soviet ships approach the blockade, slow down, and turned around and began heading back to the USSR. On October 25 Kennedy allowed the Soviet ships, the Bucharest, to pass the blockade line when he knew that it was not carrying offensive weapons. On October 26 Khrushchev sent a letter said the missiles on Cuba were defensive. However, he suggested removing the missiles from Cuba in exchange for the US promise not to invade Cuba. Kiger (2019) mentioned that On October 27 Khrushchev sent a letter to Kennedy he would only remove missiles from Cuba if the USA removed their missiles from Turkey. Kennedy replies that he would accept removing the missiles from Turkey but if the USSR does not withdraw he would attack. On October 28 the Soviet Union eliminate the missiles from Cuba and ship them back to USSR. The most difficult point in the crisis was passed.
4. Resolving the crisis

Lebow (2000) claimed that on the afternoon of 28 October Radio Moscow broadcast reported that the USSR was ready to take off the missiles from Cuba. This ended two-weeks conflict between the superpowers which almost led to a nuclear war. History.com Editors (2009) stated that the consequences and the substantial lesson had been learned by the USA and USSR. Firstly, after the USSR withdrew its missiles from Cuba, the relations between USSR and Cuba were strained. Besides, the relations between the united states and its European allies were shaken because the administration of Kennedy ignored and did not inform them about the negotiation with the Soviet Union that might have led to the atomic war. Moreover, the conflict between the USA and USSR could be discussed to avoid a future crisis by deciding to use hotlines between Moscow and Washington DC. Less than a year after the crisis ended exactly in 1963 USA, USSR and Britain signed an agreement known as a Test Ban Treaty.

Conclusion

In this chapter we have discussed several points such as: the origins of the Cuban missile crisis which includes many operations for instance Bay of Pigs invasion, Operation Mongoose and Operation Northwoods. In addition to these operations there are several options which were proposed to Kennedy as a response to the Soviet Union, which in turn contributed to the outbreak of this crisis. Moreover; the key moments of this crisis and the last point is how the eastern and the western block resolved this struggle.
Chapter Two:

Non-Proliferation Treaties between

The USA and The USSR
1. Terms to be clarified: "Non-proliferation" and "Treaty"

Charatsis (2016) claimed that Non-proliferation deals on minimizing the spread of nuclear, biological, and chemical weapons and technologies to prevent the expansion of “sensitive” raw material, technical tools, and knowledge that is used by several countries to develop, use and exchange of such weapons. Geneva protocol in 1925 was the first initiative to forbid chemical and bacteriological conflict before the foundation of the “nuclear non-proliferation regime”. Nowadays a non-proliferation system could be described as an advanced system instituted on international, regional, and bilateral agreements and arrangements supported by national legislation and enforcement mechanism. The reflection of non-proliferation efforts was on different factors and objectives. A non-proliferation system is linked in a way or another to a variety of ‘adjacent’ initiatives and issues, for example, disarmament, physical security, and the safe use, storage, and transfer of chemical, biological and nuclear equipment.

On the other side as Congressional Research Service [CRS] (2001) highlighted the treaties are formal legal agreements both in international and domestic law. Concerning international law, when these treaties enter into force the parties must abide by them and become an integral part of international law. As for domestic treaties, in which the United States is a part of federal legislation, these treaties constitute what is known as “the country’s supreme law”. However, the word treaty has various meanings, its meaning in the United States differs from international law. Under international law, a treaty is any legal agreement between nations. In the united states, the word treaty is called for an agreement that is created by and with the advice and consent of the senate.

2. The non-proliferation treaties

2.1 Nuclear Test Ban Treaty: August 5, 1963

Jacobson and stein (1966) mentioned that in Moscow, on July 25, 1963, the three representatives of nuclear superpowers which are the United States, the Soviets Union, and the United Kingdom countersigned an agreement that dealt with banning nuclear tests in the
atmosphere, in outer space and underwater. Kalinowski (2006) noted that the chairman Nikita Khrushchev and Averill Harriman parleyed the Partial Test Ban treaty (PTBT) in ten days between July and August 1963. As Jacobson and Stein (1966) mentioned the treaty was signed on August 5, 1963, in Moscow by the foreign ministers of the three countries then it was ratified by President Kennedy on October 7, 1963, and entered into force on October 10, 1963. However, this did not mean that the rest of the states did not participate in almost all countries participated in one form or another. Moreover, the Moscow Treaty was considered as the first major formal arms control agreement and the first Multilateral Treaty between both ends of the cold war and it clarified the competition between the two polar on the nuclear-missile arms race. As mentioned by Bohinc (2013) the Partial Test Ban Treaty has 117 states including the United States however, there are countries such as China, France, and Northern Korea that have not signed the Treaty though they have tested nuclear weapons.

Jacobson and Stein (1966) illustrated that the original parties which were the United States of America, the United Kingdom, the Soviets Union, and Northern Ireland divided the Partial Test Ban Treaty into five (5) articles and have agreed as follows: the first article stated that all the parties of the PTBT pledge to ban, to stop and not to implement any nuclear weapons test explosion or any other nuclear explosion in the atmosphere, in outer space or under territorial waters and high seas, or anywhere else under its jurisdiction. Also, the treaty prohibits all the explosion in any other environment especially the ones that would cause radioactive debris to be present outside the borders of the country conducting the explosion. Another point was agreed upon by the original states which were the prevention of causing or participating in any experimental nuclear detonation. Article two (2) discusses the amendments in which any state may suggest an amendment to this treaty after that this modification shall be presented to the Depository Government which in turn distributes it to all the parties of this treaty. If this amendment is accepted by one-third or more of the countries, the Depository Government should hold a conference in the presence of all parties to consider the proposed amendment,
and the amendment enters into force after the instruments of ratification are deposited by the majority of all countries.

According to article three(3), any country has not been able to sign the treaty before it enters into force can join it at any time. Moreover; only countries that are signatories to this treaty can ratify it also the instruments of ratification and accession shall be deposited by the Depositary Government that made up of the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics and these countries, the Depositary Government, should immediately inform the signatory and acceding countries to the Treaty of the date of each signature, its entry into force, the date of deposit of the instrument of ratification and accession to this treaty and the appointment for receiving any request for conferences. Furthermore; according to article 102 of the charter of the United Nations, the states which are the United States of America, the Union of Soviet Socialist Republics, the United Kingdom, and Northern Ireland shall register this treaty. Under article four(4) each state has the right to withdraw from the Treaty if the subject of this treaty has endangered the supreme interest of its country. The last article stated that this Treaty shall be deposited in the achieves of Depositary Government, and this latter shall be sent to the Government of the signatory and acceding states.

2.2 The Outer Space Treaty October 10, 1967

Bohinc (2013) stated that in 1966 The United Nations (UN) started the efforts to set the activity in space these efforts resulted in The Outer Space Treaty (OST) which being signed On 10 October 1967. Moreover; the Treaty has other names which are The Treaty on Principle Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and other Celestial Bodies or Magna Carta of Space. This Treaty has been approved by 102 countries. Ordzhonikidze (2007) illustrated that The Outer Space Treaty excluded conventional weapons. However; it was addressed to ban only the deployment of weapons of mass destruction in outer space. Also, it prevented military works on the moon
and other celestial bodies and the expansion of an arms race into outer space and is considered as an important historic agreement. As Johnson defined “the Outer Space Treaty is largely the product of efforts by the United States and the USSR to agree on certain minimum standards and obligations to govern their competition in “conquering space”(Johnson, 2008, p.1). According to our opinion we can say that the Outer Space Treaty deals with land property in space and monitors what states are allowed to do when it comes to exploring space.

The United Nations General Assembly [UNGA] (2005) stated that The 1967 Treaty on Principles Governing the Activities in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies was divided into seventeen (17) articles.

The first article states that the outer space must be explored and used for the benefit and interests of all states without taking into consideration the economic and scientific development of these states under international law. Article two clarifies that the countries could not use outer space as an area for occupation or any other means. Article three contained the works of state parties to the treaty shall be carried out following international law. Article four includes that no nuclear weapons or weapons of mass destruction shall be put in orbit around the earth or on any celestial bodies. Article five examines that state parties to the treaty shall consider astronauts as emissaries of humanity in outer space and shall give them all possible assistance if there was an accident.

Articles six and seven discussed that the responsibility of parties of the Outer Space Treaty shall be placed for damage caused by an object launched or by its components on Earth. Article eight described four categories of launching states the first one a state which launches, the second one a state which procures the launch, the third a state from whose territory a space object is launched, the last one a state from whose facility an object is launched. However; each launching state was internationally liable for damage to any other state party to the treaty caused by its launched space object or its components parts. Article nine was
complex and long. This significance article highlighted the environmental problems including the problem for both the terrestrial environment and space and extraterrestrial environment. Also, this article discussed the countries that abide by principles of cooperation and mutual assistance, and due consideration was given to the interest of parties to the treaty. Countries that discover space should make explorations. Besides, the article also mentions the consultations between states when issues of environmental protection arise. When space activities became more advanced, environmental protection expanded.

Article ten stated for enhanced international cooperation in the exploration and use of outer space. Including the Moon and other celestial bodies, consistent with the purposes of this treaty, the states parties to the treaty shall consider on an equal basis any demands from other states parties to the treaty to provide an opportunity to monitor the flight of space objects launched those states. Moreover; the kind of such chance of observation and conditions under which it could be tolerated shall be determined by convention between the states concerned.

