UNIVERSITÀ DEGLI STUDI DI PADOVA

DIPARTIMENTO DI SCIENZE POLITICHE, GIURIDICHE E STUDI INTERNAZIONALI

Corso di laurea *Triennale* in Scienze Politiche, Relazioni Internazionali e Diritti Umani



FORGING PEACE IN THE NUCLEAR ERA: THE CHALLENGING DIPLOMATIC PATH TO THE NUCLEAR NON-PROLIFERATION TREATY AND ITS CONSEQUENCES

Relatore: Prof. GIULIA BENTIVOGLIO

Laureando: ELISABETTA BIZZOTTO matricola N. 2051583

A.A. 2023/2024

Nella speranza di imparare dalla storia

INDEX

INTRODUCTION	1
CHAPTER 1- THE BIRTH OF THE NUCLEAR ERA	3
1.1. THE MANHATTAN PROJECT AND TRUMAN'S DIPLOMACY	3
1.1.1. An ambitious project 1.1.2. The Stone Guest	3 7
1.2. Latest decisions	10
1.2.1. The Order 1.2.2. Surrender of Japan	10 13
1.3. AFTER HIROSHIMA AND NAGASAKI	14
1.3.1. Anti-Nuclear Consciousness and the American Monopoly 1.3.2. The Failure of the Baruch Plan	14 19
1.4. EARLY FROST: THE ONSET OF THE COLD WAR	22
1.4.1. The Nuclear Arms Race 1.4.2. The Mutual Assured Destruction and the "Balance of Terror"	22 26
1.5. THE ESCALATION OF THE CONFLICT: THE CUBAN MISSILE CRISIS	27
CHAPTER 2- LAYING THE FOUNDATIONS: TOWARDS THE NUCLEAR PROLIFERATION TREATY	NON- 31
2.1. THE SPIRIT OF GENEVA AND THE BEGINNING OF THE DÉTENTE	31
2.2. EARLY DIPLOMATIC EFFORTS: LEARNING HOW TO NEGOTIATE	35
2.2.1. The Limited Test Ban Treaty 2.2.2. The Outer Space Treaty	35 38
2.3. THE SON OF DÉTENTE: THE NUCLEAR NON-PROLIFERATION TREATY	39
 2.3.1. The Three Main Obstacles 2.3.2. The Negotiation 2.3.3. The Non-Proliferation Regime 2.3.4. Implementation of the NPT: The Challenges 	41 43 50 53

CHAPTER 3: THE LEGACY OF DIPLOMATIC COMMITMENT TO NON- PROLIFERATION AND DISARMAMENT	56
3.1. STRATEGIC ARMS LIMITATION TALKS I AND II	56
3.1.1. SALT I: Small Steps Forward 3.1.2. SALT II: A Failure in Achieving Nuclear Disarmament	57 60
3.2. FROM D ÉTENTE TO DISCORD: THE DECLINE OF THE THAW	64
3.3. THE END OF DÉTENTE AND THE INTENSIFICATION OF THE ARMS RACE	66
3.3.1. The "Star Wars" programme	67
CONCLUSION	71
BIBLIOGRAPHY	73
SITOGRAPHY	75

ABSTRACT

This thesis examines the obstacles and challenges encountered in the quest for peace in an era dominated by the spectre of nuclear weapons and Cold War tensions, spanning the period between the end of World War II and the end of the 20th century. Through an analysis of the historical context, diplomatic strategies, and international dynamics between the United States and the Soviet Union, it explores the complex path to the 1968 Nuclear Non-Proliferation Treaty, the cornerstone of the nuclear non-proliferation and disarmament regime.

ABSTRACT IN ITALIANO

La tesi si propone di esaminare gli ostacoli e le sfide incontrate nel ricercare la pace in un'epoca dominata dallo spettro delle armi nucleari e dalle tensioni della Guerra Fredda, abbracciando il periodo compreso tra la fine della Seconda Guerra Mondiale e la fine del ventesimo secolo. Attraverso un'analisi del contesto storico, delle strategie diplomatiche e delle dinamiche internazionali tra gli Stati Uniti e l'Unione Sovietica, esplora il complesso percorso verso il Trattato di Non-Proliferazione Nucleare del 1968, pietra angolare del regime di non-proliferazione e disarmo.

INTRODUCTION

The explosion of the two atomic bombs in August 1945 not only marked the end of World War II but also the beginning of a new and dangerous phase in history: the nuclear age. Atomic weapons brought to light the destructive potential of nuclear energy, radically transforming the dimension of international conflict and the geopolitical landscape. In this context of global terror and tension, the United States and the Soviet Union, the leading powers in possession of nuclear warheads, had to learn to dialogue and cooperate in order to successfully conclude treaties and agreements that were essential for world security.

The main objective of this study is to explore the challenging diplomatic path that made possible the conclusion of the treaty with the most signatories in the field of nonproliferation and disarmament, the Nuclear Non-Proliferation Treaty (NPT), starting from historical premises and ending with the consequences of the treaty in relations between states and in the non-proliferation regime.

The first chapter explores the initial moments of this tumultuous era. Through sections on fundamental developments and critical decisions, a line is drawn from the conception of the ambitious Manhattan Project to build the first atomic bomb in 1942 to the immediate consequences of the use of the new weapon in 1945. In particular, the growth of anti-nuclear consciousness and the beginning of the turbulent diplomatic path toward international control of nuclear energy are analysed.

Subsequently, the chapter delves into the early signs of the Cold War, highlighting the mad nuclear arms race in the early 1950s and the rise of the doctrine of Mutually Assured Destruction (MAD), which led to an equilibrium between powers based on the terror of mutual destruction. This context of increasing tension culminated in the Cuban Missile Crisis, which was a moment of confrontation between the superpowers that threatened to bring the world to the brink of nuclear annihilation and demonstrated the urgent need for greater international arms control.

The second chapter, the heart of the study, is concerned with analysing the complex evolution that led to the conclusion of the Nuclear Non-Proliferation Treaty (NPT) in

1968. This section aims to provide a comprehensive understanding of the political and diplomatic dynamics from the beginning of the period of détente after the Cuban crisis to the first diplomatic successes in the nuclear sphere, in particular the Limited Test Ban Treaty and the Outer Space Treaty, that developed the premises for negotiating the NPT. The chapter then discusses the delicate balance of interests and rigorous diplomacy required to overcome the main challenges and obstacles encountered during the negotiations and the resulting non-proliferation and disarmament regime to prevent the spread of nuclear weapons.

Finally, the third chapter analyses the legacy of diplomatic efforts towards nonproliferation and nuclear disarmament. Focusing on the Strategic Arms Limitation Talks (SALT I and II), it assesses the progress and failures in realizing the goals posed by the non-proliferation regime, highlighting the persistent challenges in negotiating comprehensive agreements in this area. It then turns to the end of détente and the subsequent re-intensification of the arms race in the 1980s, demonstrating the complexities of maintaining momentum toward disarmament in a changing geopolitical landscape.

By examining the key moments that shaped the nuclear age, this thesis leads towards a reflection on the continuing importance of international cooperation in preventing a nuclear catastrophe and promoting lasting peace, recognising the importance of past diplomatic efforts and commitments as a vital lesson in forging an increasingly secure and stable international order even in the complexity of this present.

CHAPTER 1- THE BIRTH OF THE NUCLEAR ERA

On August 6, 1945, at 8:15 a.m., the world was shaken by the detonation of the first atomic bomb over Hiroshima. Only three days later, on August 9 at 11:02 a.m., the tragedy was repeated with a second explosion on Nagasaki.

With a total of 210,000 killed and 150,000 injured, the nuclear age began, leaving an indelible mark on human history.

1.1. The Manhattan Project and Truman's diplomacy

1.1.1. An ambitious project

The detonation of the two bombs symbolized the achievement of a clandestine initiative formally inaugurated on August 13, 1942, known as the Manhattan Project.

The genesis of this undertaking can be traced back to August 1939, when Albert Einstein decided to inform the incumbent American president, Franklin D. Roosevelt,¹ of recent scientific discoveries in the field of atomic energy, communicated by his colleagues Leo Szilard, Enrico Fermi and Frederich Joliot:

"In the course of the last four months it has been made probable through the work of Joliot in France as well as Fermi and Szilard in America - that it may be possible to set up a nuclear chain reaction in a large mass of uranium, by which vast amounts of power and large quantities of new radium-like elements would be generated. Now it appears almost certain that this could be achieved in the immediate future. This new phenomenon would also lead to the construction of bombs, and it is conceivable--though much less certain--that extremely powerful bombs of this type may thus be constructed. A single bomb of this type, carried by boat and exploded in a port, might very well destroy the whole port together with some of the surrounding territory."²

Einstein confidently emphasized the importance of increased US involvement in atomic research. He also diplomatically expressed his concerns about the possibility of Nazi

¹ Presidential mandate of Franklin D. Roosevelt: March 4, 1933 – April 12, 1945.

² The Atomic Archive, *Einstein's Letter to President Roosevelt*- August 2, 1939. Available on the website <u>https://www.atomicarchive.com/resources/documents/beginnings/einstein.html</u> consulted on March 2024.

Germany developing nuclear weapons before the Allied powers, citing their rapid progress in the field.

In response to Einstein's letter, President Roosevelt, in October 1939, promptly formed an Advisory Committee on Uranium, which consisted of Lyman C. Briggs, head of the National Bureau of Standards, and representatives of the Army and Navy. The committee was assigned the responsibility of thoroughly investigating the potential applications of uranium, emphasizing the government's proactive approach to exploring this matter.

Despite the anticipated challenges and the uncertain outcome, the Uranium Committee concluded in a report that the pursuit of developing an atomic bomb should continue. Consequently, Roosevelt approved the Committee's recommendations, and shortly afterward, he established the National Defense Research Committee (NDRC) to coordinate and oversee all scientific research related to warfare.³

It is worth noting that the United States was not alone in nuclear research. The United Kingdom played a major role both in scientific research and in gathering intelligence on the progress of the German atomic programme, which helped to accelerate the American project.

In 1940, two researchers of the University of Birmingham, Otto Frisch and Rudolf Peierls, sent a memorandum⁴ to the *Committee for the Scientific Survey of Air Defence* describing their new findings on uranium-235 and suggesting the possibility of developing atomic weapons. This memorandum, known as the "*Frisch-Peierls Report*", was a milestone in the field of nuclear research, highlighting the potential of nuclear fission for war purposes.

A new commission, known as the Military Application of Uranium Detonation (MAUD), was formed by the committee to scientifically verify the researchers' findings. While the United Kingdom did not provide direct funding for the construction of its own atomic weapon, the commission recognized that "the scheme for a uranium bomb"

³ Powaski, Ronald E. March to Armageddon: The United States and the Nuclear Arms Race, 1939 to the Present. Oxford university press, 1987, p. 5.

⁴ Atomic Heritage Foundation, The National Museum of Nuclear Science and History, *Frisch-Peierls Memorandum*. Available on the website <u>https://ahf.nuclearmuseum.org/ahf/key-documents/frisch-peierls-memorandum/</u> consulted on March 2024

was "practicable and likely to lead to decisive results in the war" and suggested that "the collaboration with America should be continued and extended especially, in the region of experimental work."⁵

In June 1942, six months after the attack on Pearl Harbor, US President Roosevelt and British Prime Minister Churchill met in New York to discuss the progress of the British atomic project known as "Tube Alloys."⁶ At this meeting, a partnership⁷ between Britain and the United States was formed, with the United States leading the programme and British researchers collaborating by sharing information and mutual benefits.

Colonel James C. Marshall issued a general order on August 13, 1942, creating the Manhattan Engineer District (MED). He oversaw the project's early phases until General Leslie R. Groves assumed leadership on September 17, 1942. The General began assembling the three main facilities needed to build the bomb: the *Clinton Engineer Works* in Oak Ridge, Tennessee, where uranium-235 and uranium-238 would be separated, the *Hanford Engineering Works*, near Pasco, Washington, designed to be the production centre for plutonium, and *Los Alamos Laboratory*, located in Mexico where would be designed and developed the bomb.

Instead, J. Robert Oppenheimer was appointed to lead the scientific direction of the programme. With over a decade of expertise in quantum and nuclear physics, Oppenheimer, was considered by Groves to be an essential asset for the project's success.

⁵ Bundy, McGeorge. *Danger and Survival: Choices about the Bomb in the First Fifty Years*. Random House, 1988, pp. 26-27.

⁶ The British 'Tube Alloys' project did not have a framework equivalent to the Manhattan Project. Churchill and numerous British political leaders wanted to develop and produce the atomic weapon before the US allies, to "tip the balance of power in Britain's favour". However, the considerable risk of German bombing, which may have disrupted the continuing of atomic research on the region, discouraged this endeavour. Bundy, McGeorge. *Danger and Survival*... cit., p. 25.

⁷ Churchill accepted Roosevelt's offer because by then it was clear that Britian could not match the scale of the American effort. Powaski, Ronald E. *March to Armageddon*...cit., p. 6.

This Anglo-American cooperation became full and effective on August 19, 1943, through the *Articles of Agreement governing collaboration between the authorities of the U.S.A and U.K. in the matter of Tube Alloys*, also known as the *Quebec Agreement*. Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, *Conferences at Washington and Quebec*, 1943. Available on the website <u>https://history.state.gov/historicaldocuments/frus1943/d521</u> consulted on March 2024.

Thus began the Manhattan Project, an ambitious operation that came to employ more than 125,000 men and cost over \$2 billion.⁸

In just two years, the international team of scientists stationed at Los Alamos went from studying chain reaction to successfully developing the first atomic weapon.

The entire programme was based on a security system called "compartmentalisation"⁹ designed by Groves to ensure the highest level of secrecy.

This system harmed future efforts to control the nuclear arms race because it not only prevented public debate on the question of building and using atomic weapons but also hindered discussion within the government. As a result, those few who were informed regarded the construction and use of the atomic weapon as a "foregone conclusion."

When General Groves assumed command of the project, he was ordered to build a bomb that could be used. President Roosevelt never changed these directives.¹⁰

Henry L. Stimson, the Secretary of War and the President's principal advisor on the military use of atomic energy, stated that: "At no time, from 1941 to 1945, did I ever hear it suggested by the President, or by any other responsible member of the government, that, the atomic energy should not be used in the war. All of us of course understood the terrible responsibility involved in out attempt to unlock the doors to such a devastating weapon [...] But we were at war, and the work must be done. I therefore emphasize that it was our common objective, throughout the war, to be the first to produce an atomic weapon and use it."¹¹

⁸ "Employment during peak construction numbered 125,000 and over 65,000 individuals are even now engaged in operating the plants. Many have worked there for two and a half years. [...] We have spent two billion dollars on the greatest scientific gamble in history-and won." The U.S. National Archives and Records Administration, The Harry S. Truman Library and Museum, *Statement by the President Announcing the Use of the A-Bomb at Hiroshima*. <u>https://www.trumanlibrary.gov/library/public-papers/93/statement-president-announcing-use-bomb-hiroshima</u> consulted on March 2024.

⁹ Scientists could only exchange information that was vital and necessary for their work. General Groves was able to uphold the extraordinarily high standard of secrecy that Roosevelt had demanded.

¹⁰ Knowing that the invasion of Japan would result in around one million American deaths, Roosevelt gave his approval to Groves' military preparations involving the employment of the bomb. Among these was the formation of the 509th Composite Group, a unique Air Force unit tasked with delivering the two types of bombs developed at the Los Alamos Laboratory. Powaski, Ronald E. *March to Armageddon*...cit., p. 13.

¹¹ Stimson, Henry L. On Active Services in Peace and War, Harper Brothers, New York, 1948, p. 613.

After just 82 days as vice president, Harry S. Truman¹² assumed the presidency of the United States following Roosevelt's death on April 12, 1945.

He knew nothing about the Manhattan Project and Roosevelt's intentions regarding the use of the bomb: the final decision regarding the use of the atomic weapon belonged to a man who was almost entirely unprepared for the presidency.¹³

The new president discovered the nuclear programme only on April 25, 1945, when he met Stimson and Groves for the first detailed report on the project. The three men's reports state that none of them questioned the use of the two explosives, "Little Boy" and "Fat Man," once they were ready.

Again, the absence of any discussion on this crucial point suggests that in Truman's first important meeting on this subject, he was talking to men who assumed that weapons would be used.¹⁴

1.1.2. The Stone Guest

The new president found little opportunity to contemplate the military, diplomatic, and moral implications of atomic bomb deployment, as the first days of his administration were dominated by another problem: the Soviet Union.

Before Germany's surrender, the USSR had annexed several neighbouring territories, raising doubts and concerns among American political leaders about the various political and economic systems that would arise in Central-Eastern Europe and the future balance between East and West.

The Yalta Conference, held from February 4–11, 1945, revolved around these issues. The Big Three -Roosevelt, Churchill, and Stalin- discussed several matters, including the potential for an agreement on the UN's framework, the development of a policy toward Germany regarding occupation zones and reparations, the Polish question, and the conditions under which the Soviet Union would participate in the war against Japan.¹⁵

¹² Presidential mandate of Harry S. Truman: April 12, 1945 – January 20, 1953

¹³ Powaski, Ronald E. March to Armageddon...cit. p. 7.

¹⁴ Ivi, p.13

¹⁵ Bell, P. M. H. *The World since 1945: An International History*. 2. ed., Bloomsbury Academic, 2017, p. 14.

They reached an accord regarding Poland, a pivotal nation that laid the groundwork for shaping future relations between Eastern and Western Europe. The agreement aimed to balance pro-Soviet and pro-Western tendencies but fell short of the desired outcome. While Stalin advocated for increased Soviet influence, Churchill pursued more Western influence. Roosevelt, renowned for his foreign policy emphasizing cooperation and conciliation, endeavoured to mediate between Churchill's firm stance and Stalin's obstinacy.

Two months after the Yalta Agreement, on April 12, 1945, Roosevelt passed away, leaving Truman to navigate the contentious struggle between various interpretations of the agreement's terms.

Truman, on his part, harboured considerably less sympathy for the Soviets and held fewer beliefs in the possibility of cooperation, particularly when it became evident that Stalin would not adhere to the terms of the Yalta agreements.¹⁶ The president, inexperienced and uninformed, was inclined to accept hardline advice from Churchill and key advisors within his administration. This firm stance represented a significant shift in American foreign policy, which during the war was often characterized by apprehension that a more authoritarian and uncompromising approach would jeopardize Soviet support in the war against Japan. This sentiment waned in early 1945 when John R. Deane, the chief general of the American military mission in Moscow, explored ways to reduce US dependence on the Soviets in the Far East.

Deane's research indicated that the air bases in Siberia requested by the US for raids against Japan were not essential and that the supplies requested by the USSR to participate in the war could be met without the need to open a new route in the Pacific.

The findings of Deane's research and the recommendations of Ambassador W. Averell Harriman led Washington's advisors to adopt a more "energetic" attitude towards the Soviets and to change plans for the war in Japan.¹⁷

¹⁶ The "London government," the Polish government-in-exile, was promised participation in Poland's interim administration; however, the Soviets broke this promise. Truman, therefore, feared that the Soviets were working to ensure that post-war Poland would be run by the pro-Communist group in Lublin. Powaski, Ronald E. *March to Armageddon*...cit p. 9.

¹⁷ On April 24th, the Unified Chiefs of Staff cancelled plans for B-29 bases in Siberia and shelved plans to open a new Pacific route to the Soviet Union. Additionally, they advised their superiors that Soviet intervention was no longer deemed necessary to proceed with the invasion of Japan. Ivi, pp. 28-31.

However, this was not the only reason that drove America towards a more assertive diplomacy. The development of the new atomic weapon played a key role in convincing Truman to adopt a tough foreign policy aimed at pressuring the Soviets to accept American plans for Central and Eastern Europe. This issue remained central throughout the entire Potsdam Conference, attended by Truman, Churchill, and Stalin from July 17 to August 2, 1945.