Article eleven mentions that the state parties to the treaty agree to make activities in outer space, including the Moon and other celestial bodies and this is to enhance international cooperation in the exploration of outer space for its peaceful use. Article twelve stated that the other states' parties to the treaty must provide reasonable prior notice of the expected visit of stations, installations, and spacecraft on the Moon and celestial bodies.

Article thirteen deals with regarding the space activities of the States which are parties to this Treaty, whether such activities are done by one country party to the Treaty or in association with other countries. Moreover; the countries that are within this Treaty should resolve with the appropriate international organization or with the state members of that international organization any scientific questions raised concerning the activities of international governmental organizations in the exploration and use of outer space. Furthermore, article fourteen deals with the treaty’s ratification, and entry into force. All
states have the right to join the Treaty even if they are unable to sign before it enters into force. Concerning the instruments of ratification and accession, it shall be deposited to the Depositary Government after the Treaty has been ratified by the signatory states. However; if some countries deposit their instruments of ratification after the Treaty entry into force, they shall enter into force on the date that their instruments of ratification were deposited. Also, the Depositary Government should immediately inform the signatory and acceding countries to the treaty of the date of each signature, its entry into force, the date of deposit of the instrument of ratification and accession to this treaty, and other notices.

According to article number 102 of the charter of the United Nations, the Outer Space Treaty shall be registered by the Depositary Government. Following article fifteen any state, which is considered part of the Treaty, have the right to suggest amendments to this Treaty and the proposed amendments will enter into force when they obtain the approval of the majority of the countries parties to the Treaty. As for remaining countries, the amendments shall enter into force at the time that these amendments are accepted. Article sixteen deals with the state withdrawal from the Treaty so that any state can withdraw from the Treaty a year after the latter enters into force and this is done by sending a written notification to the Depositary Government. After a year of sending the notification, the withdrawal will take effect. According to the last article, article seventeen, the Outer Space Treaty shall be deposited in the archives of the Depositary Government and the latter send duly certified copies of this Treaty to the Governments of the signatory and acceding States.

### 2.3 The Nuclear Non-proliferation Treaty

Medical Association for Prevention of War [MAPW] (2007) claimed that in 1960, at the expansion of nuclear weapons, the treaty had its origins in international concerns. The United States tested the first nuclear device at Alamogordo, New Mexico in the summer of 1945. Goldblat (1990) mentioned that the Soviet Union became a nuclear weapon power in 1949 after 3 years exactly in 1952. The UK followed the Soviet Union and became a nuclear power
too. In 1960 followed by France and in 1964 by China. Medical Association for Prevention of War [MAPW] (2007) stated that the first nuclear test of China in 1964 lead to prohibiting the further spread of these nuclear weapons and in 1965 the Geneva disarmament conference began consideration of a draft nuclear non-proliferation treaty.

Krause (2007) stated that the Non-proliferation Treaty, which is considered as an integral part of the Nuclear Non-proliferation regime, is a deal between two groups of states which are the non-nuclear-weapon states (the have-nots) and the five nuclear-weapon States (the haves) which are the United States of America, the Soviet Union, France, Britain, and China. However; Congressional Research Service [CRS] (2019) mentioned that there are three nations have significant weapon capabilities but have not signed the NPT which are India, Israel, and Pakistan, another nation had signed the Treaty but withdrew from it in 2003 which is North Korea and this nation is now believed to possess a small number of nuclear weapons. Nevertheless; several countries stopped their nuclear weapons programs and acceded the Non-proliferation Treaty such as Argentina, Brazil, and South Korea. Also, countries like Ukraine, Belarus, and Kazakhstan which have Soviet weapons on their land, renounced former soviet weapons on their territories and acceded the Treaty as non-nuclear-weapon states in 1990. Moreover; the Non-proliferation Treaty was opened for signature on July 1, 1968, but entered into force on March 5, 1970. It is implemented by several bodies such as International Atomic Energy Agency (IAEA) safeguards, national export control laws, coordinated export control policies under Nuclear Suppliers Group, U.N. Security Council resolutions, and ad hoc initiatives. Furthermore; the National Research Council of the National Academies [NRC] (2004) stated that the NPT is considered as a nuclear deal between the parties of the Treaty involving technological assistance and disarmament in which the non-nuclear-weapon states pledge not to acquire or develop nuclear weapons. Besides, in the case that if some materials and technologies facilitate their manufacture of a nuclear weapon, all of these materials or technologies will be subject to international safeguards. On the other hand, the nuclear-
weapon states those that had exploded a nuclear explosive device before January 1, 1967, must work in the field of good nuclear disarmament and the general and complete disarmament treaty; they should establish export controls for the same technologies, and they should cooperate in contributing to the further development of civil nuclear energy especially in non-nuclear-weapon states. As Rauf clarified: «the NPT is undeniably the most important and successful multilateral arms control agreement yet implemented and the one most widely adhered to». (Rauf, 1994,p.1)

From this quote we can deduce that the NPT is one of the most important nuclear arms treaties because it is still in effect until nowadays unlike some treaties.

Congressional Research Service [CRS] (2010) illustrated that the grand deal of the NPT based on three pillars: non-proliferation, disarmament, and the peaceful use of nuclear energy.

1- Non-proliferation: nuclear-weapon states pledge not to transfer nuclear weapons, technologies, or any other nuclear explosive devices to any country or in any form of assistance, and NWS undertake not to encourage or urge any non-nuclear-weapon states to manufacture or possess a nuclear weapon. On the other hand, the non- nuclear weapon states (NNWS) also pledge not to acquire any nuclear weapon or to receive any form of assistance in the manufacture of nuclear weapons.

2- Disarmament: all parties of the treaty pledge to conduct negotiations in order to find measures relating to stopping the nuclear arms race, nuclear disarmament, and general and complete disarmament.

3- Peaceful use of nuclear energy: the right of all parties to develop, produce, and use nuclear energy for peaceful purposes also to participate in the exchange of equipment, materials, scientific and technological information.

Non-proliferation Treaty’s articles:
Cirlig (2016) illustrated that article one (1) is related to non-proliferation in which it prevented nuclear weapon countries from transferring nuclear weapons or other nuclear explosive devices to any state. Moreover, nuclear weapon countries pledge not to help and encourage non-nuclear-weapon states in manufacturing nuclear weapons.

Gilligan (2014) stated that in Article two (2) each non-nuclear-weapon state party to NPT pledge not to receive from transferor whatsoever of a nuclear weapon or other explosive device or encourage other states in producing such weapon or explosive devices directly or indirectly. And not to demand or receive any assistance in the industry of nuclear weapons or other explosive devices. Goldblat (1990) claimed that Article three (3) comprises the verification element of the NPT. Safeguards should enable the disclosure of the transformation of important quantities of nuclear material from peaceful uses to the industry of nuclear explosive devices, in addition to the deterrence of transformation by inspiring the risk of suitable disclosure. No such transformation had as yet been announced by the IAEA, despite on several occasions the Agency had been prohibited in its search activities. Also, each non- nuclear state party to the treaty pledge to accept comprehensive protection of International Atomic Energy [IAEA] to prohibit the diversion of nuclear energy from peaceful uses to nuclear weapons. Article four (4) of NPT confirms again the right of parties to improve nuclear energy for peaceful objective in conformity with Article one (1) and (2) of the treaty and oblige those parties in a position to do so to share in such efforts in non-nuclear-weapon states. The implementation of this Article had been influenced to a big limit by the world-wide slow-down in develop of civilian nuclear power due to environmental safety and economic factors, which include a weak rise in electricity requests, high premier investment costs, and shortage of capital. Also, limitations had been enjoined in nuclear supplies since India, a non-party to the NPT took advantage of the indulgence pre NPT safeguards applied to its nuclear works to detonate a nuclear device. Under Article five (5) of NPT, the possible advantages of peaceful application of nuclear explosion were to be made
obtainable by the nuclear-weapon parties to non-nuclear-weapon parties under suitable global observation. This troth was made in interchange for a concession by the latter states of the right to behave any nuclear explosions because there was no way to affirm that nuclear explosion had no military mission. However; there was great doubt about the technical feasibility, economic viability, and political acceptability of nuclear explosions for peaceful objectives. Conventional explosives were difficult to achieve equivalent outcomes without the environmental and health dangers accompanying nuclear explosions. Furthermore, there had so far been no program in which the feeding of peaceful nuclear denotation services to the non-nuclear-weapon state was important. The USA finished its peaceful nuclear denotation project in 1977 and the only country which still testing with such denotations. Although, it says it’s ready to cut out them under a total nuclear experience among parties to the NPT, appeared to be that peaceful uses of nuclear denotations require more risk than advantages. By implicit agreement. Also, the practical implementation of these submits had been preserved in abeyance.

According to Goldblat (1990), article six (6) is related to disarmament obligations. In general, the obligations stipulated in article six are considered to have special results. The states parties to the Treaty pledge to follow-up negotiations in good faith to end the nuclear arms race at an early date and to achieve nuclear disarmament. Furthermore; the major nuclear powers are committed to general and complete disarmament under international control. However; article seven (7) related to another issue which is nuclear-weapon-free zones (NWFZ) and countries in which this article emphasizes the states' right to make regional agreements in order to ensure that their lands do not contain nuclear weapons. Gilligan (2014) stated that several states have chosen to join the regional treaties. Five regional treaties are establishing such zones which are the Treaty of Tlatelolco (Latin America and the Caribbean NWFZ), the Treaty of Rarotonga (South Pacific NWFZ), the
Treaty of Bangkok (Southeast Asia NWFZ), the Treaty of Plindaba (African NWFZ), and the Central Asia NWFZ treaty. Article eight (8) content is divided into two main objectives.

As Harvey (2010) mentioned the first objective explains the way that the state parties to the Treaty follow to propose and pass amendments to the Treaty. All Parties to the Treaty have the right to propose an amendment provided that this adjustment shall be submitted to the Depositary Governments which in turn distributes it to all Parties to the Treaty. After that, if it is accepted by one third or more of the Parties to the Treaty, the Depositary Governments shall hold a conference in the presence of all States to consider such an amendment.

Gilligan (2014) claimed that for an amendment to pass, it must be accepted by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all members of the Board of Governors of International Atomic Energy Agency (IAEA). The second objective is to create a conference of Parties of the Treaty in Geneva and Switzerland every five years to review the operation of the Treaty to ensure the achievement of the preamble purposes and the provisions of the Treaty. These conferences are always politically charged. The countries hold preparatory meetings in the years between the review conferences to maintain the momentum and discuss ideas because it can be difficult to achieve a lot at an international conference. Article nine (9) of NPT explains that all the State parties to the Treaty can ratify it also it clarifies how the Treaty enters into force. Harvey (2010) noted that under article IX any State does not sign the Treaty before its entry into force have the right to accede to it at any time and for the instruments of ratification and instruments of accession, they shall be deposited with the Depositary Governments. After the Treaty was ratified by the Depositary Governments and forty other States signatory to this Treaty, it shall enter into force. Moreover, this article defines a nuclear weapon state which is the one that has manufactured and exploded a nuclear weapon or other nuclear explosive devices before 1 January 1967. For article X,
Cirlig (2016) illustrated that any country has the right to withdraw from the Treaty if the subject matter of the latter has somehow affected the supreme interests of its country and has endangered them, but it must inform and give notice of such withdrawal to the remaining Parties of the Treaty and UN Security Council three months before its withdrawal and this notice shall contain a statement clarifies the extraordinary events that have placed its supreme interests at risk. Gilligan (2014) mentioned that there is another important point mentioned in this article which is the Parties of the Treaty shall hold a conference twenty-five years after the Treaty has entered into force to decide whether the Treaty shall continue indefinitely or for another fixed period. Finally, article ten (10) explains that the authentic translated copies of the Treaty shall be deposited in the archives of the Depositary Governments and transferred to the Governments of the parties of the Treaty.

2.4 The Strategic Arms Limitation Talks

As mentioned by Bull (1973) the Strategic Arms Limitation Talks (SALT) between the United States and the Soviet Union began formally in November 1969 and are considered as the most significant formal arms control negotiations that took place after 1945. These negotiations can be evaluated based on two dimensions. The first one they can be evaluated on the extent of their contributions to the goals of future weapons control which lies in reducing the damage of the race war to armament. On the other hand, they may be assessed to see its effects on the US-USSR political and strategic relations. Congressional Research Service[CRS] (2019) noted that the Strategic Arms Limitation Talks were in two rounds. The first round of the Strategic Arms Limitation Talks known as SALT I which took place between November 1969 and May 1972. The first formal agreement limiting nuclear offensive and defensive weapons was signed by the United States and the Soviet Union in May 1972. Moreover, the first round had produced two agreements. The first agreement is on the Limitation of Anti-Ballistic Missile Systems. The second one is the Interim Agreement on Certain Measures with respect to the Limitation of Strategic Offensive Arms and the Treaty.
In 1979, these treaties were followed by other agreements aimed to codify equal restrictions on US and soviet strategic offensive nuclear forces which known as the Strategic Arms Limitation Treaty SALT II.

2.4.1 The Anti-Ballistic Missile Treaty

Woolf (2000) stated that during the first Strategic Arms Limitation Talks (SALT I) in Moscow in 1969 the United States and the Soviet Union have reached two arms control agreements one of them was the Treaty on the Limitation of Anti-Ballistic Missile (ABM) system which was signed on May 26, 1972, and entered into force on October 3, 1972. The ABM Treaty limited the number of ground-based anti-ballistic missile systems and sites that each side could have. It prohibited the United States and the Soviet Union from constructing national and regional systems but it permitted each side to deploy a limited ABM system at two sites. The first site to protect the national capital and the second to protect an ICBM launch site. However; in 1974, a protocol to the Treaty limited each nation to one ABM site, either at the nation’s capital or around the ICBM deployment area. According to this Treaty, each ABM system has a specified radius of no more than 150 kilometers to prevent the creation of a regional defense zone and each site could have a maximum of 100 interceptors missiles and 100 launchers. The Treaty also limited the number and power of ABM radars at each site and stipulated that future radars that provide early warning of strategic ballistic missile attack must be located on the countries’ borders facing outward. Moreover; both sides also agreed not to develop, test, and deploy sea-based, air-based, space-based, or mobile land-based ABM systems and ABM system components (the Treaty recount these components as interceptor missiles, launchers, and radars or other sensors that can substitute for radars.

As mentioned by Yoo(2001), the ABM Treaty prevents the two sides, the United States and the Soviet Union, from deploying any anti-missile defense except for one system around the nation’s capital or ICBM deployment area. After the 1972 ratification, the Treaty was
allowed and designed to promote a strategy of mutually assured destruction (MAD). This theory states that neither US nor USSR would ever launch a first strike against the other as long as both countries did not have the defense that would allow them to survive the second retaliatory strike. Furthermore, arms control supporters consider the ABM Treaty to be one of the most successful arms control treaties after the war period that led to the elimination of an entire category of weapons and strengthening of strategic stability among the superpowers.

However, on December 13, 2001, president Bush gave formal notice to Russia, Belarus, Kazakhstan, and the Ukraine that the United States was withdrawing from the Anti-Ballistic Missile Treaty because of the constraints it imposes on the testing of missile defense systems; and six months later, on Jun 13, 2002 the treaty effectively terminated (Congressional Research Service, 2002, Para.1).

According to our opinion the United States withdrew from the ABM Treaty in order to test and build a limited National Missile Defense. Also the end of this Treaty consider as a reason to sign another Treaty which is the Strategic Offensive Reductions Treaty in Moscow on 24 May 2002.

Articles of the Anti-Ballistic Missile Treaty

Bull (1973) stated that the treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems contains sixteen articles. In Article I each party pledge to reduce anti-ballistic missile (ABM) systems and take on other measures conformity with the provisions of this treaty. Also, each party pledge not to spread ABM systems protection of the territory of its country and not extend a base for such protection, and to limit ABM systems for protection of individual region. Article II defines ABM system which is a system of strategic ballistic missiles confrontation or their items flight path currently from: ABM interceptor missiles, which are interceptor missiles organized and spread for an ABM role, or of kind tested in ABM mode. Also, ABM
launchers, which are launchers structured and deployed for launching ABM interceptor missiles. Then, ABM radars organized and spread for an ABM role, or of kind tested in ABM mode. Moreover; The ABM system ingredients listed in the above lines of this article comprise those which are Operational, Under construction, Undergoing testing, Undergoing overhaul, and Mothballed. In article III each party pledge not to place systems or their components unless the parties agree not to place phased-array radars having potential exceeding three million. Also, ABM treaty prevents the two sides USA/USSR from deploying any anti-missile except for one system around nation’s capital or ICBM deployment area. Furthermore; the ABM treaty provides that limitation provided in Article three (3) shall not stratify to ABM systems or their ingredient used for expansion or testing, and situated within current or additionally agreed test ranges. As mentioned by Labrie (1979), in article IV, the restrictions provided for Article 3 shall not stratify to ABM systems or their ingredient used for expansion or testing, and situated within current in addition to that agreed test ranges. Each party may have no more than a total of fifteen (15) ABM launchers at test ranges. Furthermore; in article V each party pledge not to expand, test or place ABM systems or ingredients which are sea-based, air based, space-based or mobile land-based and pledge not to expansions, test, or place ABM launchers for launching more than one ABM interceptor missile at time from each launchers, not to adjust placed launchers to provide them which such ability, not to expand, test, or place automatic or semi-automatic or other comparable systems for fast reload ABM launchers. In addition; article VI enhanced guarantee of effective restrictions on ABM systems and their ingredients provided by the treaty, each party pledged:

(a) Not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, abilities to counter strategic ballistic missiles or their elements flight trajectory, and not to test them in an ABM mode.
(b) Not to place in future radars for early warning of strategic ballistic missile offensive unless at site along the surrounding its national territory, and oriented external. In article VII, taking into account the provisions of this treaty, modernization and surrogate of ABM systems or their ingredients may be achieved.

In article VIII ABM systems or their ingredients in surplus of the numbers or outside the areas particular in this treaty, as well as ABM systems or their ingredients forbidden by this treaty, shall be broken or disjointed under agreed steps within the shortest possible agreed period of time.