The President himself confided to Stimson that the new weapon gave him "an entirely new feeling of confidence"¹⁸ and he was convinced, like Byrnes, that the bomb put the United States in a position to "dictate [their] terms at the end of the war."

These words confirm Churchill's impression during the meeting at Potsdam, where he described Truman as a "changed man [...] He bossed the whole meeting."¹⁹

Indeed, the weapon had become a reality on the day Stimson and Truman arrived at Cecilienhof Palace for the negotiations. The test of the first atomic bomb, named "Trinity," was conducted at Alamagordo at 5:29 a.m. on July 16, 1945.

A few days later, Stimson and General Marshall concluded that the United States would not require the assistance of the Soviets to conquer Japan. More importantly, they realized that the new weapon could ensure Japan's surrender without the need for an American invasion. Thus, when it became sure that the two atomic bombs would be ready by early August, the Potsdam Declaration was issued on July 26th, containing the terms for Japan's unconditional surrender. Although the atomic bomb was not explicitly mentioned, the declaration warned that if Japan did not surrender, it would face "prompt and utter destruction."²⁰

¹⁸ Archives at Yale, Henry Lewis Stimson papers (MS 465), *Diaries, 1909-1945*, Original Volumes, v.49 - v.52, 1944 November 1 - 1945 September 21, (July 21-22, 1945). Available on the website https://archives.yale.edu/repositories/12/archival_objects/1961455 consulted on March 2024.

¹⁹ Truman, Harry S. "*Memoirs by Harry S. Truman. Year of decisions: 1945*", Hodder and Stoughton, Limited by Richard Clay and Company, Ltd., Bungay, Suffolk, 1955, p.87.

²⁰The U.S. National Archives and Records Administration, The Harry S. Truman Library and Museum, *The Potsdam Declaration*, Proclamation, July 26, 1945 (point 13 p. C-2). Available on the website https://www.trumanlibrary.gov/library/personal-papers/subject-file-1943-1980/president-trumans-travel-logs-1945?documentid=NA&pagenumber=118 consulted on March 2024.

1.2. Latest decisions

Although the Manhattan Project was initially developed in response to the atomic threat posed by Germany -with the understanding that Germany would have been the primary target²¹ if successful- Germany's unconditional surrender on May 8, 1945, did not halt the American atomic project; instead, it intensified it as the desire to expedite the end of the war became increasingly urgent.

Thus, by mid-1945, as the Pacific War was reaching the Japanese islands, both the military and scientific efforts toward the development of the atomic weapon were yielding the anticipated results.

1.2.1. The Order

In the early spring of 1945 General Leslie Groves established the Target Committee with the mission of collecting intelligence, data, and military recommendations concerning the use of the atomic bomb and its possible consequences. Various options for the new weapon's action were discussed in this committee, such as the idea of deploying the bomb with or without alerting the targeted city or even utilizing it in a demonstrative manner. Furthermore, a list of possible cities was compiled according to specific standards, including dimensions, military importance, the psychological impact of their destruction on the population, and, above all, whether or not they had been largely spared from bombing raids, thus allowing for a clear assessment of the bomb's devastating effects.²²

The Committee identified Kyoto, Hiroshima, Yokohama, the Kokura Arsenal, and Niigata as primary bomb targets. After the Trinity Test, the list of cities had been reduced to three: Hiroshima, Yokohama, and the Kokura Arsenal. Nagasaki was added later.

²¹ Groves: "if the European war was not over before we had our first bombs, he [Roosevelt] wanted us to be ready to drop them on Germany." Bundy, McGeorge. *Danger and Survival*...cit., p. 58.

²² National Security Archive, The George Washington University, Summary of Target Committee Meetings on 10 and 11 May 1945. Available on the website <u>https://nsarchive2.gwu.edu/NSAEBB/NSAEBB162/6.pdf</u> consulted on March 2024.

The recommendations of the Target Committee were fundamental to the final decisions made by the Interim Committee, set up by Stimson to deal with the wartime use of the bomb and to make recommendations on post-war atomic research and development. The commission consisted of Stimson as chairman and his deputy George L. Harrison, Undersecretary of the Navy Ralph A. Bard and Assistant Secretary of State William Clayton, Vannevar Bush and James Conant, Karl Compton, the chairman of M.I.T and finally James Byrnes, as Truman's representative. In addition, the Scientific Panel consisting of Arthur H. Compton, Ernest O. Lawrence, J. Robert Oppenheimer, and Enrico Fermi also participated.²³

The Interim Committee recommended the use of the bomb against Japan and suggested that, to achieve "the greatest psychological effect, the most desirable target would be a vital war plant employing a large number of workers and closely surrounded by workers' houses."²⁴

Regarding the possibility of sharing atomic information with the Soviets, the Scientific Panel and the Commission presented contrasting perspectives. Oppenheimer and Karl T. Compton advocated for a "free exchange of information" between the two countries concerning the specific uses of atomic energy and international cooperation on this sensitive subject. In contrast, James Byrnes argued that any disclosure of atomic information by America would jeopardize American leadership in the development of atomic energy.²⁵

On June 1, 1945, Truman accepted the recommendations of the Provisional Committee. The atomic bomb would be used against Japan as soon as possible "without prior warning and against a target which would clearly show its devastating force." Finally, it was decided that Truman would inform Stalin that the US had successfully constructed

²³ Stimson established the Scientific Panel also to calm the growing discontent among Manhattan Project scientists over the possible military use of the bomb, demonstrated in the Franck Report and the Szilard Petition. The Interim group told the scientists attending the Committee that they had "complete freedom to present their views on any phase of the subject." Atomic Heritage Foundation, The National Museum of Nuclear Science and History, *The Interim Committee*. Available on the website https://ahf.nuclearmuseum.org/ahf/history/interim-committee/ consulted on April 2024.

²⁴National Security Archive, The George Washington University, *Notes of the Interim Committee Meeting*, Thursday, 31 May 1945, p.14. Available on the website

https://nsarchive2.gwu.edu/NSAEBB/NSAEBB162/12.pdf consulted on April 2024. ²⁵ Powaski, Ronald E. *March to Armageddon...*cit., p. 16. "a new weapon of unusual destructive force" only after the successful test scheduled for July - during the Potsdam Conference - without giving further details.²⁶

Final preparations for the dropping of the atomic bombs were completed under Groves' direction as Japan received the Potsdam Declaration. When the threat of prompt and total destruction was "ignored," ²⁷ Groves drafted the orders for the use of the bomb and sent them to the commander of the air forces in the Pacific, General Carl Spaatz. With the approval of George C. Marshall, Stimson, and Truman, the order to drop the bombs on Japan became official on July 25, 1945.

The 509th Composite Group, 20th Air Force, was scheduled to deliver its first atomic bomb as soon as weather conditions permitted visual bombing after August 3rd on one of the predetermined targets (Hiroshima, Kokura, Niigata, and Nagasaki). Additional observation aircraft would follow, carrying scientific, military, and civilian personnel from the War Department to assess and record the effects of the bomb explosion.

The plan envisioned that further bombs would be delivered to these targets as soon as the project staff was ready, aiming to create the impression that the United States possessed numerous atomic weapons.²⁸

On Sunday, 6 August, at 2:45 a.m., while the Japanese government was deliberating on the Potsdam Declaration, the B-29 carrying 'Little Boy' departed from the island of Tinian. At 8:15 a.m., it dropped the bomb on Hiroshima.

Even before the Japanese government could assess the effects of the bomb, it received another shock: Soviet forces attacked the Japanese army in Manchuria, as agreed at the Potsdam Conference. Stalin realised that Japan's surrender was a matter of days and that any Soviet delay would mean the loss of its share of the prize.²⁹

²⁶ Ivi, p. 23.

²⁷ Japan had not yet decided on the Potsdam Declaration. Foreign Minister Togo was looking for a way to end the war with honour, while Japanese military leaders were reluctant to consider surrender. Togo managed to persuade the Council and Cabinet not to respond immediately, but the Japanese press agency misinterpreted the non-decision as a desire to ignore the declaration. Butow, Robert Joseph Charles, et al. *Japan's Decision to Surrender*. Stanford University press, 1954, pp. 142-149.

²⁸ U. S. Department of Energy, Office of History and Heritage Resources, Order to Drop the Atomic Bomb, July 25, 1945. Available on the website <u>https://www.osti.gov/opennet/manhattan-project-history/Resources/order_drop.htm</u> consulted on April 2024.

²⁹ Powaski, Ronald E. March to Armageddon...cit., p. 27.

After the Soviet attack, the Japanese Supreme War Council met in Tokyo, where Foreign Minister Togo and the militarist faction, once again, failed to find common ground. According to Togo, Japan had to comply with the Potsdam Declaration before one more city was razed to the ground, while the militarists still insisted on surrender terms. ³⁰

By then, it was too late. "Fat Man," the plutonium bomb dropped on 9 August at 10.58 a.m. on Nagasaki³¹, sealed Japan's fate.

1.2.2. Surrender of Japan

On the morning of 10 August 1945, the Japanese government accepted the terms of the Potsdam Declaration, with one condition: "With the understanding that the said declaration does not comprise any demand which prejudices the prerogatives of His Majesty as a sovereign ruler."³²

A compromise was reached: the United States would only agree to allow the emperor to remain if the authority of the Japanese government and the emperor himself agreed to be subject to the Supreme Commander of the Allied Powers, who would take appropriate measures to fulfil the terms of the surrender. Furthermore, the American response stated that "the ultimate form of government of Japan shall, in accordance with the Potsdam Declaration, be established by the freely expressed will of the Japanese people."

After exhaustive deliberation on the Allied response, neither the members of the Supreme Council nor the Cabinet could reach unanimity. It was, once again, Emperor Hirohito who made the final decision.³³

³⁰ Ibidem, p. 27.

³¹ Nagasaki was chosen because the B-29 failed to see Kokura, the primary target.

³² Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States: Diplomatic papers, 1945, the Far East, China, Volume VII. Available on the website <u>https://history.state.gov/historicaldocuments/frus1945v06/d412</u> consulted on April 2024.

³³ After listening to General Umezu, Admiral Toyoda and General Anami's contrasting ideas, Emperor Hirohito said: "It was not lightly, but upon mature consideration of conditions within and without the land, and especially of the development taken by the war, that I previously determined to accept the Potsdam Declaration. My determination is unaltered. [...] unless the war be brought to an end at this moment, I fear that the national polity will be destroyed, and the nation annihilated. It is therefore my wish that we bear the unbearable and accept the Allied reply, thus to preserve the state as a state and spare my subjects' further suffering. I wish you all to act in that intention." Lu, David J. *Japan: A Documented History. The Late Tokugawa Period to the Present*, Routledge, 1997, p. 456.

On the night of 14 August, Japan communicated its surrender to the governments of the United States, Great Britain, the Soviet Union, and China.

On September 2, 1945, the war with Japan officially ended: Japanese representatives signed the official instrument of surrender, prepared by the War Department and approved by the US President, on board the U.S.S. Missouri in Tokyo Bay.³⁴

1.3. After Hiroshima and Nagasaki

The effects of the atomic bombs on Hiroshima and Nagasaki were tragic and devastating. The two cities were wiped out in a matter of moments, resulting in an estimated 210,000 casualties. This number increased in the months and years following the bombings due to the release of radiation, leading to serious illness and long-term health problems among survivors, such as cancer, leukaemia, and genetic abnormalities.³⁵

1.3.1. Anti-Nuclear Consciousness and the American Monopoly

In the face of desolation, death, and destruction, a strong antinuclear consciousness began to merge among the scientists who had worked so hard to develop these bombs. Physicist Niels Bohr was one of the first to worry about the implications of atomic energy once the war was over and predicted an arms race that could destroy the planet. The Danish physicist believed that the only way to stop this was to establish an international system of atomic energy control based on agreements that included efficient international inspections of every country's industrial, scientific, and military

³⁴The U.S. National Archives and Records Administration, *Instrument of Surrender*; September 2, 1945; Records of the U.S. Joint Chiefs of Staff; Record Group 218. Available on the website <u>https://www.archives.gov/milestone-documents/surrender-of-japan</u> consulted on April 2024.

³⁵"The Hiroshima prefectural health department placed the proportion of deaths from burns (flash or flame) at 60 percent, from falling debris at 30 percent, and from other injuries at 10 percent; it is generally agreed that burns caused at least 50 percent of the initial casualties. Of those who died later, an increasing proportion succumbed to radiation effects [...] 95 percent of the traced survivors of the immediate explosion who were within 3,000 feet suffered from radiation disease." The National Archives and Records Administrations, The Harry S. Truman Library and Museum, *United States Strategic Bombing Survey: The Effects of the Atomic Bombs on Hiroshima and Nagasaki*, June 30, 1946. Available on the website https://www.trumanlibrary.gov/library/research-files/united-states-strategic-bombing-survey-effects-atomic-bombs-hiroshima-and?documentid=NA&pagenumber=2 consulted on April 2024.

facilities. He said that to prevent a monopoly on the new weapons this had to be done before the war ended and the bomb was available.

Leo Szilard, the scientist who initially encouraged Roosevelt to pursue the atomic programme, also contributed to the summary of the Frank Report shortly after the Interim Committee and Scientific Panel decision by writing:

"Nuclear bombs cannot possibly remain a "secret weapon" at the exclusive disposal of this country, for more than a few years. The scientific facts on which their construction is based are well known to scientists of other countries. Unless an effective international control of nuclear explosives is instituted, a race of nuclear armaments is certain to ensue following the first revelation of our possession of nuclear weapons to the world. Within ten years other countries may have nuclear bombs, each of which, weighing less than a ton, could destroy an urban area of more than five square miles."³⁶

This report was one of several efforts made by scientists between the summer of 1945 and 1946 to develop an antinuclear consciousness. They aspired to underscore the importance of an "efficient agreement for the prevention of nuclear warfare," anticipating the hysterical arms race that followed. Additionally, they promoted the establishment of an organization tasked with overseeing the dissemination of atomic secrets, regulating, and promoting the peaceful use of atomic energy, and enforcing the prohibition of atomic weapons proliferation. They aimed to raise awareness among governments about the potential risks associated with the proliferation of nuclear weapons.³⁷

However, the political leaders still reasoned with the classical categories of international relations and considered the new weapons as legitimate instruments of war and diplomacy. The decision to use the atomic weapon, in fact, in the middle of a peace conference, also served to give a clear signal to the main allied power that any plans to

³⁶ U.S. National Archives, Washington D.C.: Record Group 77, Manhattan Engineer District Records, Harrison-Bundy File, folder #76, *Franck Report*, June 11, 1945. Available on the website <u>https://www.atomicarchive.com/resources/documents/manhattan-project/franck-report.html</u> consulted on April 2024.

³⁷On November 1, 1945, a group of scientists formed the Federation of Atomic Scientists (renamed the Federation of American Scientists). At the end of 1945, the FAS organised the National Committee on Atomic Information, launching an extensive information campaign on atomic energy. At the same time, Eugene Rabinowitch and his colleague, Hyman Goldsmith, began publishing the Bulletin of the Atomic Scientists of Chicago, which became one of the principal means of communicating the terms of the debate on the arms race and the role of scientists in it.

build a new world order and any demands made by the Soviet Union would have to reckon with the US atomic monopoly. ³⁸

In September 1945, a sharp division arose within the American Cabinet.

Stimson, in front of the President, the Vice-President, and the administration secretaries, advised them to approach the Soviets "directly, quickly, and privately" and inform them that they wanted to conclude an international agreement to control the use of atomic energy and to disarm, avoiding "loose debates" in the United Nations. ³⁹

This plan met with fierce opposition.

Those in favour of sharing knowledge and atomic know-how with the Soviet Union were based on the studies of Vannevar Bush and other scientists, who were certain that the Soviets' acquisition of nuclear power would inevitably occur very shortly.

On the other hand, those who firmly opposed the sharing of atomic knowledge and technology relied on the estimates of General Leslie Groves, according to whom the Soviets would need almost twenty years before they could build their first nuclear bomb.⁴⁰

This stalemate in American atomic energy policy continued for months -not to say years- and the various plans for national and international control over nuclear energy were unsuccessful. Moreover, Byrnes' atomic diplomacy proved fruitless at the Foreign Affairs Conference in London in September 1945, where it failed to persuade the Soviets to change their foreign policy in Eastern Europe. This event further strengthened the belief that any form of international collaboration and cooperation on the atomic bomb was unworkable.

³⁸ Alperovitz, Gar. Un asso nella manica: la diplomazia atomica americana: Potsdam e Hiroshima. Einaudi, 1966, prefazione p.12.

³⁹ Stimson was re-considering the administration's approach to the Soviet Union and the future role of the atomic bomb within Soviet-American relations. He advised Truman that an agreement was essential to prevent a "secret armament race of a rather desperate character." Archives at Yale, Henry Lewis Stimson papers (MS 465), Diaries, 1909-1945...cit., (September 11, 1945).

⁴⁰ In truth, the Soviets had more than sufficient supplies of uranium and had been pursuing atomic research since at least 1940. Klaus Fuchs, a German-born British scientist working at Los Alamos, transmitted the scale and timeline of the American project to the Soviets and provided details of the plutonium bomb, its design, method of construction, and information about the bomb. Powaski, Ronald E. *March to Armageddon*...cit., p. 23.

Furthermore, Truman decided to work through the "United Nations," ignoring Stimson's advice to work directly and privately with the Soviets. Thus, on 15 November 1945, US President Harry S. Truman, UK Prime Minister Clement R. Attlee, and Canadian Prime Minister W. L. Mackenzie King signed the Three-Nation Declaration on Atomic Energy in Washington.⁴¹

In the Declaration, the British and Canadians accepted the US atomic policy based on the Vannevar Bush plan. The "Bush Plan" consisted of two parts. The first terminated the Quebec Agreement with the United Kingdom and planned to negotiate a new document "merely for sharing of materials, leaving political clauses and the dissemination of information to be worked out on a more general international basis." The second laid out a three-stage programme to prevent a nuclear arms race, based on the full dissemination of scientific information, free access to all research laboratories, the gradual implementation of a system of international inspections, and, as a last resort, the conversion of new scientific knowledge to civilian use.

The Soviets were outraged by their exclusion and Molotov stated that "it is not possible at the present time for a technical secret of any great size to remain the exclusive possession of some country or some narrow circle of countries.... we will have atomic energy and many other things too." ⁴²

Byrnes, upset by the failure of the London Foreign Affairs Conference in September, undertook a further attempt, and decided to organize a new meeting for mid-December in Moscow, where he would try out the "direct" approach to atomic energy recommended by Stimson. In early December, the State Department committee, chaired by Benjamin V. Cohen and Leo Pasvolsky, prepared a draft proposal similar to the Declaration of the Three Nations to be presented to the Soviet Union.⁴³ The Cohen-Pasvosky approach, however, offered the Soviets immediate access to more than just

⁴¹Library of Congress, *Three-Nation Declaration on Atomic Energy*, Washington, November 15, 1945. Available on the website <u>https://maint.loc.gov/law/help/us-treaties/bevans/m-ust000003-1304.pdf</u> consulted on April 2024.

⁴² Powaski, Ronald E. March to Armageddon...cit., pp. 33-34.

⁴³ The plan consisted of four phases: (1) the exchange of scientists and scientific, technical, and material information; (2) the development and exchange of knowledge about natural resources; (3) the exchange of engineering information; (4) the control and safeguard measures against the use of atomic energy for means of mass destruction. The Cohen-Pasvolsky plan would not have endangered American security by conceding anything to the Soviets. Ivi, p. 35.

basic scientific information and did not require the Soviet Union to demonstrate their ability stage by stage before the US offered anything substantial in return.