As Bull (1973) states, in article IX each party pledge not to transmit to other states, and not to place outside its national territory, ABM systems or their ingredients limit by this treaty in order to confirm the viability and effeteness of this treaty. In article X each party pledge not to suppose any international commitment which would conflict with this treaty. However; in article XI the parties pledge to go on active negotiations for placements on strategic offensive arms. Otherwise; in Article XII each party shall use national technical means investigation at its conduct in a way regular with generally familiar of international law for the reason of providing emphasis submission with provision of this treaty and the parties pledged not to interpose with the national technical means of investigation of the other party. Further; each party pledged not use intentional disguise measures which block investigation by national technical means of submission with the provision of this treaty. This commitment shall not demand changes in current structure, assembly, transformation, or overhaul exercises.

Article XIII

1- In order to promote the goals and execution of the provisions of this treaty, the parties shall use as permanent advisory committee immediately, within the framework of which they will:
(a) Consider compliance-related issues assumed position and related situation which may be considered mysterious.

(b) Submit on a voluntary basis such information as either party considered important to ensure confidence of the assumed commitments.

(c) Considered the issues involved unintended interference with national technical means of investigation.

(d) Considered potential changes in the strategic position which have bearing on the provisions of this treaty.

(e) Agree upon measures and dates for broken on dissuasion of ABM systems or their ingredients in cades provided for by the provisions of this treaty;

(f) Considered, appropriate, possible suggestions for further increasing viability of this treaty; contained proposals for adjustment with the provisions of this treaty.

(g) Considered, possible proposals for further measures it’s goals to limit strategic arms.

2- Parties through consultation shall establish, to create amendment of special regulations for the standing consultative commission governing procedures formation and other relevant issues.

Also Bull demonstrated that in article XIV each party may suggest amendment to this treaty. Agreed amendments shall enter into effect in accordance with the issues governing the entry into effect of this treaty; five years after entry into effect of this treaty all the parties shall use a review of this treaty. Likewise; article XV indicates that this treaty shall be of unlimited period. In addition this article states that each party shall, in practicing its national sovereignty, have the right to retreat from this treaty if it decides that exceptional events related to the subject issue of this treaty have jeopardized it supreme benefits. It shall give ratification of its decision to other party. Six months prior to retreat from the treaty. Such ratification shall contained a statement of exceptional events the notifying party regards as having jeopardized its supreme benefits. The last article (XVI) demonstrates that this treaty
shall be subject to confirmation in accordance with the constitutional execution of each party and it shall enter into effect on day of interchange of tools of confirmation. At the end this treaty shall be recorded pursuant to Article 102 of the charter of United Nations.

2.4.2 the Interim Agreement on Offensive Arms

Freedman (2003) stated that in 1972, the two superpowers reached an Interim five-year agreement. It is an agreement deal on the limitation of offensive arms and it imposed a freeze on the number of launchers for intercontinental ballistic missiles (ICBMs) and submarine launchers ballistic missiles (SLBMs) which US and Soviet Union could deploy, but it allows the momentum in the soviet construction program. Furthermore; Congressional Research Service [CRS] (2019) mentioned that the parties of the treaty agreed to stop construction of new ICBM launchers so that after the date of July 1, 1972, all the parties would not start construction of new ICBM launchers and at this date, USA had approximately 1,054 ICBM launchers and the soviet union had 1,618 ICBM launchers. While concerning ballistic missiles launched from submarines (SLBMs) and modern ballistic missile submarines, members also agreed to freeze their number but in one case they could add SLBM launchers it is when they withdrew old ICBM launchers. Besides, the United States was allowed to deploy 710 SLBM launchers on 44 submarines, and the soviet union was allowed to deploy 950 SLBM launchers on 62 submarines.

The difference and inequality in the numbers of SLBM and ICBM launchers were not altogether appreciated in the congress and the policy community in Washington. When approving the agreement, the senator Jackson adopted an amendment known as, the Jackson amendment, in this amendment the senator Jackson, demanded that all future agreements on arms control would not limit the United States to the levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union. In other words, the US and USSR should have equal limits in future arms control agreements. the Interim Agreement on Certain
Measures with respect to the Limitation of Strategic Offensive Arms was to remain in effect for five years except if the parties replaced it with more comprehensive agreement limiting strategic offensive weapons. In 1977, USSR and the USA agreed to keep the agreement until the completion of the SALT II Treaty.

Bull (1973) clarified that the two parties of the Interim Agreement, the United States of America and the Union of Socialist Republics, were convinced that these two treaties, the Anti-Ballistic Missile Treaty and the Interim Agreement on Certain Measures with Respect the Limitation of Strategic Offensive Arms, would play a major role in creating more suitable conditions for active negotiations on limiting strategic weapons. Also, its contribution will be effective in terms of reducing international tension and enhancing trust between states. Moreover; with regard to the articles, the parties of the Treaty divided it into eight articles. The first article includes a pledge by the Treaty parties in order to stop building an additional Intercontinental Ballistic Missile (ICBM) launchers after 1 July 1972. Article two states that the two parties pledge not to transform ground launchers for light ICBM or ICBMs from the earliest types that were deployed before 1964 into ground launchers for heavy launchers of the type that were deployed after that time. In article three the parties pledge to reduce the numbers of submarine-launched ballistic missile (SLBM) launchers and modern ballistic missile submarines to the numbers operational and under construction at the date of signing this Interim Agreement, in addition to launchers and submarines created in accordance with procedures specified by the parties as an alternative to an equal number of ICBMs of ancient types that were deployed before 1964 or launchers on old submarines. Article four states that it is possible to update and replace offensive ballistic missiles and missile launchers covered by this interim agreement and the foregoing is carried out with due regard to the provisions of this agreement. However; article five is divided into three elements:

1- In order to confirm compliance with the provisions of this interim agreement, each party of the Treaty must use national technical means (NTM) of verification provided that these
technical means of validation are con with generally recognized principles of international law.

2- Each country pledges not to interfere in the technical means of validation used by other states.

3- All the parties pledge not to use intentional concealment measures that would slow down validation by national technical means of compliance with the provision of the interim agreement. This commitment does not require changes to existing construction assembly, transformation, or repair practices.

Also Bull (1973) has argued that Article six is about how to promote and implement the provision of this Interim Agreement. According to article 13 of the ABM Treaty, the parties shall use the permanent advisory mission with the provision of that article in order to promote the objectives and implementations of this agreement. Besides, in article seven the parties pledge to continue active negotiations to impose restrictions on strategic offensive weapons. The obligations under this interim agreement are without prejudice to the scope of the conditions for restrictions on strategic offensive weapons that may be placed in the context of other negotiations. The last article was also divided into three elements:

1- This provisional agreement shall enter into force upon the exchange of written notifications with the acceptance of each party, and this exchange shall take place in conjunction with the exchange of instruments of ratification of the ABM Treaty.

2- This interim agreement will remain in effect for five years unless it is replaced earlier by an agreement on more complete measures to reduce strategic offensive weapons. The goal of the parties is to conduct effective follow-up negotiations to conclude such an agreement as soon as possible.

3- The agreement entitled the parties to withdraw from the agreement if they decided that extraordinary events related to the subject matter of this interim agreement have jeopardized their supreme interests, but they should give notice of their decision to the other states six
months in advance before their withdrawal from the agreement. This notice must include a statement of unusual events that the notifying party considers to have put its highest interests at risk.

2.5 The Strategic Arms Limitation Treaty (SALT II)

Congressional Research Service [CRS] (2019) argued that after seven years of negotiations, the United States and the Soviet Union signed the SALT II Treaty in June 1979. During these negotiations, the United States sought to impose restrictions on the quantitative and qualitative changes in Soviet powers. Also, the negotiating position of the United States reflected the congressional delegations for equal numerical restrictions on the forces of the two countries. The Strategic Arms Limitation Treaty limited each country to a total of 2,400 ICBM launchers, SLBM launchers and heavy bombers. By June 1, 1981 would be reduced to 2,250. Within the aggregate limits; the Treaty set the following sub-limits which are Intercontinental Ballistic missiles (ICBMs) equipped with multiple independent re-entry vehicles (MIRVs), MIRVed ICBMs and MIRVed SLBMs; MIRVed ICBMs, MIRVed SLBMs and Air-to-surface ballistic missiles (ASBMs) equipped with MIRVs and heavy bombers. Moreover, this Treaty would not have restricted the number of warheads that could be transported on these distribution vehicles, the unlimited number of warheads was a cause of countries’ concern specially with the deployment of large numbers of multiple-warheads missiles. However, the countries have accepted that they would not raise the warheads number of existing kinds of missiles and prohibit testing new types of ICBMs with more than ten (10) warheads and new types of SLBMs with more than 14 warheads. They also agreed to provisions that limited missile modernization programs, in order to curb the qualitative improvements in their strategic forces.
As illustrated by Labrie (1979) the parties of the strategic arms limitation treaty (SALT II), the United States of America and the Union of Soviet Socialist Republics divided the treaty into nineteen articles. The first article of the Treaty obligated the parties to limit strategic offensive arms quantitatively and qualitatively as an attempt to curb the development of new types of strategic offensive arms, and to assume other measures provided for in this Treaty. Article II included the definition of Intercontinental ballistic missiles (ICBM) launchers and the parties agreed that this type of missile includes all launchers which have been developed and tested for launching ICBMs. Also, they agreed after the protocol ceases to apply, ICBM ballistic missile launchers will be subject to the relevant treaty specific restrictions that apply to ICBM launchers except if the parties agree that ICBM launchers will not be deployed after that date. Furthermore; they agreed that missiles located in submarines which work with nuclear power are considered modern submarine-launched ballistic missiles for the United States of America. However; for the Soviet Union, missiles of the kind located in nuclear-powered submarines have become operational since 1965. The last agreed statement in this article is defining the “Heavy Bombers” which is airplanes tributed to be equipped for bombs or missiles. Actually for the United States, the heavy bombers considered to be B-52 and B-1 grenade launchers. On the other side the Tupolev-95 and Myasishchev types for the Soviet Union. In the future, the heavy bombers considered to be the types of launchers that could perform a heavy launcher task in a similar or superior manner to the launchers method listed in the subparagraph above. It also considered to be types of launchers equipped with cruise missiles are able to extend a range exceeding 600 km; and types of bombers equipped for (ASBM). Besides, Air-to-surface ballistic missiles (ASBMs) are any of these missiles capable of a range of more than 600 km and located in an aircraft or on its external carriers.