Molotov accepted the proposal to proceed step-by-step toward international control of atomic energy. Additionally, he agreed to create an Atomic Energy Commission within the United Nations only if the Commission would be accountable to the Security Council, in which Soviet interests would be protected by the possibility of a veto.⁴⁴

Furthermore, during the Moscow Conference, the two countries formulated procedures for drafting peace treaties with the former Axis nations and discussed political and territorial developments in Eastern Europe, with a particular focus on Bulgaria.

The Secretary of State was satisfied with the agreements reached, unlike the hardliners within the administration.

The President himself told Byrnes on 5 January 1946 that the results of the conference were "unreal." He regarded the attempt to incorporate the Cohen-Pasvolsky report into the administration's nuclear policy as insubordination and accused him of "taking it upon himself to move the foreign policy of the United States in a direction with which he could not and would not agree."⁴⁵

Thus, Byrnes, the last representative of Roosevelt's "accommodationist" policy and Stimson's "direct" approach, resigned shortly afterward, and Truman began to "rely more and more on the views of those who insisted that the main force behind Soviet foreign policy was the expansion of world communism and that any American concessions to the Soviets would ultimately support that end."⁴⁶

This was the turning point that marked the shift in American foreign policy towards containment and the beginning of the Cold War, which chilled the atmosphere in which negotiations on international control of atomic energy and disarmament would take place.

⁴⁴ JSTOR, Bernstein, Barton J. *The Quest for Security: American Foreign Policy and International Control of Atomic Energy, 1942-1946.* The Journal of American History, vol. 60, no. 4, 1974, pp. 1028-1029. Available on the website <u>https://www.jstor.org/stable/1901011</u> consulted on April 2024.

⁴⁵ Powaski, Ronald E. March to Armageddon...cit., pp. 36-37.

⁴⁶ Ibidem, p. 37.

1.3.2. The Failure of the Baruch Plan

On October 24, 1945, the five permanent members of the Security Council ratified the United Nations Charter. Three months later, on January 24, 1946, the United Nations General Assembly in London passed its first resolution specifically on atomic energy.⁴⁷ The resolution set out the manner and terms for the creation of the United Nations Atomic Energy Commission (UNAEC), consisting of the United States, the United Kingdom, France, the Soviet Union, the Republic of China (Security Council member states), and Canada; with the task of "dealing with the problems raised by the discovery of atomic energy and other related matters."

The Commission could make specific proposals to exchange basic scientific information between nations, control and restrict atomic energy to purely peaceful purposes, eliminate atomic and other weapons of mass destruction from national armaments, and effectively safeguard adhering states from violations through inspections. Once again, it was specified that the process would be gradual and progressive.

A few months later, the United States proposed to the newborn Commission their plan for international control of atomic energy: the Baruch Plan, yet another attempt that ended in substantial failure.

The Plan was based on the Acheson-Lilienthal Report⁴⁸, a dossier prepared by a committee (Dean Acheson, Vannevar Bush, James Conant, Leslie Groves, and John McCloy) and a group of expert advisors on the subject (David E. Lilienthal, Chester I. Barnard, J. Robert Oppenheimer, Charles A. Thomas, and Harry A. Winne).

The report drafted by the committee proposed the creation of an international agency called the Atomic Development Authority (ADA), which would deal with the development of atomic energy by separating atomic processes into "safe activities" and

⁴⁷ United Nations Digital Library, Resolution A/RES/1(I), *Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy*, (Adopted at the 17th plenary meeting, 24 Jan. 1946, Meeting record A/PV.17). Available on the website <u>https://digitallibrary.un.org/record/671200</u> consulted on April 2024.

⁴⁸ C. I. Barnard, J. R. Oppenheimer, C. A. Thomas, H. A. Winne, and D. E. Lilienthal (Chairman of the Board of Consultants), *A Report on the International Control of Atomic Energy; Prepared for the Secretary of State's Committee on Atomic Energy* (known as: The Acheson-Lilienthal Report), Washington, DC, 1946. Available on the website <u>https://fissilematerials.org/library/ach46.pdf</u> consulted on April 2024.

"dangerous activities." ⁴⁹ Dangerous activities like the acquisition of raw materials, the production of fissile materials, and the manufacture of components for atomic weaponswould be under the exclusive control of the ADA. Safe activities such as commercial power plants, research facilities, and medical facilities would remain under national jurisdiction. In addition, the scientists proposed to guide countries towards the peaceful use of atomic energy by denaturing fissile materials to make them unsuitable for weapons production and by providing unrestricted access to safe ADA technology and materials.

The Report also identified what would become the principal problem in the entire history of international atomic energy control and disarmament: the ability to conduct inspections. An agency without such power would have proved ineffective, but at the same time, the dossier did not include any specific provisions to punish violators of the ADA regulations except the possibility of detaining the raw materials of any (participating) country that violated the agreements.

In any case, this was not a generous offer to the Soviets. According to the provisions of the Acheson-Lilienthal Report, the Soviet Union would have had to hand over raw materials and atomic facilities to the ADA in advance, even before the dismantling of the US nuclear arsenal. More importantly, the Soviet leaders would have had to accept the possibility of ADA inspections involving the sharing of information -with mostly American personnel- about the USSR's military capabilities and vulnerabilities.

While the scientific community was satisfied, according to the Truman administration, the Report was not a "final plan but a place to begin, a foundation on which to build." With this in mind, Bernard Baruch⁵⁰, appointed US ambassador to present the Plan to the UN Atomic Energy Commission, made a few significant changes that increased the proposal's prospects of failure.

⁴⁹ C. I. Barnard, J. R. Oppenheimer, C. A. Thomas, H. A. Winne, and D. E. Lilienthal, *A Report on the International Control of Atomic Energy*...cit., pp. 29-31.

⁵⁰ He was a 76-year-old financier interested in defending and supporting the Containment strategy embraced by the Truman administration, a man who would not reveal the nation's atomic secrets. The scientists themselves were concerned. Lilienthal wrote in his diary: "I was quite sick. We need a man who is young, vigorous, not vain, and whom the Russians would feel isn't out simply to put them in a hole, not really caring about international cooperation. Baruch has none of these qualifications." JSTOR, Chace, James. *Sharing the Atom Bomb.* Foreign Affairs, vol. 75, no. 1, 1996, pp. 140-141. Available on the website https://www.jstor.org/stable/20047473 consulted on April 2024.

Firstly, the Baruch Plan proposed excluding the control of the extraction and denaturation of fissile materials from the ADA's responsibilities, believing that private industry would be more efficient in these operations. Secondly, it required an investigation into Soviet raw material resources before the activation of international controls to assess the sincerity of the Soviet Union.

Unlike the Acheson-Lilienthal Report, it emphasized the importance of inspections and, especially, penalties for violators of agreements, also considering the possibility of an atomic attack. ⁵¹ Baruch also changed the scope of negotiation and expanded it to include not only nuclear weapons but also all weapons adaptable to mass destruction. Last but not least, he wanted to eliminate the Security Council's veto power over matters concerning the ADA, arguing that otherwise, the agency would lack effectiveness.

When Baruch introduced the plan to the Commission on June 14, 1946, the Soviets formally responded five days later by proposing the Gromyko Plan, a programme "equally unacceptable to the American leadership."

On July 5, Baruch formally rejected the Soviet plan, and on July 24, Gromyko formally rejected the American plan. At this point, the Commission publicly acknowledged that negotiations had reached an impasse and declared its inability to prepare a draft convention about atomic energy control.⁵²

The first attempt at international control of nuclear weapons and atomic energy ended in a substantial disaster. The United States was not willing to give up its nuclear monopoly or concede anything that could undermine its acquired strategic superiority, while the Soviet Union was determined to develop its atomic bomb.

⁵¹ This proposal was the "core" of his plan, as Baruch believed that people worldwide desired strict international law. Admiral Chester Nimitz, however, had a different perspective, highlighting "the incongruity [in the Baruch Plan] that the atom bomb is necessary to enforce an agreement to outlaw its use." Powaski, Ronald E. *March to Armageddon*...cit., p. 43.

⁵² JSTOR, Mezzalama, Francesco. L' U.R.S.S. e Il Disarmo Atomico, Rivista Di Studi Politici Internazionali, vol. 21, no. 4, 1954, p. 560. Available on the website <u>http://www.jstor.org/stable/43785345</u> consulted on April 2024.

1.4. Early Frost: The Onset of the Cold War

In the two years following the Hiroshima and Nagasaki disasters, the three major nations were unable to negotiate an international agreement on nuclear energy control or disarmament. They operated under a long-held belief that prevailed for the following decade: the nuclear arms race had already begun, and it was too late. ⁵³

The failures of the international discussions revealed the distrust between the United States and the Soviet Union and harmed Soviet-American relations, intensifying antagonism.

1.4.1. The Nuclear Arms Race

After the coup d'état in Czechoslovakia⁵⁴ and the Berlin Blockade⁵⁵, the construction of new US atomic weapons was already accelerated. By the end of 1949, the US atomic arsenal had 200 warheads, which had grown to more than 300 by 1950, with a corresponding improvement in all the equipment needed to deliver them.⁵⁶

During the same period, the United States had to accept two strategic defeats that resulted in significant changes in the international system: the detonation of the first Soviet atomic weapon on August 29, 1949, and the establishment of the People's Republic of China following Mao Zedong's victory on October 1 of that year.

Considering these events, the Truman administration had to reconsider its whole foreign policy agenda and decided to react by relaunching the arms race.

Soviet success in the atomic field shocked American officials, who considered the construction of a bomb by the Soviet Union inevitable, but not before 1953.

The Soviet Union began research into nuclear power as early as the beginning of 1940. Three years later, Stalin decided to officially start an atomic programme and

⁵³To confirm this, it is worth noting that while the UN Commission was making efforts to reach an agreement on the control and peaceful use of nuclear energy, the US testing of atomic weapons continued unabated.

⁵⁴In February 1948, the Czechoslovak communists took action to end the Third Czechoslovak Republic and establish a communist regime.

⁵⁵The Soviet Union blocked all road and rail access to West Berlin (24 June 1948-12 May 1949).

⁵⁶ Herken, Gregg. *The Winning Weapon: The Atomic Bomb in the Cold War 1945-1950*. Alfred A. Knopf, 1980, p. 46.

commissioned physicist Igor V. Kurchatov, head of the nuclear laboratory at the Leningrad Psychotechnical Institute, to draw up a research plan and form a working group. ⁵⁷

At the end of the Potsdam Conference, when Truman informed Stalin that the US was ready to use a new weapon on Japan, the Soviet leader ordered Kurchatov to accelerate the research. The technical-scientific information the Soviets received about the Manhattan Project and the foreign technology acquired with the victory over Germany consisting of production facilities, equipment, and thousands of German engineers and technicians- accelerated the development of the first Soviet nuclear bomb.

When the administration realised that it had lost its monopoly on the atomic bomb, US Atomic Energy Commission (AEC) member Lewis Strauss sent a memo to his colleagues calling for "an intensive effort" to proceed with the construction of a hydrogen bomb with a destructive power a thousand times greater than that of the bombs dropped on Japan, convinced that this was "the way to stay ahead," and that "the only thing that retires a weapon is a superior weapon."⁵⁸

Strauss was not the only one convinced that the construction of the *Super Bomb* would lead to victory against the Soviet enemy; Senator Brien McMahon and other scientists - such as Edward Teller, Karl Compton, and Ernest Lawrence - were also resolutely sure of this. Therefore, in the autumn of 1949, Truman referred the question of the development of the hydrogen bomb to the General Advisory Committee (GAC) of the Atomic Energy Commission and the Special Committee of the National Security Council.

The GAC, whose task was to provide scientific and technical advice, unanimously opposed the development of thermonuclear weapons. In the report, the main motivation concerned the moral factor: "The fact that no limits exist to the destructiveness of this

⁵⁷ In April, Molotov handed Pervukhin, Vice-Premier and Minister of Chemical Industry, a thick dossier, probably the first reports of Klaus Fuchs, a Soviet spy embedded in the Manhattan Project, informing him of the Americans' advanced stage in the creation of the nuclear bomb. Holloway, David. *L'Unione Sovietica e la corsa agli armamenti*. Il mulino, 1984, pp. 53-61.

⁵⁸ Wittner, Lawrence S. The Struggle Against the Bomb. One World or None. A History of the World Disarmament Movement 1954-1970, vol. 1, Stanford, CA, Stanford University Press, 1997, p. 257.

weapon makes its very existence and the knowledge of its construction a danger to humanity as a whole. It is necessarily an evil thing considered in any light."⁵⁹

Furthermore, the GAC recognised that the United States had "in [their] possession, in [their] stockpile of atomic bombs, the means for adequate 'military' retaliation for the production or use of a 'Super'."

However, the Special Committee of the National Security Council, consisting of Lilienthal, Acheson (who became Secretary of State), and Secretary of Defence Louis Johnson, did not present a unanimous opinion. While Lilienthal was against the development of the new weapon, Johnson strongly supported it. Acheson, after the unsuccessful international negotiations, was pessimistic about any possibility of an agreement with the Soviets on atomic energy.⁶⁰ The Special Committee's report essentially recommended continuing research into the feasibility of the Super bomb.

On January 31, 1950, President Truman announces that the AEC will "continue its work on all forms of atomic weapons, including the so-called hydrogen or superbomb."⁶¹

At the same time, the rise of socialism in China reinforced the idea that the enemy was gaining ground compactly and aggressively in Asia. The combination of this event with the Soviet achievement of the atomic weapon led to a significant change in US containment policy in late 1949.

On the same day he approved the development of the Super Bomb, Truman initiated a comprehensive review of military and national security strategy towards the Soviet Union. The resulting document the "United States Objectives and Programs for National Security" (NSC-68), drafted by the U.S. Department of State's Policy Planning Staff on April 7, 1950, outlined the necessity of defending against an enemy "animated

⁵⁹ Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, National Security Affairs, Volume I, Document 211, *Report of the General Advisory Committee*, Washington, October 30, 1949. Available on the website https://history.state.gov/historicaldocuments/frus1949v01/d211 consulted on April 2024.

⁶⁰ Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, National Security Affairs, Volume I, Document 162, *Report by the Special Committee of the National Security Council to the President*, Washington, October 30, 1949. Available on the website https://history.state.gov/historicaldocuments/frus1950v01/d162 consulted on April 2024.

⁶¹ The National Archives and Records Administrations, The Harry S. Truman Library and Museum. *Statement by the President on the Hydrogen Bomb,* January 31, 1950. Available on the website <u>https://www.trumanlibrary.gov/library/public-papers/26/statement-president-hydrogen-bomb</u> consulted on April 2024.

by a new fanatic faith, anti-thetical [to the American one], and [that] seeks to impose its absolute authority over the rest of the world."⁶²

For the sake of protecting national freedom and Western friends, the memorandum suggested a massive increase in investment for strengthening the entire military apparatus -both atomic and conventional forces.

Thus, the arms race intensified more and more. Each military build-up on one side triggered a symmetrical response on the other.

MIKE, the first test of Teller's hydrogen bomb, took place on November 1, 1952, in the western Pacific on the island of Elugelab (Marshall). The entire one-mile diameter island completely disappeared.⁶³

US hydrogen bomb research and American foreign policy shift accelerated the Soviet research about hydrogen bombs as well. In 1949, Kurchatov set up a group of scientists who -under the direction of physicist Igor Tamm- succeeded in developing the first Soviet hydrogen bomb, which was detonated on August 12, 1953, in the Semipalatinsk polygon (present-day Kazakhstan).⁶⁴

The United States and the Soviet Union were not the only ones involved in this mad race. Great Britain had also participated. On October 3, 1952, the first British atomic bomb exploded on the Monte Bello archipelago in Western Australia. On May 15, 1957, Britain tested its first hydrogen bomb at Christmas Island in the Pacific.⁶⁵

The arms race led to the creation of new technologies in the military field since the end of World War II, especially after 1957. Three main developments had a significant impact on the defence strategies and operational capabilities of the arsenals: the

 ⁶²San Diego State University, NSC 68: United States Objectives and Programs for National Security, Washington, April 7, 1950. Available on the website https://loveman.sdsu.edu/docs/1950NationalSecurityCouncilnsc68.pdf consulted on April 2024.
 ⁶³ Powaski, Ronald E. March to Armageddon...cit., p. 59.

⁶⁴ Holloway, David. L'Unione Sovietica e la corsa agli armamenti...cit., pp. 60-61.

⁶⁵ Archivio Disarmo, Centro di documentazione sulla pace e sul disarmo, Armamenti Nucleari, *Gli* esperimenti nucleari nell'Oceano Pacifico. Available on the website <u>https://www.archiviodisarmo.it/view/wvNCL23Mer_CI7_z9dHkdTnrlnu4B2dsr6tyrWMnuCo/funada-</u> esperimenti-nucleari-nell-oceano-pacifico-lug85-.pdf consulted on April 2024.

miniaturisation of nuclear devices, the development of major programmes to build efficient missile systems, and the launch of the first military satellites.

Miniaturisation, a process that reduced the size and weight of nuclear warheads without compromising efficiency or explosive power, facilitated the transport and installation of bombs on a wider range of vectors, such as ballistic missiles, aircraft, and other delivery platforms.

With the introduction of intercontinental ballistic missiles (ICBM) that could deliver a nuclear device in less than thirty minutes, distances were increasingly shortened, and the geography that had so far guaranteed "invulnerability" to the United States was beginning to break down.⁶⁶

Last but not least, this period also saw the launch of the first military satellites: new means of transport for strategic nuclear weapons, bringing the technical possibility of outright total war ever closer.⁶⁷

1.4.2. The Mutual Assured Destruction and the "Balance of Terror"

At this time, the United States and the Soviet Union had arsenals that were almost equal in power and number of devices. Each had the means and capability to destroy the opponent without hope of recovery but knew that they could not avoid being destroyed likewise.

This state of possible mutual annihilation exhaustively explains the doctrine of Mutual Assured Destruction (MAD). This doctrine of military strategy states that the massive use of weapons of mass destruction by two opposing sides would result in the complete and assured destruction of both attacker and defender. It assumes that both sides have

⁶⁶Delmas, Claude. Armamenti nucleari e guerra fredda. Mursia, 1972, p. 127.

The first intercontinental ballistic missile was developed by the Soviet Union (the R-7 "Semerka") and was launched on the 26th of August 1957. Ivi. p. 13.

In the summer of 1957, most political and military leaders began to be concerned about the so-called "*missile gap*": the fear that the Soviet Union had reached and surpassed American missile capacity. M. Bundy, Danger and Survival... cit., p. 328. The first American intercontinental ballistic missile ('Titan') was successfully launched on 6 February 1959.

⁶⁷ The Soviets also made history by launching the first military satellite: on October 4, 1957, the Sputnik satellite successfully entered orbit, followed by Sputnik II one month later. These Soviet achievements contrasted with an American setback that intensified the missile gap sentiment: on December 6 of the same year, the first American Vanguard missile disintegrated on live television just two seconds after launch. Delmas, Claude. *Armamenti nucleari e guerra fredda*. Cit., p. 87.

sufficient ordnance to annihilate the enemy and that each side if attacked, would respond to the assault with equal or greater force without hesitation.

Following the logic of MAD, neither side would dare to stop the arms race for fear of losing the nuclear parity achieved, and at the same time, would not dare to launch an attack first. The result is a "tense but stable global *peace*." This tense but stable state of mutual vulnerability is called the "balance of terror." ⁶⁸

Indeed, it can be said that the Cold War did not degenerate into a world conflict because it imposed a new form of peace - *peace through fear*, through fear of the consequences for oneself.

The potential mutual annihilation using these weapons reveals the irrationality of resorting to force, but above all, it highlights how "the more the instruments of force exceed the human scale, the less usable they become. Technical excess brings war back to its essence as a test of will."⁶⁹

Therefore, the destructive potential of the new weapons, imposed restraint but, more importantly, altered the diplomatic game. The US and the Soviet Union continued to be ideological adversaries -they fought with espionage, subversion, and propaganda- but had become "brother-enemies" as they attended the same conferences and tried to prevent potential misunderstandings and events that might escalate the conflict.⁷⁰

1.5. The Escalation of the Conflict: The Cuban Missile Crisis

The Cuban Crisis of 1962 is an example of a conflict escalation that had a significant impact on Soviet-American relations and, more importantly, on the diplomatic path toward non-proliferation and disarmament.

It all started on October 4, 1957, when the Soviet Union launched the first Sputnik satellite into orbit, proving its technological ability to produce missiles that could reach

⁶⁸ Delmas, Claude. Armamenti nucleari e guerra fredda. Mursia, 1972, pp. 87-100.

⁶⁹Aron, Raymond. Paix et guerre entre les nations. Calmann-Levy, 1962, p. 179.

⁷⁰ Art, Robert J. *Between Assured Destruction and Nuclear Victory: The Case for the 'Mad-Plus' Posture. Ethics*, vol. 95, no. 3, 1985, pp. 501-502. JSTOR. Available on the website <u>https://www.jstor.org/stable/2381034</u> consulted on April 2024.

overseas targets. This worried both the US and Europe about their defence and security capabilities.

For this reason, US President Dwight D. Eisenhower⁷¹, at the Atlantic Council meeting in December 1957, proposed a new defence programme that would intensify NATO's⁷² military apparatus by installing the new intermediate-range ballistic missiles (IRBMs), known as *Jupiter* and *Thor*, in those European allied countries that had agreed to accept them. In this way, the US had the possibility of rapidly striking the vital centres of the Soviet Union directly from European bases if necessary. In December 1959, Great Britain, Turkey, and Italy agreed to host the new missile bases.⁷³

As a consequence, between late September and early October 1962, around 85 Soviet ships sailed to Cuba carrying 42 intermediate-range missiles with 164 nuclear warheads and 42,000 Soviet soldiers.⁷⁴

It was not a strategic move, indeed; the new Soviet long-range missiles were already capable of reaching targets on the American continent. It was rather a negotiating move that would allow, according to Khrushchev, concessions to be demanded elsewhere.

Khrushchev claimed that the deployments were made to protect Cuba from another American invasion. In addition, the US had positioned IRBMs for defensive purposes in Turkey, close to the Soviet Union; the latter could then position them in Cuba, balancing "what the West likes to call the balance of power."⁷⁵

On 16 October, the Executive Committee met to decide the situation in Cuba. Not all members of the committee supported a drastic reaction. Robert McNamara, Secretary of Defence, believed that Soviet missiles did not significantly alter the Soviet-American strategic equation. He stated: "A missile is a missile. [...] It makes no great difference whether you are killed by a missile fired from the Soviet Union or from Cuba." He, therefore, argued that the best response was simply to ignore them. According to

⁷¹ Presidential mandate of Dwight D. Eisenhower: January 20, 1953 – January 20, 1961

⁷² North Atlantic Treaty Organization: intergovernmental political-military alliance created in 1949 to ensure the collective defence of its members in response to external armed aggressions.

⁷³Fondazione biblioteca archivio Luigi Micheletti, Sorrenti, Deborah. *L'Italia nella guerra fredda e i missili americani IRBM Jupiter*. Available on the website <u>https://www.fondazionemicheletti.eu/contents/documentazione/archivio/Altronovecento/Arc.Altronovece nto.09.16.pdf</u> consulted on April 2024.

⁷⁴ Bell, P. M. H. The World since 1945: An International History. cit., pp. 110-113.

⁷⁵ Khrushchev quoted in Powaski, Ronald E. March to Armageddon...cit., p. 103.

President John F. Kennedy⁷⁶, on the other hand, the missiles in Cuba created a Soviet strategic advantage "in appearance" anyway, and if he had let it go, other similar situations would have occurred.⁷⁷

Different approaches to handling the problem were being considered.

A diplomatic approach would have been reasonable, according to UN Ambassador Adlai Stevenson. Still, Kennedy refused this suggestion right away, stating that he "felt strongly that the thought of negotiations at this point would be taken as an admission of the moral weakness of our case and the military weakness of our posture." Similarly, the president opposed US military action against Soviet missile bases in Cuba or an invasion similar to the Normandy invasion in 1944.

Ultimately, a naval blockade was chosen. It aimed to prevent the reinforcement of the missiles and troops already in Cuba while buying time and demonstrating strength.

On October 23, Kennedy signed the order establishing the beginning of the "quarantine" for October 24, during which "all ships of any kind bound for Cuba from whatever nation or port will, if found to contain cargoes of offensive weapons, be turned back."⁷⁸

The "quarantine" had its effects: six identified Soviet ships stopped and turned back. This was only a temporary truce, as the Soviet missiles were still in Cuba, and their installation continued, but the blockade caused significant psychological pressure that opened an opportunity for negotiation. On October 24, the UN Secretary-General, U Thant, delivered the same message to Washington and Moscow, proposing that the Soviet government stop sending weapons to Cuba and that the US withdraw the naval blockade. Khrushchev accepted his part of the arrangement, and when the US president declined, he requested a summit meeting, to which Kennedy refused to reply.

The pressure endured, and the risk of war became serious on 27 October when an American U-2 plane was shot down by anti-aircraft fire. The Cubans publicly took the

⁷⁶ Presidential mandate of John F. Kennedy: January 20, 1961 – November 22, 1963

⁷⁷ Ibidem, p. 103.

⁷⁸The John F. Kennedy Presidential Library and Museum, Historic Speeches. *Adress during the Cuban missile crisis*, 22 October 1962. Available on the website <u>https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-during-the-cuban-missile-crisis</u> consulted on April 2024.

blame for the incident, but Khrushchev still issued an order to the commander of Soviet forces in Cuba that explicitly forbade the use of nuclear weapons.⁷⁹

During this moment of extreme tension, Khrushchev proposed a negotiation: the Soviet Union would withdraw its missiles from Cuba if the US guaranteed not to invade the island and agreed to remove its missiles from Turkey. Kennedy publicly accepted Khrushchev's proposal but did not mention the removal of the Jupiter missiles in Turkey. This decision was communicated to Khruschev privately.

On 20 November 1962, the quarantine was lifted. Between March and April 1963, both missile sites in Cuba and Turkey were dismantled.

The main lesson of Cuba was the realisation of the risk and possible consequences of the outbreak of a nuclear war in a period characterised by the arms race and the logic of the Cold War. The crisis had a significant impact on political leaders, improving the diplomatic environment in which following arms control and disarmament negotiations were handled. Kennedy and Khrushchev recognized the importance of establishing a direct and immediate dialogue to avoid future misunderstandings in case of heightened tensions, so they created the "hotline," a telecommunications line that immediately connected the Pentagon to the Kremlin.

Despite the steps towards détente, the crisis once again led to an accelerated nuclear arms race from both sides, driven by the fear and terror inherent in the prospect of mutual destruction.

⁷⁹ Bell, P. M. H. The World since 1945: An International History. cit., pp. 110-113.
CHAPTER 2- LAYING THE FOUNDATIONS: TOWARDS THE NUCLEAR NON-PROLIFERATION TREATY

2.1. The spirit of Geneva and the Beginning of the Détente

The image of the United States and the Soviet Union as "brother-enemies" -continuing as opponents yet participating in the same conferences and summits to seek appropriate solutions for atomic energy- was particularly explicit during the 1950s. On one hand, both sides developed massive nuclear arsenals and kept on constant alert against potential surprise attacks. On the other hand, they tried to reduce the tensions arising from these military preparations through campaigns, negotiations, and meetings, which were crucial to the diplomatic path to arms and nuclear energy control.

An important early example of this was the *Atoms for Peace* campaign that President Eisenhower launched on December 8, 1953, at the United Nations General Assembly to "strip [nuclear energy] military casing and adapt it to the arts of peace." ⁸⁰

Eisenhower intended to safeguard the continuous dissemination of fissile materials and nuclear technology and to develop peaceful uses for the new scientific knowledge in the nuclear field.

This plan invited the major nuclear powers to donate a portion of their materials and technologies to an international atomic energy "bank," which would provide nuclear assistance to nations that renounced the production of atomic weapons. The American president's speech encouraged the United Nations General Assembly to adopt a resolution in 1954 that called for the establishment of the International Atomic Energy Agency and the organization of an international technical conference under the auspices of the UN.

The First International Conference on the Peaceful Uses of Atomic Energy, held from August 8 to 25, 1955, in Geneva, was the largest meeting convened by the United Nations in which formal sessions alternated with evening lectures on various scientific

⁸⁰ IAEA, *Atoms for Peace Speech*. Address by Mr. Dwight D. Eisenhower, President of the United States of America, to the 470th Plenary Meeting of the UN General Assembly, Tuesday, 8 December 1953 Available on the website <u>https://www.iaea.org/about/history/atoms-for-peace-speech</u> consulted on May 2024.

and technical aspects by leading nuclear energy personalities such as Professor Niels Bohr. This conference paved the way for the declassification of nuclear fusion and fission reactor technology and allowed scientists from communist and non-communist countries to collaborate.⁸¹

In the same year, governments made available almost 40,000 kilograms of Uranium-235 for peaceful nuclear research. On July 29, 1957, the International Atomic Energy Agency (IAEA) was established to monitor the atomic activities of states and ensure the non-military use of Uranium; unfortunately, the inspection system failed to achieve the desired results.⁸²

During this time, US President Dwight D. Eisenhower, Soviet Union Prime Minister Nikolai Bulganin, British Prime Minister Anthony Eden, and French Prime Minister Edgar Faure attended the Geneva Summit, where the agenda covered a wide range of themes, including European security, Germany's future, trade programmes, and disarmament.

Regarding disarmament, the US administration proposed the *Open Skies Plan*, which -unlike the failed Baruch Plan- did not claim complete disarmament but provided for confidence-building measures that would facilitate the control of atomic weapons through an international airspace monitoring system through air inspections on Soviet and US territory and the exchange of blueprints of installations in the two countries.⁸³

Soviet Premier Bulganin responded to the US programme by proposing a plan that included several measures concerning numerous issues. To address the problem of atomic weapons and begin a path to disarmament, the Soviets suggested banning nuclear testing.

⁸¹ IAEA, *Peaceful Uses of Atomic Energy*, United Nations. Available on the website <u>https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull6-3/06305100303.pdf</u> consulted on May 2024.

⁸² The USA, Great Britain, and the Soviet Union were excluded from the controls; France and China refused to submit to the controls and proceeded to develop their nuclear weapons; India, which was partially subjected to the controls, managed to produce and detonate an atomic device using nuclear materials and technology supplied by the USA and Canada for civil purposes. Powaski, Ronald E. *March to Armageddon...*cit., p. 75.

⁸³ Ivi, pp. 78-79.

Once again, the states failed to reach an agreement on disarmament, but the proposal to ban nuclear testing became a central topic of public debate in the following years and dominated arms control negotiations for a long time.

From 1956 to 1960, efforts between the United States and the Soviet Union to suspend nuclear testing failed due to a combination of political, military, and propaganda factors. These were endless back-and-forth negotiations that produced insufficient results.

The American administration was disunited. The Pentagon, the AEC, and some important figures, such as Secretary of State John F. Dulles, did not believe in the Soviet willingness to end atomic testing and insisted on the military necessity of continuing the tests for national security. On the contrary, the other side of the administration, including President Eisenhower, ⁸⁴ believed it was essential to reach a compromise with the Soviets to stop the mad arms race and to calm the public pressure concerning the effects of radioactive fallout.

American distrust of the Soviet Union and the inability to reconcile the administration were evident in several American negotiating proposals. These suggestions accepted the suspension of tests only if combined with on-site inspections and a progressive reduction in nuclear weapons production. However, these conditions were unacceptable to the Soviets, who viewed the inspections as a tool for American espionage and believed that reducing the production of nuclear warheads would be effective only if it was "indissolubly linked to the prohibition of atomic weapons, their elimination from the armaments of states, and the destruction of atomic weapons stockpiles."⁸⁵

In the context of propaganda, the Soviet Union gained international recognition by adopting a strategy of public denunciation against nuclear tests, despite continuing to conduct them and rejecting the possibility of inspections to verify the actual cessation of testing that was present in every American proposal. An example of this was the announcement of the Soviet government's decision, "guided by the desire to make a

⁸⁴ Eisenhower believed in the imperative to stop the nuclear arms race. During the campaign, on 12 October 1952, he told an aide: "My God, we have to simply figure a way out of this situation. There's just no point in talking about 'winning' a nuclear war. " Powaski, Ronald E. *March to Armageddon...cit.*, p. 76.

⁸⁵ The National Security Archive, The George Washington University. *Background Papers for the Declaration on Disarmament*, 1961, p. 6. Available on the website <u>https://nsarchive2.gwu.edu/nukevault/ebb321/16.PDF</u> consulted on May 2024.

concrete start on the cessation of experiments [...] and to take the first step towards the total liberation of mankind from the danger of atomic war," to "unilaterally end tests with all types of A- and H-weapons from 31 March 1958." The message also called on the US and British governments to follow their example.⁸⁶In reality, this suspension appeared hypocritical to the most attentive observers since the Soviet Union had just finished its series of tests.

Eisenhower attempted to respond to these propaganda moves but was often restrained by supporters of nuclear testing within his administration, who feared a false sense of security among the American population and a negative impact on defence programmes. Strong objections also came from some allies such as the United Kingdom and France, who were concerned about the delays that would result from test suspensions in their much younger and less developed nuclear programmes.

Just when it seemed that the superpowers were moving towards a global test ban in May 1960, through a possible treaty to be concluded at the Paris summit meeting -in which Eisenhower and Khrushchev had agreed to participate- an event profoundly changed the thaw that had begun with the "spirit of Geneva" of 1955.⁸⁷

On 1 May, an American U-2 spy plane was shot down on Soviet soil, and the pilot, Francis Gary Powers, who survived the crash, was taken prisoner. Eisenhower refused to shirk responsibility for the crash and to apologize publicly to the head of the Soviet government.

On 17 May, the Paris summit began, but only two days later, the American president left the French city, decreeing the end of the meeting and consequently the failure of the test ban agreement. Thus, relations between the countries deteriorated further, and various crises followed, including the escalation of the conflict in Cuba.⁸⁸

The disaster averted during the 1962 Cuba crisis represented a significant shock to international relations. The strong impact improved relations between the US and the

⁸⁶ Delmas, Claude. Armamenti nucleari e guerra fredda...cit., p. 107. (Translated from Italian)

⁸⁷ Vienna Center for Disarmament and Non-proliferation, Policy Brief No. 47 Sokov, Nikolai. US-Soviet Arms Control During Détente: Lessons for the Present, Toda Peace Institute, September 2019, p. 1. Available on the website <u>https://vcdnp.org/wp-content/uploads/2019/09/Nikolai-Sokov_Arms-Control-During-Detente.pdf</u> consulted on May 2024.

⁸⁸ Powaski, Ronald E. March to Armageddon...cit., pp. 90-92.

Soviet Union and created a favourable climate for the negotiation of arms control and non-proliferation treaties, an atmosphere that had not existed since the abortive Paris summit conference of May 1960. A new period began, conventionally called Détente, which made fruitful cooperation possible, especially in atomic matters between the two superpowers from the mid-1960s to the mid-1970s.

2.2. Early Diplomatic Efforts: Learning How to Negotiate

Since the end of World War II, the United States and the Soviet Union had to learn to dialogue and cooperate by overcoming mutual fears and suspicions in order to solve numerous situations and issues. On nuclear energy, arms control, and disarmament, the negotiations were slow and complex, it was an "unnatural act, [which] requires countries to tear down what they have built up," which is why it took a long time before it yielded the desired results.⁸⁹

2.2.1. The Limited Test Ban Treaty

In 1961, when John F. Kennedy became president, the negotiations between the US and USSR concerning experiments and arms control continued.

Building on the foundation laid by Eisenhower, he managed to reach an important arms control agreement in less than two years. Unlike his predecessor, Kennedy centralised presidential leadership and ensured that essential positions in the US administration were not occupied by arms control opponents -such as John F. Dulles and Lewis L. Strauss during Eisenhower's presidency. This method gave him a cohesive and balanced administration determined to stop the arms race.

Moreover, the president, fully aware of how much the US public was pressing for an international nuclear agreement, began to follow the development of an agency created within the State Department. It was called the US Arms Control and Disarmament Agency (ACDA) and was "responsible for conducting, supplying, and coordinating arms control research throughout the Federal Government[...]providing a basis for

⁸⁹ Paul Warnke cited on Krass, Allan S. The United States and Arms Control: The Challenge of Leadership. Praeger, 1997, p. 9.

policy planning and for the preparation and management of [American] participation in international negotiations."90

During this period, several technical developments in the field of detection and control of nuclear tests were crucial to the progress of negotiations. In particular, the possibility of long-range seismic detection of atomic weapon detonations increased American confidence in being able to monitor the Soviet Union's observance of the cessation of experimentations and drastically decreased the need for on-site seismic survey stations. This possibility improved the chances of successful negotiations. Despite this, the US was still not prepared to eliminate on-site inspections, only to reduce them, while according to the Soviets, the new inspection perspectives made them completely superfluous.⁹¹ This issue of inspections and the refusal of the Soviets to provide and discuss the technical details needed to determine the process and the necessary number of these inspections were the main factors that led to the inability to conclude a comprehensive test ban agreement.

Even after the drastic change of heart after the Cuban crisis, the impasse over inspections struggled to dissolve. An opportunity for an agreement presented itself on 8 June 1963 when Khrushchev invited the Americans and British to a conference in Moscow to negotiate a nuclear test ban treaty, but it soon became clear that the Soviet Union would categorically refuse any on-site inspections. At this point, the head of the American delegation, W. Averell Harriman, suggested to Kennedy to abandon the goal of a global accord and concentrate instead on a narrower agreement. The president took the advice considering that in July, Khrushchev expressed his support for a limited

⁹⁰ Defense Technical Information Center, ACDA's Coordination of Federal Arms Control Research and Management of Its External Research Program Still Need Improvement, 1983, pp. 3-27. https://apps.dtic.mil/sti/pdfs/ADA135008.pdf consulted on May 2024. Kennedy's speech at the inauguration of the ACDA: "Our ultimate goal, as the act points out, is a world free from war and free from the dangers and burdens of armaments in which the use of force is subordinated to the rule of law and in which international adjustments to a changing world are achieved peacefully." U.S. Government Information, Public Papers of the Presidents of the United States: John F. Kennedy.1961, p. 626. Available on the website <u>https://www.govinfo.gov/app/details/PPP-1961-book1</u> consulted on May 2024.
⁹¹ In the American proposal of August 27, 1962, the US proposed a partial ban on tests (allowing underground experiments) and a reduction in the number of annual on-site inspections, only in case seismic events were identified. Khrushchev would have accepted a maximum of three inspections per year, Kennedy no less than six. Powaski, Ronald E. March to Armageddon...cit. p. 106-112.

treaty.⁹² In less than a month, almost eight years of negotiations were concluded. On 25 July 1963, the United States, the Soviet Union, and Great Britain agreed to a treaty on the prohibition of nuclear weapons testing in the atmosphere, outer space, and beneath the surface of the seas.

The *Limited Test Ban Treaty* (LTBT) was signed in Moscow on 5 August 1963, by US Secretary of State Dean Rusk, Soviet Foreign Minister Andrei Gromyko, and British Foreign Secretary Lord Home. The preamble to the treaty included the will to pursue through future negotiations "the speediest possible achievement of an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations" to end the arms race and nuclear weapons testing forever.⁹³

According to Article I "Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: (a) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted." Therefore, only underground nuclear explosions that did not result in any leakage of radioactive materials were allowed. ⁹⁴

At the wishes of the United States, a clause was inserted in Article IV that provided the right to withdraw on three months' notice if "extraordinary events, related to the subject matter of this Treaty [had] jeopardised the supreme interests of its country." While, at the insistence of the Soviet Union, the Treaty prohibited "any nuclear weapon test explosion, or any other nuclear explosion" even for peaceful purposes under Article I.