Launchers of ICBMs and SLBMs equipped with multiple independent targetable re-entry vehicles (MIRVs) are considered as launchers of the kinds which have been developed and
tested for launching ICBMs or SLBMs equipped with MIRVs. ASBMs equipped with MIRVs are ASBMs for species that have been tested in flight using MIRVs. Heavy ICBMs are ICBMs that have a greater launch weight or a more heavy throw-weight, in terms of either launch weight or throw weight, respectively, of the light ICBMs that have been deployed by either party as of the date of signature of this Treaty. Cruise missiles are self-guided drone vehicles intended to deliver weapons that maintain flight by using aerodynamic lifting over most of their flight paths that are tested by aircraft or are deployed on board aircraft, i.e. flight that launched from the air missiles or vehicles that are referred to as cruise missiles in article 9, subparagraph 1 (b).

As Labrie mentioned, in article III, when the Treaty enters into force, the parties pledge to limit ICBM launchers, SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs) to an aggregate number not to exceed 2,400, and from 1 January 198, to an aggregate number not to exceed 2,250, as well as to initiate reductions of those arms which as of that date would be in excess of this aggregate numbers. Within this aggregate numbers, the parties were entitled to determine the composition of these aggregates. Moreover; for each ASBMs-equipped bombers, the total numbers provided above in this article should contain the maximum numbers of these missiles that are equipped with this type of bomber for one operational missions. However; the aggregate numbers provided for in the above paragraphs of this article shall not include a heavy bombers equipped only for ASBMs. Reductions are made in the number of strategic offensive weapons required to comply with the provisions of paragraphs above of this article as provided for in article XI.

In article IV the parties pledge not to start construction of additional fixed ICBM launchers; not to transfer fixed ICBM launchers; not to convert launchers of light ICBMs or of ICBMs of older types deployed before 1964 into launchers of heavy ICBMs of types deployed after that time. Moreover; each party undertakes not to raise the original internal
volume of an ICBM silo launcher by more than 32 percent in the process of modernization and replacement of ICBM silo launchers. Also they agreed not to provide ICBM launcher deployment areas with ICBMs in excess of a number consistent with normal deployment maintenance, training and replacement requirement; not to provide ICBM launchers sites; not to develop, test, or deploy systems for rapid reload of ICBM launchers.

Besides, Labrie states that according to the provisions of this Treaty, each party undertakes that no strategic offensive weapons referred to in article three paragraph one, shall be under construction at any time in excess of numbers consistent with the regular construction schedule. Each party undertakes not to develop, test, or deploy ICBMs that have a greater launch weight or a throw weight greater than the heavier weight; in terms of launch weight or throw weight, respectively, from the heavy ICBMs deployed by either part until the date of signature of this Treaty.

Furthermore; each party pledge not to convert and test land based launchers of ballistic missiles that are not ICBMs into launchers for launching ICBMs; not to test flight or deploy new types of ICBMs, that is, types of ICBMs that have not been flight-tested as of May 1, 1979, except that each party may test flight and deploy one new type of light ICBM; not to test flight or deploy ICBMs of a type that has been tested as of May 1, 1979 with a number of re-entry vehicles greater than the maximum number of re-entry vehicles with which an ICBM of that type has been flight-tested as of that date; not to flight-test or deploy ICBMs of the one new type permitted by the Treaty with a number of re-entry vehicles greater than the maximum number of re-entry vehicles, with which an ICBM of either Party has been flight-tested as of 1 May 1979, (that is, 10). what has been applied to ICBM was also applied to SLBM means that each state pledge not to flight-test or deploy SLBMs with a number of re-entry vehicles greater than the maximum number of re-entry vehicles with which an SLBM of either Party has been flight-tested as of 1 May 1979, (that is, 14), and undertakes to test or
deploy ten or fewer ASBMs with a number of re-entry vehicles. Finally, not to deploy at any one time on heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers (km) more than 28 such cruise missiles. Article V, Within the aggregate limits, the Treaty set the following sub-limits:

- Total of 1,320 launchers of ICBMs and SLBMs equipped with MIRVs, ASBMs equipped with MIRVs, and heavy bombers equipped for cruise missiles capable of a range in excess of 600 km.
- Total of 1,200 launchers of ICBMs and SLBMs equipped with MIRVs, and ASBMs equipped with MIRVs.
- Total of 820 launchers of ICBMs equipped with MIRVs

Within the aggregate numbers provided for in this article and subject to the provisions of this Treaty, each party has the right to determine the composition of these aggregates. Article VI limited arms which are operational, in the final storage of construction which include SLBM launchers on submarines which have sea trials; ASBMs, after a type-ready grenade launcher has been removed from the store, factory or other facilities where it is assembled or final converted for the purpose of preparing it for such missiles has been performed, and other strategic offensive weapons that are finally assembled in a store, factory, or other facility where the final assembly took place. It also limited arms in reverse, in storage or mothballed and undergoing overhaul, repair, modernization, or conversion. Moreover; intercontinental ballistic and SLBM missile launchers of the type not subject to the limitation provided for in article five, which are subject to conversion into a type of launcher subject to this limitation, will be subject to this limitation as follows:

1- Fixed ICBM launchers when operating upon their conversion to the stage that first indicates that they have transferred to this extent.

2- SLBM launchers on a submarine when that submarine first goes to sea after its diversion.
ASBMs on a bomber which undergoes conversion from a bomber of a type equipped for ASBMs which are not subject to the limitation stipulated in article five to a launcher of the ASBMs equipped type that is subject to this restriction becomes subject to that restrictions when the detonator is removed from the store, factory or any other facility where this conversion has been made. Also, a heavy bomber of the type not subject to the restriction contained in article five is subject to this restriction upon its removal from the shop, factory, or any other facility where it has been converted into a heavy bomber of the type equipped with cruise missiles capable of over 600 km. The launcher is of a type that is not subject to the restrictions provided for in paragraph 1 or 2 of article III of this restriction and to the extent stipulated in paragraph 1 of article five upon its removal from the store, factory or other facilities where it was converted into a launcher of a type equipped with cruise missiles capable of a range exceeds 600 kilometers. Weapons subject to the restrictions provided for in this treaty remain subject to these restrictions until they are dismantled, destroyed, or ceased to be subject to these restrictions in accordance with the procedures agreed upon. The last point in this article is the parties’ agreement in the standing consultative commission upon procedures to implement the provisions of this article in accordance with the provisions of article XVII.

In the same study by Labrie (1979), Article VII of this Treaty explains that the two parties agreed that there will not be a significant increase in the number of ICBM or SLBM test and training launchers or in the number of these heavy ICBMs. Also, they agreed that ICBMs in test ranges are built or converted only for testing and training purposes. Finally, test and training launchers for ICBMs or space vehicle launchers may not be converted to ICBMs subject to the limitations provided for in article III. In article VIII the Treaty prohibited the flight-testing, including research and development, of cruise missiles capable of a range in excess of 600 km or ASBMs from aircraft other than bombers. Also, each party undertakes not to convert such aircraft into aircraft equipped for such missiles and they prohibit
conversion of an aircraft other than bombers into an aircraft, which can carry out the mission of a heavy bomber.

Also, Labrie (1979) clarified that in article IX the Treaty prohibited development, testing or deployment of ballistic missiles capable of a range of more than 600 km for installation in water-borne vehicles other than submarines, or their launchers; fixed ballistic or cruise missile launchers for installation on the ocean floor, the sea floor, the inland or inland water bed, or the subsoil thereof, or the mobile missile launchers, which move only in contact with the ocean floor, the seabed, or the beds of internal waters and inland waters, or missiles for such launchers; nuclear weapons systems in earth orbit or any other type of weapons of mass destruction, including partial orbital missiles; mobile launchers of heavy ICBMs; SLBMs that have a higher launch weight or a more heavy throw weight, in terms of launch weight or throwing weight, respectively, of light the ICBMs deployed by either party as of the date of signature of this treaty, or SLBM launchers; ASBMs that have a launch-weight greater or a throw-weight greater than that of the heaviest of the light ICBMs deployed by either Party as of the date of signature of the Treaty.

Article X and XI allowed the modernization and replacement of strategic offensive weapons, subject to the provisions of the Treaty, and obligated the parties to dismantle or destroy strategic offensive weapons greater than the total number of the treaty by December 31, 1981 and strategic offensive weapons prohibited by the treaty no later than six months after the entry into force of this treaty. Article XII each party pledges not to circumvent the provisions of this Treaty, through any other country or countries, or in any other way in order to ensure the validity and effectiveness of this Treaty.

Article XIII includes the parties’ pledge not to assume any international obligations that may conflict with this treaty. Article XIV the parties undertake, immediately after the entry into force of this treaty, active negotiations with the aim of reaching, as soon as possible, an agreement on further measures to limit and reduce strategic weapons. The parties also aim to
conclude, before 1985, an agreement restricting strategic offensive weapons to replace this treaty when it expires. Article XV, SALT II entitled the parties to use their national technical means (NTM) of verification to ensure compliance with the Treaty and obligated them not to interfere with the national technical means of the other party as well as the parties pledge not to use deliberate concealment measures which impede verification by NTM of compliance with the provisions of this Treaty. Labrie (1979) stated that article XVI includes the notifications on a case-by-case basis of ICBM launchers, except for single ICBM launchers from test ranges or from ICBM launchers deployment areas, which are not intended to extend beyond a party’s national territory. Article XVII the standing consultative commission (SCC) established by the government of the United States of America and the government of the Soviet Union is used to further the objectives and implementation of the provisions of this Treaty.

Within the framework of the standing advisory committee’s work in relation to this Treaty, the parties shall consider issues relating to compliance with the obligations undertaken and related situations that may be considered ambiguous; provide such information on a voluntary basis that either party considers necessary to ensure confidence in compliance with its obligations; consider matters involving unintended interference with national technical means for verification, and matters involving an unintended hindrance to verification by national technical means of compliance with the provisions of this Treaty; consider potential changes in the strategic situation that have an impact on the provisions of this Treaty; agreeing to procedures for replacing, diverting, and dismantling or destroying strategic offensive weapons in the cases stipulated in the provisions of this Treaty and on procedures for removing these weapons from the total numbers when they cease otherwise to be subject to the restrictions stipulated in this Treaty, and in the official sessions of the standing advisory committee, notifying each other in accordance to the above-mentioned procedures, at least twice a year, with the procedures performed and those in progress; consider possible
proposals to increase the validity of this Treaty, including proposals for amendments in accordance with the provisions of this Treaty; consider, as appropriate, proposals for further measures to limit strategic offensive weapons.

Furthermore; in the standing advisory committee, the parties should maintain an agreed database on numbers of strategic offensive weapons that were identified under the Memorandum of Understanding between the United States of America and the USSR regarding the creation of a database on numbers of strategic offensive weapons on June 18, 1979. Article XVIII each party has the right to propose amendments to this Treaty after that these agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty.

Article XIX

The treaty is ratified according to the constitutional procedures of each party. This treaty will enter into force on the day of the exchange of ratification documents and remain in effect until December 31, 1985, unless it is replaced earlier by an agreement limiting strategic offensive weapons. Moreover; the Treaty allowed the parties to withdraw from the treaty, with a six months’ notice, if they decided that extraordinary events related to the subject matter of the treaty had jeopardized their supreme interests. SALT II Treaty is registered in accordance with article 102 of the charter of the United Nations (Labrie, 1979).

2.6 The Intermediate-Range Nuclear Forces (INF) Treaty

Congressional Research Service (2019) claimed that in December 1979, NATO set a “two track” approach to intermediate-range nuclear forces (INF) in Europe: it would seek conversations with the Soviets to border such systems, and at the same time schedule deployments as stimulant such conversations. In the fall of 1980 the conversations session had started and continued until November 1983, when the Soviets left the conversation spread of the first U.S.INF systems in Europe. In January 1985 the conversations reopened. At the conversation, on the first time The Regan Administration called for “double zero” options,
which would remove all short as-well as long-range INF systems, a set at the time reviewed by most observers to be barren to the Soviets conversations progressed to debate possible border on the systems. With advance slowed by the Soviets refusal to consider border on its systems in Asia.

However; during the Gorbachev regime the important progress had started. At the Reykjavik summit in October 1986, Gorbachev agreed to put reductions of Soviet INF systems in Asia. Also, in June 1987 the Soviets suggested an international prohibit on short-and long-range INF systems, which was comparable to U.S proposal for double zero. Gorbachev also accepted the U.S. proposal for an intrusive investigation regime.

North Atlantic Treaty Organization (NATO) 2019 stated that on 8 December 1987 the INF treaty was being signed by the United States and the Soviet Union, on June 1988 the INF treaty was entered into force. It wanted both two powers to remove their ground launched ballistic and cruise missiles that could transport between 500 and 5,500 kilometers (between 300 , 3,400 miles) by application deadline on July 1991. By the deadline the USA and USSR had together broken a total of 2,692 short-and intermediate-range missiles: 1,846 Soviet missiles and 846 American missiles. It salient the first removal of entire category of weapons capable of loading nuclear warheads. The INF Treaty end up with the withdrawal of USA and after that Russia as Pompeo (2019) stated “ On February 2, 2019, the United States provided its six-month notice of withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty due to the Russian Federation’s continuing violation of the treaty ” (Para. 1). From this quote we can say that although the INF Treaty was a successful nuclear disarmament, the Russian’s disruption of the INF text obliged USA to withdraw from this Treaty.

Laqueur and Sloss (1990) claimed that the Treaty between the USA and USSR on elimination of their intermediate-range and shorter-range missiles was divided into seventeen articles. Article I of the Intermediate-Range Nuclear Forces (INF) Treaty contains that each
party shall remove its intermediate-range and shorter missiles; the parties of this treaty have no right to use this systems afterwards, and to perform the other commitments set forth in this treaty. Article II includes the definition of “intermediate-range missile” and “shorter-range missile”: Intermediate-range missile means a GLBM [ground-launched ballistic missile] or a GLCM [ground-launched cruise missile], having a range ability in surplus of 1000 kilometers but not in surplus of 5500 kilometers. Shorter-range missile means a GLBM or a GLCM having a range ability similar to or in surplus of 500 kilometers but no surplus of 1000 kilometers.

Article III mentions the types of intermediate-range missiles and shorter-range missiles. Intermediate-range missiles are missiles of the types specified by the USA as the perching 2 and BGM-10G, which are known to the USSR by the same specifies. Missiles of the types specific by the USSR as the RSD-10, the R-12 and the R-14, but those are known to the USA as the SS-20, the SS-4 and the SS-5 respectively. Moreover; shorter range missiles are missiles of type specified by USA as perching IA, but to the USSR are known as the same specification. Missiles of types specified by the USSR at the OTR-22 and the OTR-23, those are known to the USA as SS-12 and the SS-25, respectively.

In the article IV of INF Treaty the parties of the Treaty are obliged to remove all of their intermediate-range missiles and launchers of these missiles, and all support frameworks and support tools of the categories register in Memo of understanding specified with these missiles and launchers, so that no later than three years after entry into force of this treaty and no these missiles, launchers, support specifies or support tool shall be possessed by either party. To perform paragraph 1 of this Article, upon entry into force of this treaty, both parties shall started and continue during the duration of each phase, the lowering of all types of their deployed and non-deployed intermediate-range missiles and deployed and non-deployed launchers of these missiles and support frameworks and support tool specified with such
missiles and launchers in similar with the provisions of this treaty, this lowering shall be performed two phases so that:

By the end of the first phase, that is, 29 months after entry into force of this treaty:

- The number of deployed launchers of intermediate-range missiles for each party shall not overrun the number of launchers that eligible for transmit or including at one time missiles considered by the parties to transmit 171 warheads.

- The number deployed intermediate-range missiles for each party shall not overrun the number of such missiles considered by the parties to transmit 180 warheads.

- Total number of deployed and non-deployed launchers of intermediate-range missiles for each party shall not overrun the number of launchers that are eligible of overrun or including at one time missiles considered by the parties to overrun 200 warheads.

- The overall number deployed and non-deployed intermediate-range missiles for each party shall not overrun the number of such missiles considered by the parties to overrun 200 warhead.

- The ratio total number of deployed and non-deployed intermediate-range GLBM of existing types for each party to overall number deployed and non-deployed intermediate-range missiles of exiting types possessed by the party shall not overrun the ration of such intermediate-range GLBM such intermediate-range missiles for the party on November 1, 1987, set in Memo of understanding. At the end of the second phase, no later than three years after entry into force of this treaty. All intermediate-range missiles of each party. launchers of such missile and backing framework and backing tool of categories listed in Memo of understanding connected with such missile and launchers shall be rejected. Also as mentioned by Laqueur and Sloss, in article V of INF Treaty, each party shall reduce all its shorter-range missiles and launchers of such missiles, and all backing tool of categories used in Memo of understanding connected with such missiles and launchers, so that no later than 18 months
after entry into force of this treaty thereafter, no such missiles, launchers or backing tool shall be possessed by either party.

After entry into force of this treaty, no later than 90 days, each party shall continue the elimination of all developed shorter-range missiles and deployed and non-deployed launchers of such missiles to removal easiness and retain them at those locations until they are removed in similar with execution used forth in the protocol on removal. After entry into force of this treaty, no later than 12 months, each party shall continue the elimination of all it non-deployed shorter-range missiles to removal easiness and shall retain them at those locations until they are removed in similar with the executions used forth in the protocol on removal. Shorter-range missiles and launchers of such missiles shall not be existed at same removal easiness. Such easiness shall be divided by no less 1000 kilometers. Furthermore; article VI of INF Treaty contains: After the INF Treaty entry into force, neither party shall product, or flight-test any intermediate-range missiles or product any stages of such missiles or any launchers of such missiles and product, flight-test launch any shorter-range missiles or product any stages of such missiles or any launchers of each missiles. Furthermore; each party shall have the right to product a type of GLBM not limited by this treaty which use a stage which is ostensibly accordance to but not interchangeable with a stage phase of an existing type of intermediate-range GLBM having more than one stage, providing that party did not product any other phase of existing type of intermediate-range GLBM.