In conclusion, the Soviets 'fear of being caught committing cheating and the Americans' lack of trust blocked the possibility of a comprehensive agreement on a

⁹² Hathi Trust, *Foreign Relations of the United States 1961-1963v.7 1961-1963.* Pp. 740-770. Available on the website <u>https://babel.hathitrust.org/cgi/pt?id=osu.32437010144604&seq=5</u> consulted on May 2024.

⁹³United Nations Treaty Collection, *Partial Nuclear Test-Ban Treaty*, Document No. 6964, August 5, 1963. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20480/volume-480-I-6964-English.pdf</u> consulted on May 2024.

⁹⁴ Calogero, Francesco. Armi e disarmo: i negoziati sulla riduzione e il controllo degli armamenti nucleari, chimici, batteriologici e convenzionali. F. Angeli, 1997, pp. 85-88.

nuclear test ban. The new treaty did not end the nuclear arms race; it simply drove it, literally, underground, but it taught Americans and Soviets to dialogue and negotiate in pursuit of a common goal, preparing the ground for future nuclear negotiations.

2.2.2. The Outer Space Treaty

While the Limited Test Ban Treaty negotiations were proceeding, a further arms control treaty was beginning to take shape: the *Outer Space Treaty* (OST).

In 1957, when the first programmes for the construction of efficient missile systems began to develop, the Americans put forward a proposal for international control of tests on space objects, but the Soviet Union, ready to launch the first earth satellite, *Sputnik*, into orbit in October of that year, did not accept the offer.

Between 1959 and 1962, the United States and the Soviet Union made provisions concerning the use of outer space. The Western powers wanted to ban the orbiting and stationing of weapons of mass destruction in space; meanwhile, the Soviets wanted to prohibit the military use of outer space without restricting its peaceful use.

The Soviet Union's proposal was part of the advanced drafts for general and complete disarmament because the Soviets did not want to "separate outer space from other disarmament issues, nor [did they want to] agree to restrict outer space to peaceful uses unless U.S. foreign bases at which short-range and medium-range missiles were stationed were eliminated also." This resulted in a stalemate in negotiations that only unlocked after the signing of the LTBT, when on 19 September 1963, the Soviet Union declared its readiness to conclude an agreement with the United States not to orbit nuclear weapons in space.⁹⁵

On 13 December 1963, the General Assembly adopted the resolution known as the *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*,⁹⁶ which included the American and Soviet declarations and urged states to follow the principles contained therein when exploring and using outer space. Between 1965 and 1966, after the success of the LTBT and the new enthusiasm

⁹⁵ Bluth, Christoph, Soviet Strategic Arms Policy before SALT. Cambridge university press, 1992, p. 77.

⁹⁶ United Nations Digital Library, *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*, A_RES_1962(XVIII)-EN, December 13, 1963. Available on the website <u>https://digitallibrary.un.org/record/203965?v=pdf</u> consulted on May 2024.

for arms control agreements due to détente, it was decided to make the resolution more concrete by concluding an agreement. On 19 June 1966, the General Assembly passed the resolution to create the treaty and its signing followed on 27 January 1967 in Washington, Moscow, and London.

The *Outer Space Treaty* prohibits the placing "in orbit around the Earth [of] any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner." Under Article IV, all States Parties to the Treaty must use the Moon and other celestial bodies "exclusively for peaceful purposes" and "the establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres" is expressly prohibited. ⁹⁷

The OST was an example of a preventive treaty. States were able to realise its usefulness and importance before strategic reasons, technological capabilities, and economic-industrial interests relating to the presence of nuclear weapons in outer space could deter and hinder its realisation. Thanks to it, any possibility of deploying nuclear weapons in outer space or on celestial bodies was eliminated at the root.⁹⁸

2.3. The Son of Détente: the Nuclear Non-Proliferation Treaty

On 21 March 1963, US President Kennedy stated at a press conference: "I see the possibility in the 1970s of the president of the United States having to face a world in which 15 or 20 or 25 nations may have [nuclear] weapons. I regard that as the greatest possible danger and hazard."⁹⁹ These words manifested the main fears that pushed states

https://www.faa.gov/about/office_org/headquarters_offices/ast/media/treaty_Princi_Gov_Acti_States_OS <u>T.pdf</u> consulted on May 2024. ⁹⁸ Calogero, Francesco. *Armi e disarmo...cit.*, pp. 85-88.

⁹⁷ Federal Aviation Administration, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies*, 1966. Available on the website

⁹⁹ Arms Control Association. *Timeline of the Nuclear Non-proliferation Treaty*. Available on the website <u>https://www.armscontrol.org/factsheets/NPT-Timeline</u> consulted on May 2024.

Between 1950 and 1960, analysts shared some alarming predictions: by the 1970s some 15-20 states would possess nuclear weapons, and by the end of the century, the number would not stop; on the

and the United Nations to cooperate in concluding international agreements that they believed were necessary for world security.

Proposals such as the one of Ireland to the United Nations on 17 October 1958, to ban the "further dissemination of nuclear weapons" and the following General Assembly Resolution 1665 calling on states to prevent the proliferation of nuclear devices, led to the development of the concept of *non-proliferation* within the diplomatic community.

At the same time, the first resolutions and treaties began to be adopted for the creation of nuclear-weapon-free zones, called *denuclearised zones*, in which the manufacture, equipping, introduction, and stationing of nuclear weapons were prohibited, and the nuclear powers were required to "respect the status of the denuclearised zone and not to commit any act that might violate its spirit and objectives."¹⁰⁰

The first treaty in this field was the Antarctic Treaty signed in Washington on 1 December 1959. There were then several proposals and UN Resolutions, such as the proposal for the denuclearisation of Africa in 1960 and the respective Resolution 1652 (XVI) of 24 November 1961.

A particularly emblematic agreement was the *Treaty of Tlatelolco*, which arose from a proposal for the denuclearisation of Latin America submitted by Bolivia, Brazil, Chile, Ecuador, and Mexico, and was subsequently drafted and signed on 14 February 1967. In the preamble, the states affirm their desire "to contribute, so far as lies in their power, towards ending the armaments race, especially in the field of nuclear weapons, and towards strengthening a world at peace, based on the sovereign equality of States, mutual respect and good neighbourliness," and also refer to General Assembly Resolution 808 (IX), which sets the goal of a "total prohibition of the use and manufacture of nuclear weapons and weapons of mass destruction of every type."¹⁰¹

100 Archivio Disarmo, Le proposte di disarmo regionale in zone extraeuropee, Scheda n. 5, 30 June 1986.Availableonthewebsitehttps://www.archiviodisarmo.it/view/d9cNiCoq6O3kPIv5ASMbvPzWUHwQkOTw2-

KJRL9XqI/sebastiani-le-prop-disarmo-regionale-extraeuropee-giu86-.pdf consulted on May 2024.

contrary, it would grow exponentially. Roberts, Brad. Weapons Proliferation and World Order: After the Cold War. Kluwer, 1996, p. 8.

¹⁰¹ The treaty was signed by all Latin American states except Guyana and Cuba. United Nations Treaty Collection, *Treaty for the Prohibition of Nuclear Weapons in Latin America*. Mexico, Federal District, February 14, 1967. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20634/volume-634-I-9068-English.pdf</u> consulted on May 2024.

2.3.1. The Three Main Obstacles

Although non-proliferation began to be discussed as early as 1960, various obstacles during the negotiations led to continuous delays and the discussion of more specific agreements with a more limited scope such as the LTBT and the OST. It was only after the Cuban crisis and the first Chinese atomic bomb, ¹⁰² which exploded on 16 October 1964, that the necessary rationality was found to stop nuclear proliferation and conclude one of the most important treaties in history: the *Nuclear Non-proliferation Treaty* (NPT).

Three main obstacles delayed the negotiation process.

The first impediment arose from the US nuclear deterrence programme of setting up a NATO *Multilateral Nuclear Force* (MLF). The MLF, born in the summer of 1960 out of a secret State Department study on the Atlantic Alliance, was officially announced after a meeting between US President Kennedy and British Prime Minister Harold MacMillan on December 21, 1962, in Nassau. Its purpose was to improve nuclear burden-sharing by placing nuclear weapons under joint and multinational control with European countries to ensure a collective approach to nuclear deterrence and strengthen cohesion among NATO member states.¹⁰³

The MLF's plan consisted of a fleet of 25 warships (with merchant hulls to avoid detection by high-altitude aircraft and enemy submarines), capable of remaining on a continuous mission for 100 days, armed with Polaris A-3 missiles with nuclear warheads, and manned by a crew of 400 men from up to three different Allied navies. The fleet would be under the control of a special NATO committee that would be responsible for ordering the use of the missiles in case of emergency.¹⁰⁴

A key feature of this proposal was the possibility of giving the Federal Republic of Germany a more prominent role in the decision-making process concerning the use of

¹⁰³ IFRI, Alberque, William, *The NPT and the Origins of NATO's Nuclear Sharing Arrangements*, Proliferation Papers, February 2017. Available on the website <u>https://isodarco.it/wp-content/uploads/2020/10/alberque_The-NPT-and-the-Origins.pdf</u> consulted on May 2024.

¹⁰² China never ratified the Limited Test Ban Treaty.

¹⁰⁴ JSTOR, Kohl, Wilfrid L. Nuclear Sharing in Nato and the Multilateral Force. Political Science Quarterly, vol. 80, no. 1, 1965, pp. 88–109. Available on the website <u>https://doi.org/10.2307/2147185</u> consulted on May 2024.

nuclear warheads. Since, for the Soviet Union, any non-proliferation agreement that allowed West Germany access to the arsenals was unacceptable, this possibility led to a stalemate in the negotiations.

The second obstacle holding up the negotiations was the lack of consideration by the Soviet Union and the United States of the concerns of the non-aligned states, also called *non-nuclear weapons states* (NNWS). These states complained that there was a discriminatory regime in the American and Soviet proposals, characterised by a disproportionate division of obligations between *nuclear weapons states* (NWS) and non-nuclear weapons states and insufficient guarantees for the latter.

The truth is that the US and USSR were not used to negotiating in the nuclear field with non-nuclear states, and although their drafts towards the last years of negotiations began to look increasingly alike, the superpowers saw the treaty as an agreement between themselves and their mutual allies. Thus, the NWS "attempted to sell a non-proliferation treaty" configured according to their interests, imposing obligations on the NNWS, and maintaining control of the negotiating process.¹⁰⁵

However, the non-aligned states did not form a single, solid bloc; on the contrary, they were divided and brought different views and opinions to the negotiations. Some countries like Brazil, India, and Pakistan saw the negotiations as a "political vehicle to put pressure in the committee on the superpowers to commit themselves to actual steps towards nuclear disarmament," other states like Mexico and Sweden considered nuclear disarmament too important to be reduced to a mere "bargaining chip."¹⁰⁶

Inspections, the main problem in all previous agreements, were the third major obstacle to the formulation of the non-proliferation treaty.

The body in charge of such inspection activities would be the International Atomic Energy Agency (IAEA), established a few years earlier. The drafts presented during the negotiations by the United States and the Soviet Union provided for mandatory

¹⁰⁵ Stoessinger, John. *The United Nations and the Superpowers: China, Russia, and America*. New York, 1977, p. 173.

¹⁰⁶ Bourantonis, Dimitris. *The Negotiation of the Non-Proliferation Treaty, 1965-1968: A Note. International History Review*, vol. 19, no. 2, 1997, pp. 347-357. Available on the website <u>https://doi.org/10.1080/07075332.1997.9640788</u> consulted on May 2024.

international monitoring of peaceful nuclear facilities only in the NNWS, a proposal that baffled the non-nuclear states and demonstrated the disproportionality of obligations presented in the previous hurdle.¹⁰⁷

The inspection difficulty was exacerbated when non-nuclear member nations of the European Atomic Energy Agency (EURATOM) consented to inspections of their nuclear facilities only if carried out by EURATOM itself. Soviets, who claimed that only the IAEA should be responsible for implementing the treaty, initially rejected this condition.¹⁰⁸

2.3.2. The Negotiation

The Nuclear Non-Proliferation Treaty was negotiated by the Committee of Eighteen Nations from 1962 to 1968 at the invitation of the UN General Assembly.

On 17 October 1958, the issue of the danger of nuclear proliferation first emerged through Ireland's proposal to the Committee on Disarmament during the 13th session of the General Assembly.¹⁰⁹

The Committee adopted a draft resolution to establish an ad hoc committee to examine and investigate the dangers associated with the spread of nuclear weapons, and the Assembly, following a further request, placed the topic "dissemination of nuclear weapons" on the agenda of the 14th session. This resulted in Resolution 1380 (XIV) of 20 November 1959, which adopted the draft proposed by the Committee on Disarmament called "Prevention of wider dissemination of nuclear weapons," in which it was suggested to "consider appropriate means whereby this danger [could be] averted."¹¹⁰

¹⁰⁹ First Committee of the General Assembly, draft resolution, Ireland, A/C.1/L.206, 17 October 1958.
 ¹¹⁰ United Nations General Assembly, *Prevention of the Wider Dissemination of Nuclear Weapons*,

A/RES/1380/XIV, 20 November 1959. Available on the website <u>https://documents.un.org/doc/resolution/gen/nr0/142/02/pdf/nr014202.pdf?token=rwwq04vNL6WvfLocY</u> <u>F&fe=true</u> consulted on May 2024.

¹⁰⁷ International Atomic Energy Agency Bulletin, *The Negotiation of the Nuclear Non-proliferation Treaty*, vol.22, n°.3/4. Extract from Goldschmidt, Bertrand, *Le complexe atomique*. Editions Fayard, Paris ,1980. Available on the website <u>https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull22-3/223_403587380.pdf</u> consulted on May 2024.

¹⁰⁸The six States were: France, the Federal Republic of Germany, Italy, Netherlands, Belgium and Luxembourg. Powaski, Ronald E. *March to Armageddon*...cit., pp. 121-124.

The recipient of this suggestion was the *Ten Nation Disarmament Committee* (TNDC), established in 1959 following a UN resolution. It consisted of five NATO nations - Canada, France, Great Britain, Italy, and the United States- and five Warsaw Pact nations -Bulgaria, Czechoslovakia, Poland, Romania, and the Soviet Union.

The TNDC decided not to follow the invitation. Therefore, during the Geneva meetings held from 15 March to 28 June 1960, the issue of nuclear proliferation was not addressed.

In December 1961, the Assembly approved two resolutions exhorting governments to commit to non-proliferation. The first, entitled "Prevention of wider dissemination of nuclear weapons," echoed the Irish resolution and urged nuclear weapon states to work towards the conclusion of a non-proliferation treaty. In the second, the Assembly called on the United States and the Soviet Union to create a new committee consisting of the ten nations of the TNDC and eight additional states: Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden, and the United Arab Republic. This committee replacing the TNDC was called the *Eighteen Nation Disarmament Committee* (ENDC) and was charged with negotiating a "general and complete disarmament under effective international control."¹¹¹

The Committee began meeting regularly in Geneva from 14 March 1962 to 26 August 1969. Nevertheless, the first three years of negotiations were unfruitful because the positions of the nuclear states (NWS) and non-nuclear states (NNWS) appeared irreconcilable. It was not until after the first Chinese bomb test on 16 October 1964 that the Disarmament Commission adopted Resolution 225, as it considered it necessary that "the Eighteen Nation Disarmament Committee [...] resume as a matter of urgency its efforts to develop a treaty on general and complete disarmament under effective international control [...] to relax international tension and halt and reverse the arms race."¹¹²

Between 27 July and 16 September 1965, the ENDC meeting was held, during which the US presented a new draft in which nuclear non-proliferation appeared for the first

¹¹¹ United Nations General Assembly, *Question of disarmament*, A/RES/1722 (XVI), 20 December 1961. Available on the website

https://documents.un.org/doc/resolution/gen/nr0/167/75/pdf/nr016775.pdf?token=4d2rO2hPRJfdqVrj2b& fe=true consulted on May 2024

¹¹² Resolution adopted by the Disarmament Commission at its 102nd meeting on 15 June 1965, DC/225

time as the main aim of the treaty. In this draft, the US emphasised the need to reach an agreement and tried to address Soviet fears about the first obstacle: NATO's MLF programme. The US Representative emphasised that "the arrangements within NATO [...] have nothing to do with the proliferation of nuclear weapons" and that the MLF programme did not represent a case of nuclear proliferation since the United States would maintain a veto on the use of such weapons. Yet, the Soviet representative reaffirmed concern about "the creations of a NATO multilateral force within the framework of which it [was] indented to give access to nuclear weapons to the Federal Republic of Germany."¹¹³

At the 20th session of the General Assembly, the American and Soviet draft resolutions were presented, reflecting the two positions, which were similar but not identical.

The first principle of the Soviet draft stated that the NWS should undertake not to transfer to the NNWS, in any way -directly or indirectly, through third states or groups of states or military alliances- their nuclear war arsenals. Furthermore, it prohibited the right to co-own, control, and place nuclear weapons; and also, the assistance and sharing of information that could contribute to the production of nuclear weapons by the NNWS. The second principle obliged NWS to undertake not to design or develop nuclear weapons, either independently or jointly with other states, in their territory or that of other states. Furthermore, they had to renounce access to nuclear weapons directly through third states or groups of states.

Otherwise, the American proposal included a commitment by each of the NWS not to transfer any nuclear weapons into the "national control" of any non-nuclear state, either directly or indirectly, through a military alliance. It also prohibited actions that would increase the total number of states and organisations with independent power to use nuclear weapons, such as assisting in their manufacture. He then addressed the NNWS

¹¹³ Archivio Disarmo, *Non proliferazione e riarmo nucleare*. IRIAD Review, January 2023, pp. 52-62. Available on the website <u>https://www.archiviodisarmo.it/view/NHPmNdqMcyGrghgGaaTjujjlY72aZ3TcLqNlvJRNSEE/iriad-review-speciale-gennaio.pdf</u> consulted on May 2024.

with the same demands as the Soviet draft, always specifying the ban on "national control," a loophole that gave the NATO Multilateral Force plan a chance.¹¹⁴ The US-Soviet negotiations continued until the end of 1966 when, thanks to several secret talks between Secretary of State Dean Rusk and Foreign Minister Andrei Gromyko, a compromise was reached that removed the first obstacle: NATO would abandon the MLF project, and the Soviet Union would accept the *status quo*: the presence of American nuclear weapons on the territory of the US Atlantic allies.¹¹⁵

During the ENDC Conference in Geneva, held from 21 February to 23 March and 18 May to 14 December 1967, an important result was achieved: on 24 August, the United States and the Soviet Union presented two identical drafts. Although this was a significant achievement, the conference did not adopt a final text because Azaredo Da Silveira, Brazil's representative, brought to the committee's attention the imbalance in the US and USSR's joint draft. According to Brazil, the text did not encourage the accession of non-nuclear states, as concerns about the risk of not receiving sufficient guarantees from nuclear states on disarmament were completely overlooked. Furthermore, the Representative pointed out the strong disproportion in the distribution of obligations included in the joint draft: while NNWS had to comply with "obligations," NWS were subject to generic "commitments."¹¹⁶

The non-aligned states had already stated this position in the five-principles draft resolution adopted in General Assembly Resolution 2028 (XX). The eight states demanded the absence of loopholes that would allow NWS and NNWS to cooperate in the direct or indirect proliferation of nuclear weapons; they insisted on a balance of responsibility between the obligations imposed on NWS and NNWS; and they affirmed that the Treaty on the Non-Proliferation of Nuclear Weapons should be a step towards achieving general and complete nuclear disarmament. They also called for inspection

¹¹⁴ Bourantonis, Dimitris. *The Negotiation of the Non-Proliferation Treaty, 1965–1968: A Note.* The International History Review, vol. 19, fasc. June 2, 1997, pp. 347–57. *DOLorg.* Available on the website <u>https://doi.org/10.1080/07075332.1997.9640788</u> consulted on May 2024.