As Laqueur and Sloss (1990) stated, article VII of intermediate-range missile discusses that all missiles of that type shall be deemed to be weapon-delivery vehicles if a ballistic missile or a cruise missile has been flight-tested or deployed for weapon delivery. While article VIII of this treaty states that all intermediate-range missiles and launchers of such missiles shall be situated in deployment of such missiles shall not be existed elsewhere. Article IX mentions that the Memo of understanding includes categories of data relevant to commitments pledge with regards to this treaty and lists all intermediate-range and shorter-
range missiles, launcher of such; missiles, and backing structure and backing tool connected with such missiles; and launchers, possessed by the parties as of November 1, 1987. Updates of that information and warning in demanded by this Article shall be provided according the categories of information included in the Memo of understanding. Besides, the parties shall update that information provide the warnings required by this treaty through the Nuclear Risk Reduction Centers founded pursuant to the convention between USA and USSR on the fundament of Nuclear Risk Reduction Centers September 15, 1987. Also upon entry into force of this Treaty, each party shall provide these warnings to other party:

a) Warning, no less than 30 days in advance, of schedule information of removal of specific deployment area missile operating base or missile backing easiness.

b) Warning, no less than 30 days in advance, of changes in the number of site of removal easiness, containing the site and scheduled information of each change.

c) Warning, unless with respect to launches of intermediate-range missiles for the aim of their removal, no less than 30 days in advance, of scheduled information of the opening of removal of intermediate-range and shorter-range missiles, and steps of such missiles, and launchers of such missiles and backing structures and backing tool connected with such missiles and launchers, containing:

- The number and kind of items of missiles systems to be removed.

- The removal location.

- For the intermediate-range missiles the site from which such missiles, launchers of such missiles and backing tool connected with such missiles and launchers are animated to the removal easiness.

- Unless in the case of backing structures point entry to be used by a search team conducting a search pursuant to paragraph 7 of Article XI of this treaty and evaluated time of exit of a search team from the point of entry to removal easiness.
d) Warning, no less than ten days in advance, of scheduled of the launch, or the scheduled information of inception of series of launches, of intermediate-range missiles for the aim of their removal, containing:

- The kind of missiles to be removed.
- The site of launch, or, if removal is by a series of launchers, the site of such launches in the series.
- The point of entry to be used by searching team conducting a search pursuant to paragraph 7 of Article XI of this treaty.
- The evaluated time of exit of a searching team from point entry to removal easiness.

e) Warning, no later than 48 hours after happen, of changes in the number of intermediate-range and shorter-range missiles, launchers of such missiles and backing structures and backing tool connected with such missiles and launchers resulting from removal as described the protocol of removal, containing:

- The number and the kind of items of missile system which were removed.
- The information and site of such removed.

f) Warning of crossing of intermediate-range or shorter-range missiles or launchers of such missiles, or the activity of exercising missiles or exercising launchers for such intermediate-range and shorter-range missiles, no later than 48 hours after it has been finished containing:

- The number of missiles or launchers.
- The point, dates and times of exit and incoming.
- The mode of transit.
- The site and time at that site at least once every four days during the duration of transport.

upon entry into force of this Treaty, each party shall convey the other party; no less than ten days in advance of scheduled date and site of launch of a research and increase booster system. Also as Laqueur and Sloss argue in article X, during the first (6) six months after
entry into force of the INF treaty, the parties shall have the right to remove by means of launching no more than 100 of its intermediate-range missiles.

Intermediate-range and shorter-range missiles which have been pre-tested to entry into force of this treaty, never spread, and which are not existing kinds of intermediate-range or shorter-range missiles registered in Article III of this treaty, and launchers of such missile shall be removed within (6) six months after entry into force of this treaty in conformity with the executions set forth in the protocol on removal such missiles are:

- For the USA, missiles of the type specified by the USA as perishing IB, which is known to the USSR by the same specification.

- For the USSR, missiles of the type specified by the USSR as the SSC-x-4

The article XI of the intermediate-range missile demonstrates that each party shall have the right to hold on-site; the parties shall perform on location inspections in conformity with this Article, the protocol on inspection and protocol on removal. Moreover; 30 days after entry into force of the INF treaty, each party shall have the right to disposal inspection at all missile operating bases and missiles backing facilities specified in Memo of understanding other than missile production facilities, and all removal facilities included in premier data update required by paragraph 3 of Article IX of this treaty. These inspections shall be finished no later than 90 days after entry into force of this treaty. The reason behind these inspections shall be to investigate the number of missiles, launchers, backing structures and backing tool and other data as of the date of entry into force of the INF treaty. Provided pursuant to paragraph (3) three of Article IX of this treaty. Moreover; each party shall have the right to disposal inspection to investigate the removal of missile operating base and missile backing facilities other than missile production facilities. Such an inspection shall be executed within 60 days after the scheduled date of removal of that facility. If a party conducts an inspection at specific facility pursuant to paragraph (3) three of this Article after scheduled date of removal of that facility, then no additional inspection of that facility pursuant to this
paragraph shall be permitted. In addition; they shall have the right to conduct inspections pursuant to this paragraph for 13 years after entry into force of the INF treaty and the right to disposal 20 such inspections per schedule year during the first three years after entry into force of this treaty, 15 such inspections per schedule year during the next five years, and ten such inspections per schedule year during the last five years within the territory of anyone casing country. Each party shall have the right to disposal:

a. Inspections, starting 90 days after entry into force of this treaty, of missile operating bases and missile backing facilities other than removal facilities and missile production facilities, achieve, according to categories of information particularly in the Memo of understanding, the numbers of missiles, launchers, backing structures and backing tool situated at each missile operating base or missile backing facilities at the time of inspection; and

b. Inspections of previous missile operating bases and previous missiles backing facilities remove pursuant to paragraph 8 of Article X of this the INF treaty other than previous missile production facility. Furthermore; 30 days after entry into force of this treaty, each party shall have the right, for 13 years after entry into force of this treaty to search by means of continuous control:

a. The gates of any facility of other parties at which the last association of GLBM using stages, any of which is ostensibly comparable to a stage of solid-propellant GLBM registered in Article III of the INF treaty, is carried out; or

b. If a party has no such facility, the gates of an agreed previous missile production facility at which existent type of intermediate-range or shorter-range GLBM were created.

The party whose facility is to be searched pursuant to this paragraph shall make sure that the other party is able to set a constant continuous control system at that facility within six months after entry into force of this treaty or within six months of initiation of the process of last association described in subparagraph (a). If, after the end of second year after entry into force of this treaty neither party conducts the process of last association described in
subparagraph (a) for a period of 12 successive months, than neither party shall have the right to search by means of continuous control any missile created facility of the other party unless the process of last association as described in subparagraph (a) is begin again. Upon entry into force of the INF treaty, the facilities to be search by continuous control shall be: in conformity with subparagraph (b), for the USA, Hercules plant Number 1, at Magna, Utah; in conformity with subparagraph (a), for the USSR, the Votkinsk Machine Building Plant, Udmurt Autonomous Soviet Socialist Republic. The parties of the Treaty shall conduct inspections of process of removal, including removal of intermediate-range and shorter-range missiles and launchers of such missiles and backing tool connected with such missiles and launchers executed at removal facilities in conformity with Article X of this treaty and the protocol of removal. Researchers conducting inspections provided for in this paragraph shall locate that process specified for the removal of the missiles, launchers, backing tool have been finished and they shall have the right to conduct inspections to affirm the accomplishment of the process of the removal of intermediate-range and shorter-range missiles and launchers of such missiles and backing tool linked with such missiles and launchers removed pursuant to Section V of the protocol on removal, and of exercising missiles, exercising missiles stages, exercising launch canisters and exercising launchers removed pursuant to Sections II, IV and V of the protocol on removed.

Laqueur and Sloss (1990) claimed that Article XII of INF Treaty includes that each party shall use national technical means of investigation at its conduct in a mode regular generally renowned principles of international law. However, neither party shall Intervention with national technical means of investigation of other party operating in conformity with paragraph 1 of this Article and Use disguise measures which discourage investigation with the provisions of this treaty by national technical means of investigation executed in conformity with paragraph 1 of this Article. This commitment does not stratify to cover or hiding coaching within deployment area, linked with normal coaching, conservation and operations
including, the use of environmental refuges to protect missiles and launchers. Besides, to reinforced observation by national technical means of investigation, each party shall have the right until to treaty between the parties decrease and boundary strategic offensive arms enters into force, but in any event for no more than three years after entry into force of the INF treaty.

To demand the application mutual measures at deployment bases for road-mobile GLBM with a range capacity in surplus 5500 kilometers, which not previous missile operating base removed pursuant to paragraph 8 of Article X of this treaty. The party making such demand shall inform the other party of the deployment base at which mutual measures shall be applied the party whose base is to be observed shall executed the following mutual measures. No later than six hours after such demand, the party shall have opened the overheads of all of fixed structures for launchers situated at the bases, removed completely all missiles on launchers from fixed structures for launchers and offered such missiles on launchers in the open without using hiding measure.