¹¹⁵ Archivio Disarmo. Non proliferazione e riarmo nucleare...cit., pp. 52-62.

¹¹⁶ Statement by the Brazilian Representative (Azaredo da Silveira) to the Eighteen Nation Disarmament Committee: Draft Non-Proliferation Treaty, ENDC/195, 31 August 1967. Ivi, p. 384.

mechanisms to ensure the effectiveness of the agreement and the freedom to conclude regional nuclear disarmament treaties for States Parties as well.¹¹⁷

A turning point occurred with the proposal by the United Arab Republic to include a specific article on nuclear disarmament. Mexico was the first to submit the drafting of this article, which presented some innovations such as the commitment "to pursue [disarmament] negotiation in good faith," the "cessation of manufacture of nuclear weapons" and the "liquidation of all their existing stockpiles," the "elimination from national arsenal of nuclear weapons and the means of their delivery," and the stipulation of a "Treaty on General and Complete Disarmament under strict and effective international control." ¹¹⁸

The nuclear states accepted the article's inclusion in the treaty but modified it: they redistributed the responsibilities of negotiating a disarmament treaty and removed the obligation to conclude a treaty for an absolute ban on nuclear tests.

Within the disproportionate nature of the NNWS obligations, one can also find the obstacle of inspections.

When negotiations resumed in 1965, most of the Committee members meeting in Geneva were part of an international nuclear safeguards system: the International Atomic Energy Agency (IAEA), founded after Eisenhower's campaign (Atoms for Peace) at the behest of the General Assembly. This is why the US draft proposed in Geneva in August 1965 stated, even if vaguely, that "each of the States Party [had] to cooperate in facilitating the application of International Atomic Energy Agency or equivalent international safeguards on all peaceful nuclear activities."¹¹⁹

UN General Assembly Resolution 2028 (XX) also called for "acceptable and workable provisions to ensure the effectiveness of the treaty" but did not mention safeguards by a specific monitoring body.

¹¹⁷ Archivio Disarmo, *Non proliferazione e riarmo nucleare*...cit., pp. 56-57.

¹¹⁸ Mexican Working Paper Submitted to the Eighteen Nation Disarmament Committee: Suggested Additions to Draft Non-proliferation Treaty, ENDC/196, 19 September 1967. Ivi, p. 410.

¹¹⁹ Pacific Northwest National Laboratory, National Security Training. Bunn, George, *Brief History of NPT Safeguard Article*, February 2006. Available on the website

https://nationalsecuritytraining.pnnl.gov/fois/doclib/NPTNegHist.Art.III.6%20Feb.06.pdf consulted on May 2024.

This uncertainty stemmed from a twofold problem. Firstly, non-nuclear states did not accept that nuclear states were exempt from permanent IAEA inspections. Secondly, European non-nuclear member states of the European Atomic Energy Agency insisted they would only permit inspections if conducted by EURATOM.

Regarding the first problem, the Swedish representative at the ENDC Conference in May 1967 voiced the fears of the NNWS. In his statement he said that "fears were expressed in some quarters, public and private, that unbalanced control measures could cause severe drawbacks for non-nuclear weapon States in the way of technological underdevelopment, industrial espionage, and commercial discrimination."¹²⁰

In August of the same year, Canada's representative at the ENDC Conference reaffirmed the necessity and importance of international inspections, especially in non-nuclear countries, to ensure that "plutonium or other explosive fissile material [was] not diverted" for military purposes but invited the NWS to "accept control over their peaceful nuclear activities" because "this particular kind of discrimination [was] not necessary in the treaty." He further added that if "the nuclear Powers [told] the non-nuclear States that inspection by IAEA will not inhibit their development of nuclear energy or expose them to the possibility of commercial espionage [...], why do they reject such safeguards for themselves?"¹²¹

As a gesture and response to these arguments, the United States and Great Britain in 1967 declared themselves willing to open their peaceful facilities to IAEA inspections, thus facing the same risks of industrial espionage as the NNWS. For its part, the Soviet Union declared instead that it did not want to follow the American and British example.¹²²

Regarding the desires of the EUROATOM states parties, they had to clash with the Soviets, fervent supporters that the safeguards system should be just one, the IAEA. Indeed, the coexistence of a global international safeguards' agency and a regional one

¹²⁰ Statement by the Swedish Representative (Myrdal) to the Eighteen Nation Disarmament Committee: Non-proliferation of Nuclear Weapons, May 30, 1967, (ENDC/ PV. 300). Defense technical Information Center. *Documents on Disarmament, 1967...*cit., p. 254.

¹²¹ Statement by the Canadian Representative (Burns) to the Eighteen Nation Disarmament Committee: Non-proliferation of Nuclear Weapons, August 3, 1967, (ENDC/PV. 319). Ivi, p. 331.

¹²² International Atomic Energy Agency Bulletin, *The Negotiation of the Nuclear Non-proliferation Treaty...*cit., pp. 6-7.

with different territorial claims, different control processes, and different inspectors was unthinkable for the Soviet Union. This position was reaffirmed in an interview on 26 August 1967, in which the Soviet ambassador discussed this issue, stating that it was not possible to "allow a situation where in a country, any country, [was] granted a privileged status. [They were] in favour of one single system, recognised and accepted by all. [They could not] and [would not] destroy EURATOM, but [they did] not want to create a situation of exceptions by making it possible for a country evade the universal controls."¹²³

The United States, on the other hand, was in favour of the EURATOM safeguards, and confident that there would be no abuse of this concession by the European states.

The deputy director of the ACDA found a solution: in the EURATOM states parties, the European Agency inspectors would be the 'base inspectors,' while IAEA inspectors would have the task of 'verifying through periodic audits' the adequacy of the work done by the EURATOM inspectors. Subsequent informal talks between the US and the Soviet Union produced a draft of the safeguards article, which did not name the European Agency but specified that the NNWS had to conclude inspection agreements with the IAEA, "either individually or together with other States." This left room for EURATOM to enter into safeguards agreements with the IAEA.¹²⁴

On June 12, 1968, the negotiations ended, and the General Assembly adopted Resolution 2373 to approve the preliminary text of the Nuclear Non-Proliferation Treaty. The vote recorded 95 votes in favour, 4 against (Albania, Cuba, Tanzania, Zambia), and 21 abstentions. On July 1, the treaty was opened for signatures, and as stipulated in Article IX, the United Kingdom, the United States, and the Soviet Union

¹²³ Interview of Ambassador Roshchin With L'Unitd, August 26, 1967. Ivi., p. 372.

¹²⁴ Pacific Northwest National Laboratory, National Security Training. Bunn, George, *Brief History of NPT Safeguard Article*...cit., pp. 5-6.

On 5 April 1973, the IAEA/EURATOM Agreement for implementing the safeguards provisions of the NPT was signed in Brussels. International Atomic Energy Agency, *IAEA/EURATOM Agreement*. Available on the website <u>https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull15-3/15303581016.pdf</u> consulted on May 2024

signed as depositary states. China and France were the only NWS not to sign the treaty until 1992.¹²⁵

The Nuclear Non-Proliferation Treaty officially entered into force on March 5, 1970, after almost eight years of diplomatic efforts.

2.3.3. The Non-Proliferation Regime

The Nuclear Non-Proliferation Treaty was, and still is, the treaty with the highest number of signatories in the field of non-proliferation and disarmament. Five years after it entered into force, the number of state parties grew from 43 to 91, a number that increased considerably in the 1980s and 1990s to 191 state parties today.¹²⁶

It created an international regulatory framework that was the basis and fertile ground for subsequent disarmament agreements.

Not only did it help limit the spread of nuclear weapons by reducing the number of states that could develop them, but it encouraged gradual disarmament and reduction in the arsenals of these states to reduce the risk and likelihood of nuclear conflict in order to ensure a safer international environment as far as possible.

It also had a strong impact on international relations and diplomatic processes between states, reducing tensions and increasing trust, cooperation, and dialogue between them. It taught the great powers to collaborate and negotiate, even with non-nuclear countries, on such a delicate and complex issue.

Finally, he bequeathed a certain way of thinking about proliferation as an international security issue, setting a global culture that considered proliferation harmful. This "pejorative connotation of proliferation has reinforced a tendency to look at the problem in systemic terms and to evaluate proliferation as a global problem and not as a regional or national one."¹²⁷

¹²⁵ China refused to sign and adhere to the treaty because it claimed it was discriminatory, while France did not sign the treaty but stated that it wanted to behave in this area "exactly like the states party to the treaty."

¹²⁶ Arms Control Association. *Timeline of the Nuclear Non-proliferation Treaty...*cit.

¹²⁷ Roberts, Brad. Weapons Proliferation and World Order...cit., pp. 13-15.

The Treaty and the global non-proliferation regime that it defines stand on three interconnected pillars that create a delicate balancing of interests: non-proliferation, disarmament, and the peaceful use of nuclear energy.

The first pillar can be identified in Articles I and II of the Treaty.

According to Article I: "Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices."¹²⁸

According to Article II: "Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices."¹²⁹

These are complementary non-proliferation commitments. Both nuclear and nonnuclear states are required not to contribute to *horizontal proliferation*, meaning the increase in the number of countries possessing such weapons of destruction, and nuclear states are required not to contribute to *vertical proliferation*, meaning the increase in the number and lethal power of their nuclear weapons.¹³⁰

The second pillar can be traced back to the sixth article.

According to Article VI: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear

¹²⁸United Nations Treaty Collection, *Treaty on the Non-proliferation of Nuclear Weapons*, Document No. 10485, March 5, 1970. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20729/volume-729-I-10485-English.pdf</u> consulted on May 2024.

¹²⁹ Ibidem.

¹³⁰ The Indian physicist Homi Bhabha is the author of this distinction between horizontal and vertical proliferation. International Atomic Energy Agency Bulletin, *The Negotiation of the Nuclear Non-proliferation Treaty*...cit., p.1.

arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."¹³¹

At the negotiations, the nuclear powers promised to attend a review conference in Geneva "five years after the entry into force of this Treaty, [...], in order to review the operation of [it] to assure that the purposes of the Preamble and the provisions of the Treaty [were] being realised."¹³²

This article was born out of a desire to try to move towards, and hopefully achieve, complete disarmament by the nuclear states. This intention was mainly expressed by the non-nuclear states not only for the sake of greater international security but also because the achievement of general disarmament took on the guise of a needle that would readjust the balance of obligations between the NNWS and NWS.¹³³

The third pillar concerning the peaceful use of nuclear energy can be found in Article IV.

According to Article IV: "1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production, and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.

2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials, and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclearweapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world."¹³⁴

This article was proposed by the non-nuclear states to rebalance treaty obligations and nuclear energy positions between states. The peaceful use of nuclear power would have

¹³⁴ United Nations Treaty Collection, Treaty on the Non-proliferation of Nuclear Weapons...cit.

¹³¹ United Nations Treaty Collection, Treaty on the Non-proliferation of Nuclear Weapons...cit.

¹³² According to Article VIII

¹³³ Shaker, Mohamed Ibrahim. *The Nuclear Non-Proliferation Treaty: Origin and Implementation 1959 – 1979*, vol. 2. Oceana Publications Inc, London, 1980, p. 556.

led to considerable progress for human welfare in medicine, agriculture, water, and energy management, especially in developing countries.

These three pillars must mutually reinforce and balance each other to support the nonproliferation regime created by the NPT. The right to access the benefits of nuclear technology and know-how for peaceful purposes implies a commitment to nonproliferation; if States Parties comply with these non-proliferation obligations, then progress towards general disarmament will also be possible, which in turn will strengthen compliance with non-proliferation obligations.

2.3.4. Implementation of the NPT: The Challenges

Although the treaty was agreeable and straightforward in its principles, its implementation was weak or inconclusive in some areas.

During the four NPT Review Conferences held from 1975 to 1990, nuclear states and non-nuclear states met to discuss the functioning of the treaty, considering weaknesses and possible strengthening measures.

At the first conference in 1975, the non-nuclear states brought to attention several issues that would also be the focus of debate at future conferences. Prominent among these was the issue of IAEA safeguards and controls.¹³⁵

With the entry into force of the NPT, the International Atomic Energy Agency established the Safeguards Committee on 6 April 1970 to draft a specific document containing the safeguards to be applied to implement the treaty commitments. The resulting document improved the safeguards system offered by the IAEA and provided the basis for inspection agreements between the Agency and NNWS parties to the NPT, states non-party to the Treaty but part of nuclear-free zones, and non-party states that nevertheless wished to conclude comprehensive safeguards agreements with the IAEA. The committee also decided the technical elements of the agreements with the five

¹³⁵Reaching Critical Will, Disarmament Fora, *History of the NPT 1975-1995*. Available on the website <u>https://www.reachingcriticalwill.org/disarmament-fora/npt/history-of-the-npt-1975-1995</u> consulted on May 2024.

nuclear-weapon states, which, over time, agreed to place some of their civil nuclear facilities under safeguards.¹³⁶

According to the new system, the Agency would have focused on the flow and inventory of nuclear material rather than on the facilities -although it would have had access to them and to design information during periodic site visits to carry out inspections. In addition, the flow and inventory of material would have to be monitored at specific "strategic points" of the facilities and through designated instruments and detectors.

The major limitation of the Agency's action consisted in the possibility of inspecting or verifying "only what was declared"¹³⁷ by states through unilateral communications indicating the production and actual availability of fissile material for civil purposes.¹³⁸ The architects of the safeguards system did not exclude the possibility of some states constructing such facilities clandestinely, but it was assumed that these facilities would still be detected by means other than IAEA inspections.

An example of this flaw in the system was the Iraqi nuclear programme. In 1981, Israeli bombers destroyed an Iraqi research reactor supplied by France, which was under IAEA control, because they did not believe that the safeguards would prevent Iraq from improperly using the reactor to build nuclear weapons. Ten years later, with Iraq's defeat in the Gulf War, it was discovered that the Iraqi government was building a clandestine programme to produce fissile material and bomb design.¹³⁹

During the Review Conferences, States expressed their satisfaction with the IAEA safeguards system and expressed their "energetic support of IAEA' s efforts to prove the efficiency of verification." They also recommended that "continued efforts should be

¹³⁶ The committee met from June 1970 to March 1971 and was attended by approximately 45 states. International Atomic Energy Agency, *IAEA/INFCIRC/153*. Available on the website <u>https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc153.pdf consulted on May 2024</u>.

International Atomic Energy Agency, *The Evolution of IAEA Safeguards*, International Nuclear Verification Series No. 2, pp. 22-31. Available on the website <u>https://www-pub.iaea.org/MTCD/publications/PDF/NVS2_web.pdf</u> consulted on May 2024.

¹³⁷ El Baradei, Mohamed, et al. L'età dell'inganno: le minacce nucleari e l'ipocrisia delle nazioni. Castelvecchi, 2011, p. 23.

¹³⁸ Most states were unwilling to grant free access to the IAEA to identify undeclared facilities and stockpiles.

¹³⁹ In 1997, the Additional Protocol to the NPT was concluded to intensify inspections and tighten rules to provide greater control over states. International Atomic Energy Agency, *The Evolution of IAEA Safeguards...* cit., p. 27.

made to improve safeguards techniques, to complete the elaboration of verification procedures for all installations in the nuclear fuel cycle, with particular emphasis on installations which [were] especially important from the standpoint of safeguards, and to bring in full operation with optimum cost efficiency an automatic system for processing safeguards data. [...] States [would] continue to provide support to IAEA in these activities.¹⁴⁰

However, the safeguards worked relatively well among the members of the NPT. Nonnuclear states that were part of the Treaty had no real intentions and willingness to build nuclear weapons and thus to use nuclear energy for other than peaceful purposes, and NWS did not want the small circle of nuclear countries to expand further. On the contrary, some states not joining the NPT, such as India and Pakistan, could continue developing their programmes without being subject to non-proliferation obligations. For this reason, another major theme during the Review Conferences was the need for the universality of the Treaty to spread the non-proliferation regime and make it more effective and widely accepted globally.¹⁴¹

A particularly critical and divisive issue regarding the implementation of the Nuclear Non-Proliferation Treaty was disarmament. The call for "dialogue in good faith" to conclude real and concrete disarmament agreements between nuclear states as soon as possible remained, at least initially, according to the NNWS, a "dead letter." Witness the negotiations in the 1970s between the United States and the Soviet Union, known as Strategic Arms Limitation Talks (SALT) I and II, which led to unsatisfactory results. Despite some limitations imposed on nuclear arsenals, these agreements failed to achieve meaningful and lasting disarmament, leaving one of the treaty's main objectives unresolved.

content/uploads/assets/WMD/Nuclear/pdf/finaldocs/1980%20-%20Geneva%20-

¹⁴⁰United Nations Office for Disarmament Affairs, Review Conference of the Parties to the Treaty on the non-proliferation of nuclear weapons, NPT/CONF.II/C.II/6, *Working paper containing formulations for the final declaration on article III of the Treaty*, 21 August 1980, p. 113. Available on the website <u>https://unoda-web.s3-accelerate.amazonaws.com/wp-</u>

<u>%20NPT%20Review%20Conference%20-%20Final%20Document%20Part%20I.pdf</u> consulted on May 2024.

¹⁴¹ Bundy, McGeorge. Danger and Survival... cit., p. 515.

CHAPTER 3: THE LEGACY OF DIPLOMATIC COMMITMENT TO NON-PROLIFERATION AND DISARMAMENT

President Lyndon B. Johnson¹⁴², from his inauguration in November 1963, showed a strong willingness to engage in arms limitation and disarmament talks by proposing various initiatives to the Soviet Union. Once the NPT was signed, in 1968, he stated that the Soviet Union and the United States had reached an agreement to engage in what was then called Strategic Arms Limitation Talks.

However, until 1970, the superpowers' efforts did not lead to concrete results for several reasons, such as the difficulty in reconciling opposing visions, the escalation of the Vietnam War, the USSR's determination to achieve nuclear equality with the US, and the invasion of Czechoslovakia by Soviet troops in August 1968.¹⁴³

The decisive impetus that led to new talks was generated by the entry into force of the Nuclear Non-proliferation Treaty and the increasing pressure from non-nuclear states for a disarmament agreement.

3.1. Strategic Arms Limitation Talks I and II

When the SALT negotiations began, the presidency was assumed by an ardent anticommunist but also a flexible and pragmatic man: Richard M. Nixon.¹⁴⁴

The new president succeeded in defining a new American approach in negotiations with the Soviet Union with the help of his Secretary of State Henry A. Kissinger, who believed in a new method, distant from the traditional method of solving Cold War problems that placed emphasis "on military rather than diplomatic solutions." He wanted to combine diplomacy with military power, as he was convinced that without arms control, there was no possibility of lasting détente between the two blocs.¹⁴⁵

¹⁴² Presidential mandate of Lyndon B. Johnson: November 22, 1963 – January 20, 1969.

¹⁴³ Kissinger, Henry. *Gli anni della Casa Bianca*. SugarCo, 1980, pp. 49-50.

¹⁴⁴ Presidential mandate of Richard M. Nixon: January 20, 1969 – August 9, 1974.

¹⁴⁵ Powaski, Ronald E. March to Armageddon...cit., p. 124-130.

The Soviets, following the NPT, also proved willing to engage in talks on arms limitation and disarmament, to the point that as early as the first day of the new U.S. president's inauguration, they sent out a call to resume talks as soon as possible.

This eagerness stemmed from economic and military factors. Indeed, on one hand, the industrial growth rate was declining, and the collectivized farms could not feed the entire nation; on the other hand, they had reached a rough nuclear parity with the U.S. and saw in the SALT talks a chance to maintain it since without an agreement the Americans would probably be able to overtake them once again through the construction of new missiles called Multiple Independently Targetable Re-entry Vehicle (MIRV).¹⁴⁶

Although both sides were favourable to participating in the talks, there remained an abiding note of distrust and scepticism, mainly because it was not only the new principles of the non-proliferation regime that promoted such negotiations but also the potential mutual benefits. Therefore, Nixon and Kissinger agreed on the need to proceed cautiously with SALT in order to understand Soviet intentions.

3.1.1. SALT I: Small Steps Forward

From November 1969 to May 1972, in Vienna and Helsinki, there were seven meetings between the United States and the Soviet Union, where the superpowers engaged in SALT I talks.

The Moscow Summit was held on May 23, 1972, at which Nixon and Kissinger ended the round of negotiations with Leonid Brezhnev, general secretary of the Soviet Communist Party. The final negotiations resulted in the signature of two important SALT agreements: the Anti-ballistic Missile Treaty (ABM) and the Interim Agreement. The *Anti-Ballistic Missile Treaty*, ¹⁴⁷ signed on May 26, was the most significant and comprehensive agreement. It allowed the parties to build exclusively two ABM sites,

¹⁴⁶ The Soviets had also allocated resources for their development, but the U.S. project was more advanced, so an agreement would have slowed the U.S. deployment of MIRV by giving the Soviets time to develop their own. Ibidem.

¹⁴⁷ US Department of State. Secretary of Arms Control and International Security, *Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems*. May 26, 1972. Available on the website <u>https://2009-</u> <u>2017.state.gov/t/avc/trty/101888.htm</u> consulted on May 2024.

one around the capital and the other to protect an ICBM launch zone. Each site was to consist of a maximum of one hundred interceptor missiles, and the construction of missile-related radars was forbidden. In addition, the agreement allowed the replacement and modernization of ABM systems, but it prohibited the development and use of "futuristic" ABM weapons.

To overcome the previous obstacle of inspections, they were to be conducted by national means of verification, and each party was required not to interfere with the other's inspection systems. To help the verification system, an Advisory Commission was formed to establish procedures for implementing the treaty, examine possible violations, and formulate possible additional measures.

The ABM Treaty was not unlimited in duration but could be reviewed every five years.

The *Interim Offensive Weapons Agreement*, ¹⁴⁸ which had a five-year validity, included a ban on the United States and the Soviet Union building additional fixed ICBM launchers, limiting the Americans to 1,054 ICBMs and the Soviets to 1,618. In addition, light ICBMs already deployed before 1964 could not be converted to heavy ICBMs deployed after the same date, but unfortunately, the scope of this ban was diminished as the question of how to define a heavy missile remained unresolved.

An additional protocol to the Interim Agreement restricted submarine-launched ballistic missiles (SLBMs) and ballistic missile submarines. Both the U.S. and the Soviet Union were to dismantle SLBMs and submarines deployed before 1964 in equal numbers, resulting in a total of 710 U.S. SLBMs and 44 submarines and 950 SLBMs and 62 Soviet submarines.

The Interim Agreement did not limit strategic bombers, in which the U.S. had both a numerical and qualitative advantage, road-mobile ICBMs, nor the ongoing MIRV programmes of both sides.

¹⁴⁸ United Nations Treaty Collection, *Interim Agreement on certain measures with respect to the limitation of strategic offensive arms (with protocol)*, Document No. 13445, May 26, 1972. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20944/volume-944-I-13445-English.pdf</u> consulted on May 2024.

The Moscow summit was concluded with the agreement on "*Basic Principles Relations*." In the document, the parties stated that they wanted to define a new relationship based on a "common determination that in the nuclear age there is no alternative to conducting their mutual relations on the basis of peaceful coexistence. Differences in ideology and in the social systems of the USA and the USSR are not obstacles to the bilateral development of normal relations based on the principles of sovereignty, equality, non-interference in internal affairs, and mutual advantage."¹⁴⁹ They also confirmed that they would "continue their efforts to limit armaments on a bilateral as well as on a multilateral basis. They [would continue] to make special efforts to limit strategic armaments. Whenever possible, they [would conclude] concrete agreements aimed at achieving these purposes."

This meeting was the culmination of the period of détente that followed the Cuban crisis.

Unfortunately, not everyone in the administration agreed with Nixon and Kissinger's assessment of the SALT I outcomes. Initially, the SALT strategy adopted by Nixon and Kissinger aroused several perplexities because they linked other sensitive and divisive issues to the arms limitation talks, in particular, the Vietnam War, the status of Berlin, and the Arab-Israeli conflict. According to Kissinger, nothing in history supported "the view that all arms races caused tensions; arms buildups, historically, were more often a reflection rather than a cause of political conflicts and distrust." He believed in the need for SALT agreements, but at the same time, saw the development of arms programmes as "negotiating chips" to be played at the negotiating table because they provided the Soviets with an incentive to reach an agreement.¹⁵⁰

The administration was not pleased by the way the negotiations turned out either. The Liberals claimed that the agreements were insufficient because they did not prevent qualitative improvements in strategic arsenals such as Trident bombers and submarines, and they also did not stop the MIRV programmes that would have led to an enormous

¹⁴⁹ The American Presidency Project, *Text of the "Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics."* May 29, 1972. Available on the website <u>https://www.presidency.ucsb.edu/documents/text-the-basic-principles-relations-between-the-united-states-america-and-the-union-soviet</u> consulted on May 2024.

¹⁵⁰ Kissinger, Henry. *Gli anni della Casa Bianca*...cit., pp. 200-202.

expansion of American and Soviet warheads. Furthermore, the development of weapon systems for bargaining purposes would still be deployed, making future disarmament and arms limitation talks even more complex.

Conservatives, on the other hand, believed that the agreements did too much and granted the Soviets superiority in the number of offensive missiles and ICBM launchers.¹⁵¹

Despite the shortcomings and limited scope of the agreements, they represented a first step towards control of nuclear arsenals within the new non-proliferation regime.

3.1.2. SALT II: A Failure in Achieving Nuclear Disarmament

Unlike SALT I, the SALT II negotiations were marked by greater complexity. The discussions lasted seven years, from 1972 to 1979, and spanned three US presidents: Richard M. Nixon, Gerald R. Ford, and James E. Carter.

The objectives of these talks were to continue the negotiations on strategic offensive weapons that had begun with the Interim Agreement and to conclude a comprehensive and not time-limited agreement.

The sessions focused on the weapon systems to be included in the limitations, the determination of the number of permitted strategic nuclear launchers, and the bans on new, state-of-the-art systems to impose qualitative developments dangerous to global security. They were long and unproductive sessions because the United States and the Soviet Union had widely divergent views that were difficult to reconcile.¹⁵²

In 1974, Gerald R. Ford¹⁵³ became President of the United States. He invited Kissinger to retain his position as Secretary of State to continue his foreign policy efforts, an area in which Ford had no experience. In October of that year, Kissinger succeeded in

¹⁵¹ The President signed the Interim Agreement on September 30. The ABM Treaty and the Interim Agreement came into force in October 1972. Powaski, Ronald E. *March to Armageddon*...cit., pp. 142-145.

¹⁵² US Department of State. Secretary of Arms Control and International Security, *Treaty Between the United States of America and The Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms (SALT II)*, June 18, 1979. Available on the website <u>https://2009-</u> <u>2017.state.gov/t/isn/5195.htm</u> consulted on June 2024.

¹⁵³ Presidential mandate of Gerald R. Ford: August 9, 1974 – January 20, 1977

formulating a proposal that was also widely welcomed by the Soviets, which then became the basis of an agreement signed in Vladivostok, Soviet Union, by the American president and Brezhnev the following month.

This agreement established certain principles on which future SALT negotiations would be based. First, each side would not be allowed to exceed two quantitative limits: a ceiling of 2,400 launchers and a maximum of 1,320 MIRVs. In addition, bomberlaunched missiles and ground-mobile missiles would be included in the overall total, while Soviet heavy missiles would be limited to a maximum of 313 deployments. The proposal also provided for the conclusion of an agreement based on these principles in January 1975 in Geneva. It would be valid for ten years, and further negotiations would begin in 1980 with a view to its expiry in 1985.¹⁵⁴

This agreement, perceived by Kissinger as a breakthrough that would halt the strategic arms race, was once again criticised. ¹⁵⁵ Moreover, during the negotiations in Geneva in 1975 for creating a single agreement, the parties disagreed sharply on salient points such as cruise missiles, the new Soviet bomber, and MIRV control methods.

The change of administration and the complete revision of the SALT talks in 1977 broke the deadlock. At this point, negotiations restarted, which led the United States and the Soviet Union to agree on a framework that combined the Soviet desire to maintain the Vladivostok Treaty programme and the American desire to expand the limitations in SALT II. The framework consists of three parts: a Protocol on the limitation of cruise missiles and mobile intercontinental missiles and qualitative constraints for intercontinental missiles; a Declaration containing principles and guidelines for future talks; and a Treaty based on the Vladivostok Agreement valid until 1985.¹⁵⁶

¹⁵⁴ Archivio Unità, *Dalla fine del «boom» economico una serie di convulsioni politiche L'anno delle crisi*, december 31, 1974. Available on the website https://archivio.unita.news/assets/main/1974/12/31/page 007.pdf consulted on June 2024.

¹⁵⁵According to some critics outside the administration, the agreement did not include any provision for equal launch weights or warhead numbers. On the other hand, the liberals pointed out that the treaty imposed no restrictions on missile or bomber replacements or any aspect of the qualitative arms race. But above all, they emphasised the absurdity of the numerical ceilings included in the agreement: the US would have to build more strategic weapons to reach them. Powaski, Ronald E. *March to Armageddon...*cit., pp. 151-152.

¹⁵⁶US Department of State. Secretary of Arms Control and International Security, *Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic*

Successive negotiations between Washington, Moscow, and Geneva took place between September 1977 and 1979, attended by Carter, ¹⁵⁷ Secretary of State Cyrus R. Vance, and Soviet Foreign Minister Gromyko.

On 18 June 1979, US President Carter and Secretary General Brezhnev signed the SALT II agreement in Vienna. It provided "an equal aggregate limit of 1,320 on the total number of launchers of MIRVed ballistic missiles and heavy bombers with long-range cruise missiles; an equal aggregate limit of 1,200 on the total number of launchers of MIRVed ballistic missiles; an equal aggregate limit of 820 on launchers of MIRVed ICBMs; and an equal aggregate limit on the number of strategic nuclear delivery vehicles -ICBM and SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs)."¹⁵⁸

The treaty banned heavy mobile ICBM launchers, heavy ballistic missile launchers through submarines, and the development of new types of intercontinental ballistic missiles - except for a new type of light ballistic missile on both sides.

An obligation of advance notification in case of test launches and a database of systems included in the restricted categories was established. Furthermore, tests, as in previous SALT treaties, would be conducted through national technical means, with agreement of non-interference or use of deliberate concealment measures.

The *Protocol* prohibited the deployment and flight testing of mobile launchers of intercontinental missiles and the deployment of cruise missiles with a range greater than 600 kilometres on land and sea-based carriers.

The *Declaration* proposed principles for future SALT III negotiations, with the aim of reducing strategic offensive weapons and more stringent qualitative limitations.

Four days after the signing, the agreement was transmitted to the Senate for its opinion and consent to ratification. Unfortunately, on 24 December 1979, the Soviet Union

Offensive Arms. Available on the website <u>https://1997-2001.state.gov/www/global/arms/treaties/salt2-</u><u>1.html</u> consulted on June 2024.

¹⁵⁷ Presidential mandate of James E. Carter: January 20, 1977 – January 20, 1981.

¹⁵⁸ US Department of State. Secretary of Arms Control and International Security, *Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms*...cit.

invaded Afghanistan, so Carter asked to delay consideration of the treaty in the Senate.¹⁵⁹

However, the possibility of obtaining a consensus for ratification was by any means assured, even before the Soviet invasion. The SALT II treaties faced strong opposition, as distrust towards the Soviet Union and arms control was again emerging, as it had been in the periods before détente.

Conservative critics argued that the treaty was too permissive towards the Soviets, who were allowed to keep the heavy intercontinental ballistic missiles and 375 strategically capable Backfire bombers. Moreover, they were convinced that the treaty was not verifiable, as it did not provide adequate controls to ensure and guarantee with certainty that the Soviets complied with it.¹⁶⁰

Liberals, on the other hand, argued that the treaty allowed both the United States and the Soviet Union to continue to develop, improve, and replace weapons systems, thus proving ineffective against the nuclear arms race. Moreover, it limited the number of warheads in the arsenals only minimally.

Delusion and disappointment also came from the non-nuclear states parties to the NPT during the Review Conferences, who repeatedly and on several occasions reiterated their concern about the lack of observance and implementation of Article VI of the NPT, which called for the "cessation of the nuclear arms race at an early date [...] and a treaty on general and complete disarmament under strict and effective international control."¹⁶¹

¹⁵⁹ The Soviets had concluded that the ratification prospects of the agreement were so poor that they had little to lose in their relationship with the United States by invading Afghanistan. Powaski, Ronald E. *March to Armageddon*...cit., pp. 178-181

¹⁶⁰ Ibidem.

¹⁶¹ United Nations Office for Disarmament Affairs, Review Conference of the Parties to the Treaty on the non-proliferation of nuclear weapons...cit.

3.2. From Détente to Discord: The Decline of the Thaw

If the 1960s had brought détente, the 1970s represented its climax and its conclusion. The fervent diplomatic activity of the détente years led to the conclusion of several agreements that helped reinforce the legal obligation between the United States and the Soviet Union to commit to each other not to increase their nuclear arsenals. In the wake of the enthusiasm for the adoption of the Nuclear Non-Proliferation Treaty, the SALT agreements were supposed to be the first steps towards concrete disarmament measures; instead, they merely curbed the arms race. This represented a major diplomatic success, but the goal of general and complete nuclear disarmament became an increasingly distant and complex objective to achieve.

During the same period, as the SALT I and II talks progressed, a debate emerged on the nature and purpose of the détente. The main instigators of this debate were the conservatives, who, with their anti-Soviet rhetoric, pushed for a stricter US approach to the USSR and questioned the effectiveness of détente policies. Indeed, they argued that détente had acquired a one-sided dimension as the Soviet Union gave little in return compared to the benefits ceded by the United States.

This perception also extended to the diplomatic negotiations on nuclear arms control, which were seen as overly concessive towards the Soviets, to the point of undermining American nuclear superiority and, consequently, the security of the nation.¹⁶²

Another reason that led to the progressive distrust in the possibility of fruitful relations between the two superpowers was the promotion of political, military, and economic actions by the Soviets to intensify their presence and influence in the Third World.¹⁶³

A personality particularly opposed to this view was Henry Kissinger, who -during and after his time in the White House- repeatedly responded to criticism from conservatives

¹⁶² Powaski, Ronald E. March to Armageddon...cit., pp. 152-157.

¹⁶³ The invasion of Afghanistan in 1979 was only the culmination of Soviet adventurism in the 1970s. In fact, during this period, the Soviet Union never abandoned the possibility of promoting revolutionary activities in the Third World to expand its influence and support communist movements. Their military support for North Vietnam that began in the 1960s continued into the 1970s, as did their support for Cuba. They also intervened in some African countries, such as Angola, where they gave logistical and military support to the Popular Movement for the Liberation of Angola and in the Middle East during the Arab-Israeli conflict.

and liberals regarding the treaties achieved in the nuclear field and, more generally, regarding détente.

Kissinger rejected the idea that American strategic superiority was essential to maintain US global interests. In this regard, during a press conference in Moscow in 1974, he raised provocative questions: "What in the name of God is strategic superiority? What is the significance of it, politically, militarily, operationally, at these levels of numbers? What do we do with it?" He claimed that "in no crisis since 1962 have the strategic weapons of the two sides determined the outcome." Yet, he recognised that "the race goes on because of the difficulty of finding a way to get off the treadmill."¹⁶⁴

According to Kissinger "American policy [should have] embrace both deterrence and coexistence, both containment and an effort to relax tensions."

In one of his memoirs, referring to the conservatives' idea that they could change the internal structure of the Soviet Union through American political, economic, and military pressure, he wrote: "We will not accept it from Moscow, [...] Moscow will not accept it from us [pressure]. We will wind up again with the Cold War and fail to achieve peace or any human goal."¹⁶⁵

Thus, between the Détente crisis and rising geopolitical tensions, progressive mistrust in the nuclear arms control and disarmament negotiations, and the non-ratification of the SALT II agreement, the non-proliferation regime created by the NPT faced several significant challenges. However, the relevance of the treaty was not undermined. It continued to receive support and gain adherents.

Moreover, diplomatic efforts continued through review conferences conducted every five years, which provided opportunities to discuss non-proliferation issues to strengthen and consolidate the regime.

¹⁶⁴ Kissinger, Henry A. et al. *Policentrismo e politica internazionale*. A. Mondadori, 1969, p. 310.

¹⁶⁵ Powaski, Ronald E. March to Armageddon...cit., p. 156.

Kissinger, Henry A. Anni di crisi. SugarCo, 1982, pp. 243-245.

3.3. The End of Détente and the Intensification of the Arms Race

The 1980 American elections consecrated the victory of Republican Ronald W. Reagan, the first president since Truman who was firmly convinced of nuclear rearmament for the nation's security and quite sceptical about the value of arms control agreements. He shared with conservatives the belief that all previous efforts to conclude treaties had been in vain and had merely weakened the United States by benefiting the Soviet Union.¹⁶⁶

By the time Reagan became president, he had no experience in diplomatic and military affairs, just like his top advisers. This inexperience, especially in national security, led the president to rely on the Committee on the Present Danger (CPD), a group created by opponents of the SALT treaties, including former government officials with security and defence experience. ¹⁶⁷

Through a combination of anti-Soviet rhetoric and super-patriotism, the administration marked the end of détente and the beginning of a new period of intense political, economic, and military competition between the two superpowers. This change led to a renewed arms race, characterised by a significant increase in military expenditure and war technology development, which further intensified Cold War tensions.

¹⁶⁶ In 1976, in Florida, during his campaign for the presidential nomination, he accused Kissinger and Ford of making the United States the "Number Two nation in a world where it is dangerous -if not fatal-to be second best." Ford, Gerald R., *A time to heal: The autobiography of Gerald R. Ford*. W.H. Allen, London, 1979, p. 373.

¹⁶⁷ Online Archive of California, Committee on the Present Danger records, No. 92073. Available om the website <u>https://oac.cdlib.org/findaid/ark:/13030/kt6w1038fh/</u> consulted on June 2024.

In 1981, precisely thirty-two key positions in the Reagan administration were occupied by Committee members who brought anti-Soviet sentiments to power. Some of these were Richard V. Allen, the first security adviser, and General Edward L. Rowny, head of the SALT delegation. Powaski, Ronald E. *March to Armageddon*...cit., pp. 184-185.
3.2.1. The "Star Wars" programme

The nuclear strategy formulated by the Committee on the Present Danger and adopted by the Reagan administration rested on the refutation of the doctrine of mutual assured destruction on which the balance of terror and deterrence strategy had been based since the 1950s.