The party shall have desertion the overheads open and missiles on launchers in place until twelve hours have elapsed from the time of reception of a demand for such a noting. Each party shall have the right to make six such demands per calendar year. Only one deployment base shall be subject to these mutual measures at any one time. Besides, article XIII of INF Treaty contains that to encourage the objectives and application of the provisions of the INF treaty, parties hereby set up the special verification commission. The parties agree that, if either party so demand, they shall meet within the framework of the special verification commission to:

a) Dissolve question relating compliance with the commitments supposed.

b) Agree upon such measures as may be needful to get better the viability and efficiency of this treaty. In other hand, the parties shall use the Nuclear Risk Reduction Centers, which supply for continues communication between parties, to:
a) Interchange information and supply warnings as required by paragraph 3,4,5 and 6 of Article IX of this treaty and protocol on removal.
b) Supply and receive information required by paragraph 9 of Article X of the INF treaty.
c) Supply and receive warnings of inspections as required by Article XI of this treaty and the Protocol on Inspections; supply and receive demand for mutual measures as supplied for in paragraph 3 of Article XII of the INF treaty.

The same study by Laqueur and Sloss shows that article XIV the parties shall interrogate with this treaty and shall not suppose any international commitments or pledges which would struggle with its provisions. Furthermore; article XV includes that the treaty shall be of unbounded period. And each party shall have the right to retreat from this treaty if it sets that exceptional events related to the subject matter of the INF treaty have jeopardize its superior attentive. It shall give notice of its resolution to retreat from this treaty. Such notice shall include a statement of exceptional events the convey party greeting as having jeopardize its top attentive. Article XVI each party may suggest amendments to this treaty. Agreed amendments shall enter into force in conformity with the executions registered forth in Article XVII controlling the entry into force of this treaty.

article XVII of INF Treaty discusses the Memo of understanding and protocols, which form complete part subsequently, shall be subject to confirmation, in conformity with constitutional executions of each party. This treaty shall enter into force on the date of interchange of the tool of confirmation. In the end, INF treaty shall be set pursuant to Article 102 of Charter of United Nations.

3. The impact of Non-proliferation Treaties between USA and USSR after the Cuban Missile Crisis on the International peace

Some scholars argue that non-proliferation treaties have impacted the international peace while others claim that these treaties have not impacted the international peace. Ventura (2018) argues that arms control seeks to deter challenges to peace by creating a global order
that does so by limiting certain arms or eliminating them altogether for instance, as Woolf (2000) clarified, the ABM Treaty decreases the number of ground-based anti-ballistic missile systems and cites that each side could have. Also Freedman (2003) mentioned that the interim agreement reduce the number of offensive arms and imposed freeze the number of launchers for ICBMs and SLBMs which the US and USSR could deploy. However; neither arms control nor disarmament can make any claim to prevent war entirely. Rather, they seek to prevent and limit war under certain conditions.

Kulesa (2020) argues that non-proliferation agreements such as INF, to some extent, halted or eased the confrontation between the eastern and western block and supported the peaceful transformation of relations between the east and west at the end of the cold war.

As illustrated by Diplomatic blue book (1990), in December 1989 at Malta meeting the USA and USSR publicly acknowledged that they on cusp a completely new era in their relations and appealed to the world they would work together to build a new relationship based on dialogue and cooperation, thus putting an end to the Cold War for example, president Bush expressed his support for the conclusion of a trade agreement between the USA and the USSR and accession of the Soviet to the General Agreement on Tariffs and Trade [GATT ]as an observer. Moreover; he suggested increasing US technical assistance related to statistics, government financing, budget, taxation, stock exchange and anti-monopoly policy.

In 2020, Kulesa stated that arms control made a positive contribution to preventing nuclear war and managing the US-Soviet relations. Moreover; Europe’s security has benefited from the subsistence of INF Treaty and maintains of the bilateral negotiation between the two nations on strategic stability and arms control. Furthermore; it contributed in preventing some European countries for instance Ukraine from developing the intermediate-range missiles as illustrated by Kimball and Reif (2019), the parties of the INF treaty expanded in 1990 to
include the countries that were formerly belonging to the Soviet Union which are Ukraine, Kazakhstan, Belarus.

Also Kulesa (2020) claimed that the collapse of this treaty (INF) and other struggles revive the threat that the Europe continent will become a proliferation area for additional Russian and American weapons systems. In the other hand, arms control has been criticized because as Ventura (2018) mentions arms control does not work and does not successfully address the security dilemma. Perhaps, if arms control was universal, strict, and adhered to by all countries in the world, then it might successfully address the security dilemma. However; imperfect arms control does not benefit the world so much or does nothing. Moreover; arms control is just a cloak without real depth behind it with the states, especially the superpowers, are secretly keeping banned weapons and trying to gain an unfair advantage. Clemens (1972) believes that without arms control the world will be in a much worse condition and that the treaties are necessary for peace, even though not sufficient. Arms control succeeds, at its best, in “defeating the opponent for the time being” but is important in the ideal project to achieve lasting peace.

**Conclusion**

In this chapter we have focused on non-proliferation treaties between USA and USSR after the Cuban missile crisis by providing the reader with the definition of non-proliferation and treaty as terms and an overview of each non-proliferation treaty has been mentioned in this dissertation which are: Limited Test Ban Treaty, The Outer Space Treaty, The Non-Proliferation Treaty, SALT I, SALT II, and INF Treaty. In addition we have discussed their articles. At the end, we tried to show the impact of these treaties on the international peace.

From the study we can deduce that the non-proliferation treaties are effective agreements to enhance transparency, facilitate military planning and limit forces. The main objectives of these treaties are to limit the spread of nuclear weapons and to slow the spread of technologies that nations could use to develop advanced conventional weapon.
General Conclusion

In this dissertation we attempted to shed light on the Cuban missile crisis and the non-proliferation treaties that have been signed after this crisis. The non-proliferation treaties are formal agreements that have been signed in order to reduce the number of nuclear forces and to avoid the brink of nuclear war.

This dissertation consists of two chapters. In the first chapter entitled: the Cuban missile crisis, the origins and the events of the crisis have been discussed. In the second part we tried to discuss and analyze the content of some of the non-proliferation treaties signed after the Cuban missile crisis, especially: the Nuclear Test Ban Treaty, the Outer Space Treaty, the Nuclear Non- Proliferation Treaty, SALT I, SALT II, and the last one the Intermediate-Range Nuclear Forces.

In this study we have reached how the Cuban missile crisis changed the course of the Cold war, by investigating the content of the non-proliferation treaties between the USA and USSR, and identifying the impact of these treaties on the spread of nuclear weapons and international peace during and in the aftermath of the Cold War.

Three main hypotheses have been raised in this research. In the first one, we have asked if the Cuban missile crisis was the cause of the struggle that pushed the USA and USSR to sign the non-proliferation treaties. After the study we made concerning the non-proliferation treaties between the two camps after the Cuban missile crisis, we have reached that this hypothesis was true as history editors (2009) mentioned less than a year after that the Cuban
missile crisis ended exactly in 1963, the USA, USSR and Britain signed an agreement known as Test Ban Treaty. In the second hypothesis we have asked if non-proliferation treaties have impacted the international peace over the world. But Ventura (2018) underestimated arms control as she saw that arms control treaties have no significant impact on the international peace and she clarified that arms control do not work and does not successfully address the security dilemma. On other hand, other scholars believe that these treaties helped to spread the international peace in the world in a way or another. As Clemens (1972) believes that without arms control the world would be struggling in much worse conditions and these treaties were necessary even though not sufficient. For the last hypothesis which was concerning the impact of decreasing the number of USA and USSR missiles on reducing the intensity of arms race, according to our study during the cold war, we saw that the situation was tense with regard to the arms race, but after the signing of non-proliferation treaties the intensity of the armament race was reduced.

Despite the singing of several treaties regarding nuclear weapons control, a nuclear war between the superpowers or other parties was possible.
References


History.com editors.( 2009). The Cuban Missile Crisis comes to an end. Retrieved from

https://www.history.com/this-day-in-history/the-cuban-missile-crisis-comes-to-an-end


Kimball, D & Reif, K. (2019). The intermediate-range nuclear forces (INF) treaty at glance . Retrieved from

https://www.armscontrol.org/factsheets/INFtreaty


Résumé

Cette thèse tente d'étudier les accords signés entre les États-Unis d’Amérique et l’Union soviétique sur le désarmement nucléaire après la crise des missiles cubains. Cette enquête servira à comprendre la politique menée par les Etats-Unis et l’URSS pour réduire l’utilisation d’armes nucléaires après la crise des missiles cubains qui a conduit à la signature des traités de non-prolifération. Cette thèse vise à identifier les origines de la crise des missiles cubains et de ses événements. En outre, l’étude est analytique sur la base de l’analyse des textes des traités de non-prolifération et de leur interprétation. Les résultats de l’enquête en cours peuvent être utilisés pour clarifier le contenu et la nature de ces traités entre l’Union soviétique et l’Amérique et leur rôle dans le règlement de la paix mondiale.

L’étude révèle les traités de non-prolifération nucléaire les plus importants de la guerre froide.

Mots clés : États-Unis d’Amérique, Union soviétique, désarmement nucléaire, crise des missiles à Cuba, armes nucléaires, traités de non-prolifération, guerre froide.