According to the CPD, the MAD doctrine offered no credible deterrence to the possibility of Soviet aggression because it did not provide for the failure of deterrence except through retaliation that would result in self-annihilation. For this reason, the CPD feared the possibility of a Soviet first strike against American military installations that could eliminate a large number of strategic forces, not allowing the United States to counterattack effectively. Consequently, counterattacking with insufficient forces would undoubtedly have been suicidal, as American cities would have been exposed to second and third Soviet attacks. The United States would have suffered such paralysis as to risk American capitulation to the Soviet Union's nuclear blackmail.¹⁶⁸

The only answer to avoid this dreadful possibility in which the Soviets could have attacked U.S. military installations and kept cities under nuclear blackmail was to enhance American counterattack capabilities. Thus, during the Reagan years, defence spending doubled. ¹⁶⁹ Systems such as the MX ICBM and the Trident submarine were deployed, while weapons shelved during Carter's presidency, such as the B-1 bomber and the neutron bomb, were revived. In addition, considerable resources were used to develop new systems, such as anti-missile weapons and ballistic missile defence (BMD).

This commitment to the new and revived arms race diverted attention from the conclusion of important agreements regarding nuclear arms control. Indeed, during Reagan's first mandate, he failed to conclude treaties on nuclear arms control and limitation.

He expressed only a willingness to negotiate treaties that could correct the imbalances produced by the previous SALT agreements and arrive at parity "weapon for weapon."

¹⁶⁸ This idea relied on the assumption that the Soviets had never accepted the MAD doctrine as the foundation of their nuclear strategy and had ready-to-use first-strike forces and capabilities. Powaski, Ronald E. *March to Armageddon*...cit., pp. 187-189.

¹⁶⁹ During the 1970s, thanks to arms control, military spending had decreased.

For this reason, when the administration proposed to begin negotiations with the Soviets on arms reduction, he enthusiastically agreed.

The SALT talks were renamed Strategic Arms Reduction Talks (START) and formally began in Geneva on June 29, 1982. Reagan, however, before seriously beginning to negotiate about a reduction, would have wanted to close that "window of vulnerability" opened with the previous agreements through rearmament.¹⁷⁰

In 1983, the Soviets abandoned the START talks as the suspicion that Reagan was more interested in developing and producing new weapons rather than reducing them became increasingly justified. Proving this was the president's announcement on March 23, 1983, in which he declared his willingness to activate research and development of a new ballistic missile defence (BMD) system, called the *Strategic Defensive Initiative* (SDI), "a program to counter the awesome Soviet missile threat with measures that are defensive." This defence system went down in history as "Star Wars" because it was such a cutting-edge system that with the technology that existed at the time, to think of being able to develop it seemed science fiction, utopian.¹⁷¹

Reagan's SDI was a completely new defence system. "It [was] not designed to be partial. What [they] want to try to get [was] a defense system that was thoroughly reliable and total."¹⁷² The system was supposed to be able to intercept and strike all possible nuclear warheads that the Soviets might use in a major strategic attack through "beams of subatomic particles, X-rays, or homing rockets."¹⁷³

While the administration was trying to figure out how to start the research process, the Star Wars program was harshly criticized on several fronts.

¹⁷⁰ Powaski, Ronald E. March to Armageddon...cit., pp. 186-187.

¹⁷¹Freedman, Lawrence D. *Strategic Arms Reduction Talks*. Encyclopedia Britannica, 7 November 2023. Available on the website <u>https://www.britannica.com/event/Strategic-Arms-Reduction-Talks</u> consulted on June 2024.

The National Archives and Records Administrations, Ronald Reagan Presidential Library and Museum, *Address to the Nation on Defense and National Security*, March 23, 1983. Available on the website <u>https://www.reaganlibrary.gov/archives/speech/address-nation-defense-and-national-security</u> consulted on June 2024.

¹⁷² Bulletin of the Atomic Scientists, *Onward and upward with space defense*. 39(6), 1983, pp. 4-8.
Available on the website <u>https://doi.org/10.1080/00963402.1983.11459000</u> consulted on June 2024.
¹⁷³ Powaski, Ronald E. *March to Armageddon...cit.*, pp. 210-212.

Some scientists were encountering real technical difficulties: the idea of building the individual components of the defence system might be feasible, but the possibility of combining them and creating a working, complete system seemed impossible.

Adding to the technical difficulties, questionable effectiveness, and very high costs was the problem of the program's incompatibility with the diplomatic arms control effort. The Strategic Defensive Initiative would have repercussions for arms control, triggering an escalation into a new theatre, namely space, by clashing with the provisions of some existing treaties, such as the Limited Test Ban Treaty of 1963, but especially the Outer Space Treaty, which came into force in 1967, and which was the principal legal obstacle to the idea of putting laser beam sources into orbit using nuclear explosions as energy sources.¹⁷⁴ The deployment of a ballistic missile defence system would also have abrogated the ABM Treaty of 1972 and removed some restrictions regarding offensive missiles, as it would have potentially prompted the Soviets to improve their ballistic missile capability and force, destabilising the nuclear balance.¹⁷⁵

In addition to undermining existing treaties, the Star Wars program further complicated START negotiations. After negotiations were interrupted in 1983, they resumed in 1985 on a Soviet proposal, but Reagan never allowed SDI to become a "bargaining chip," convinced that achieving a space shield was more important than surviving existing treaties or negotiating new ones.

This position of the U.S. president emerged clearly during the Reykjavík summit, held October 11-12, 1986. The new Soviet leader, Mikhail Gorbachev, who had played a key role in improving Soviet-American relations and promoting purposeful diplomatic dialogue and fruitful negotiations on nuclear disarmament, proposed several concessions to the United States. In return, Gorbachev demanded strict adherence to interpretations of the ABM Treaty that would ban testing and develop a strategic defence system. However, Reagan rejected any agreement limiting the testing of defensive means, as he did not want to abandon his ambitious project.¹⁷⁶

¹⁷⁴ Calogero, Francesco. Armi e disarmo...cit., pp. 85-88.

¹⁷⁵ JSTOR. Agar, Jon. *The Strategic Defense Initiative and the Politics of Research*. Science Policy under Thatcher, UCL Press, 2019, pp. 188–220. Available on the website https://doi.org/10.2307/j.ctv8xnfk4.11. Consulted on June 2024.

¹⁷⁶ Bundy, McGeorge. Danger and Survival... cit., pp. 570-579.

The meeting ended bitterly. Gorbachev, accusing the American president of missing an opportunity, asserted that "the SDI does not allow [them] to find a way out of the threat that hangs over the heads of mankind."¹⁷⁷

With the Reagan administration more focused on spreading anti-Soviet rhetoric rather than maintaining and nurturing détente, relations between the US and the Soviet Union deteriorated progressively. It follows that the diplomatic quest for disarmament, arms control, and peace at this time was unsurprisingly drawn out, convoluted, and ultimately unsuccessful.

Almost a decade after the talks began, the START I Agreement was signed on 31 July 1991 by US President George H.W. Bush¹⁷⁸ and Soviet Union leader Mikhail Gorbachev, while the SDI programme, so dear to Reagan, was formally abandoned.

START I was the first comprehensive strategic arms reduction agreement, which also imposed defined quantitative limits on strategic offensive means, ICBMs, SLBMs, and heavy bombers, and provided for a rigorous system of on-site inspections to verify and ensure US and Soviet compliance.¹⁷⁹

Five months later, the Soviet Union ceased to exist, and the Cold War ended.

¹⁷⁷ New York Times, *Summit Aftermath: The View from Moscow; Excerpts from Speech by Gorbachev About Iceland Meeting*, Section A, p. 12. October 15, 1986. Available on the website <u>https://www.nytimes.com/1986/10/15/world/summit-aftermath-view-moscow-excerpts-speech-gorbachev-about-iceland-meeting.html consulted on June 2024.</u>

¹⁷⁸ Presidential mandate of George H.W. Bush: January 20, 1989 – January 20, 1993.

¹⁷⁹Freedman, Lawrence D. *Strategic Arms Reduction Talks*...cit.

NTI, Building a Safer World. *Treaty Between the United States of America and the Union of Socialist Soviet Republics on Further Reduction and Limitation of Strategic Offensive Arms (Start I)*, 31 July 1991. Available on the website <u>https://media.nti.org/documents/start_1_treaty.pdf</u> consulted on June 2024.

CONCLUSION

This thesis aims to examine the tumultuous diplomatic path that led to the formulation of the Nuclear Non-Proliferation Treaty in the late 1960s. A path that began with the unsuccessful Baruch Plan but, over time, succeeded in overcoming obstacles, crises, tensions, and detentions, creating an essential structure for nuclear proliferation control and promoting an ongoing international dialogue capable of establishing and renewing fundamental principles for disarmament.

By researching and analysing various diplomatic documents, the study exposes the most salient negotiations. The resulting agreements, such as the Limited Test Ban Treaty, the Outer Space Treaty, the Nuclear Non-proliferation Treaty, and the SALT I and II talks, sought to respond to what was an urgent call for security and peace, which had it not been heeded would probably have had different outcomes.

Despite the significant challenges and problems with implementation and safeguards that the NPT had to contend with during the 1970s and 1980s, this agreement was crucial as it paved the way for more responsible management of destructive weapons and enhanced international stability. The treaty did not end the arms race entirely nor result in complete disarmament, but its importance lies in its *pioneering role*. It created the necessary framework for subsequent nuclear arms control initiatives and established international standards for non-proliferation.

The historical framework presented here does not show us that nuclear arms control can eliminate the danger of nuclear war, but it does show us that it can help decrease the chances of it happening.

We can definitely say that progress towards better global security will be slow and erratic, just as during the years under review in this study. Still, we must learn from the historical experience of non-proliferation and disarmament agreements as they offer valuable lessons for meeting the challenges of the present and the future.

Looking at the current geopolitical scenario, the legacy of nuclear diplomacy continues to influence international relations profoundly. The need for global cooperation and solid trust between superpowers to manage and mitigate nuclear threats remains as relevant as ever, and relying on the pillars of the Nuclear Non-Proliferation Treaty is the only way forward in our efforts to build a safer and more peaceful world.

Recalling the words of one of the writers who accompanied me on this journey, McGeorge Bundy, former US National Security Advisor, "in the long run only mutual trust, not arms control as such, can end any military rivalry. But accepted coexistence and shared support for strategic stability can over time make important contributions to trust."

BIBLIOGRAPHY

Alperovitz, Gar. Un asso nella manica: la diplomazia atomica americana: Potsdam e Hiroshima. Einaudi, 1966.

Aron, Raymond. Paix et guerre entre les nations. Calmann-Levy, 1962.

Bell, P. M. H. *The World since 1945: An International History*. 2. ed., Bloomsbury Academic, 2017.

Bluth, Christoph, Soviet Strategic Arms Policy before SALT. Cambridge University Press, 1992.

Bundy, McGeorge. Danger and Survival: Choices about the Bomb in the First Fifty Years. Random House, 1988.

Butow, Robert Joseph Charles, et al. *Japan's Decision to Surrender*. Stanford University press, 1954.

Calogero, Francesco. Armi e disarmo: i negoziati sulla riduzione e il controllo degli armamenti nucleari, chimici, batteriologici e convenzionali. F. Angeli, 1997.

Delmas, Claude. Armamenti nucleari e guerra fredda. Mursia, 1972.

El Baradei, Mohamed, et al. *L'età dell'inganno: le minacce nucleari e l'ipocrisia delle nazioni*. Castelvecchi, 2011.

Ford, Gerald R., A time to heal: The Autobiography of Gerald R. Ford. W.H. Allen, London, 1979.

Herken, Gregg. *The Winning Weapon: The Atomic Bomb in the Cold War 1945-1950*. Alfred A. Knopf, 1980

Holloway, David. L'Unione Sovietica e la corsa agli armamenti. Il mulino, 1984

Kissinger, Henry A. Anni di crisi. SugarCo, 1982.

Kissinger, Henry A. et al. Policentrismo e politica internazionale. A. Mondadori, 1969.

Kissinger, Henry. Gli anni della Casa Bianca. SugarCo, 1980.

Lu, David J. Japan: A Documented History. The Late Tokugawa Period to the Present, Routledge, 1997.

Paul Warnke cited on Krass, Allan S. The United States and Arms Control: The Challenge of Leadership. Praeger, 1997.

Powaski, Ronald E. March to Armageddon: The United States and the Nuclear Arms Race, 1939 to the Present. Oxford University Press, 1987.

Roberts, Brad. Weapons Proliferation and World Order: After the Cold War. Kluwer, 1996.

Shaker, Mohamed Ibrahim. *The Nuclear Non-Proliferation Treaty: Origin and Implementation* 1959 – 1979, vol. 2. Oceana Publications Inc, London, 1980.

Stimson, Henry L. On Active Services in Peace and War, Harper Brothers, New York, 1948

Stoessinger, John. The United Nations and the Superpowers: China, Russia, and America. New York, 1977.

Truman, Harry S. "Memoirs by Harry S. Truman. Year of decisions: 1945", Hodder and Stoughton, Limited by Richard Clay and Company, Ltd., Bungay, Suffolk, 1955.

Wittner, Lawrence S. The Struggle Against the Bomb. One World or None. A History of the World Disarmament Movement 1954-1970, vol. 1, Stanford, CA, Stanford University Press, 1997.

SITOGRAPHY

Archives at Yale, Henry Lewis Stimson papers (MS 465), *Diaries, 1909-1945*, Original Volumes, v.49 -v.52, 1944 November 1 - 1945 September 21, (July 21-22, 1945). Available on the website <u>https://archives.yale.edu/repositories/12/archival_objects/1961455</u> consulted on March 2024.

Archivio Disarmo, Centro di documentazione sulla pace e sul disarmo, Armamenti Nucleari, *Gli* esperimenti nucleari nell'Oceano Pacifico. Available on the website <u>https://www.archiviodisarmo.it/view/wvNCL23Mer_CI7_z9dHkdTnrlnu4B2dsr6tyrWMnuCo/f</u> unada-esperimenti-nucleari-nell-oceano-pacifico-lug85-.pdf consulted on April 2024.

Archivio Disarmo, *Le proposte di disarmo regionale in zone extraeuropee*, Scheda n. 5, 30 giugno 1986. Available on the website <u>https://www.archiviodisarmo.it/view/d9cNiCoq6O3kPIv5ASMbvPzWUHwQ_kOTw2-KJRL9XqI/sebastiani-le-prop-disarmo-regionale-extraeuropee-giu86-.pdf</u> consulted on May 2024.

Archivio Disarmo, *Non proliferazione e riarmo nucleare*. IRIAD Review, gennaio 2023, pp. 52-62. Available on the website <u>https://www.archiviodisarmo.it/view/NHPmNdqMcyGrghgGaaTjujjlY72aZ3TcLqNlvJRNSEE/i</u> <u>riad-review-speciale-gennaio.pdf</u> consulted on May 2024.

Archivio Unità, Dalla fine del «boom» economico una serie di convulsioni politiche. L'anno delle crisi, December 31, 1974. Available on the website https://archivio.unita.news/assets/main/1974/12/31/page_007.pdf consulted on June 2024.

Arms Control Association. *Timeline of the Nuclear Non-proliferation Treaty*. Available on the website <u>https://www.armscontrol.org/factsheets/NPT-Timeline</u> consulted on May 2024.

Art, Robert J. Between Assured Destruction and Nuclear Victory: The Case for the 'Mad-Plus' Posture. Ethics, vol. 95, no. 3, 1985, pp. 501-502. JSTOR. Available on the website https://www.jstor.org/stable/2381034 consulted on April 2024.

Atomic Heritage Foundation, The National Museum of Nuclear Science and History, *Frisch-Peierls Memorandum*. Available on the website <u>https://ahf.nuclearmuseum.org/ahf/key-documents/frisch-peierls-memorandum/</u> consulted on March 2024.

Atomic Heritage Foundation, The National Museum of Nuclear Science and History, *The Interim Committee*. Available on the website <u>https://ahf.nuclearmuseum.org/ahf/history/interim-committee/</u> consulted on April 2024.

Availableonthewebsitehttps://www.faa.gov/about/office_org/headquarters_offices/ast/media/treaty_Princi_Gov_Acti_States_OST.pdfconsulted on May 2024.

Bourantonis, Dimitris. *The Negotiation of the Non-Proliferation Treaty, 1965-1968: A Note. International History Review*, vol. 19, no. 2, 1997, pp. 347-357. Available on the website <u>https://doi.org/10.1080/07075332.1997.9640788</u> consulted on May 2024. Bourantonis, Dimitris. *The Negotiation of the Non-Proliferation Treaty, 1965–1968: A Note.* The International History Review, vol. 19, fasc. June 2, 1997, pp. 347–57. *DOI.org.* Available on the website <u>https://doi.org/10.1080/07075332.1997.9640788</u> consulted on May 2024.

Bulletin of the Atomic Scientists, *Onward and upward with space defense*. 39(6), 1983, pp. 4-8. Available on the website <u>https://doi.org/10.1080/00963402.1983.11459000</u> consulted on June 2024.

C. I. Barnard, J. R. Oppenheimer, C. A. Thomas, H. A. Winne, and D. E. Lilienthal (Chairman of the Board of Consultants), *A Report on the International Control of Atomic Energy; Prepared for the Secretary of State's Committee on Atomic Energy*, Washington, DC, 1946. Available on the website <u>https://fissilematerials.org/library/ach46.pdf</u> consulted on April 2024.

Defense Technical Information Center, ACDA's Coordination of Federal Arms Control Research and Management of Its External Research Program Still Need Improvement, 1983, pp. 3-27. https://apps.dtic.mil/sti/pdfs/ADA135008.pdf_consulted on May 2024.

Federal Aviation Administration, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies*, 1966.

Fondazione biblioteca archivio Luigi Micheletti, Sorrenti, Deborah. L'Italia nella guerra fredda e i missili americani IRBM Jupiter. Available on the website https://www.fondazionemicheletti.eu/contents/documentazione/archivio/Altronovecento/Arc.Alt ronovecento.09.16.pdf consulted on April 2024.

Freedman, Lawrence D. *Strategic Arms Reduction Talks*. Encyclopedia Britannica, 7 November 2023. Available on the website <u>https://www.britannica.com/event/Strategic-Arms-Reduction-Talks</u> consulted on June 2024.

Hathi Trust, *Foreign Relations of the United States 1961-1963v.7 1961-1963*. Pp. 740-770. Available on the website <u>https://babel.hathitrust.org/cgi/pt?id=osu.32437010144604&seq=5</u> consulted on May 2024.

IAEA, *Atoms for Peace Speech*. Address by Mr. Dwight D. Eisenhower, President of the United States of America, to the 470th Plenary Meeting of the UN General Assembly, Tuesday, 8 December 1953 Available on the website <u>https://www.iaea.org/about/history/atoms-for-peace-speech</u> consulted on May 2024.

IAEA, *Peaceful Uses of Atomic Energy*, United Nations. Available on the website <u>https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull6-3/06305100303.pdf</u> consulted on May 2024.

IFRI, Alberque, William, *The NPT and the Origins of NATO's Nuclear Sharing Arrangements*, Proliferation Papers, February 2017. Available on the website <u>https://isodarco.it/wp-content/uploads/2020/10/alberque_The-NPT-and-the-Origins.pdf</u> consulted on May 2024.

International Atomic Energy Agency Bulletin, *The Negotiation of the Nuclear Non-proliferation Treaty*, vol.22, n°.3/4. Extract from Goldschmidt, Bertrand, *Le complexe atomique*. Editions Fayard, Paris ,1980. Available on the website https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull22-3/223_403587380.pdf consulted on May 2024.

International Atomic Energy Agency, *IAEA/EURATOM Agreement*. Available on the website <u>https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull15-</u>3/15303581016.pdf consulted on May 2024.

International Atomic Energy Agency, *The Evolution of IAEA Safeguards*, International Nuclear Verification Series No. 2, pp. 22-31. Available on the website <u>https://www-pub.iaea.org/MTCD/publications/PDF/NVS2_web.pdf</u> consulted on May 2024.

JSTOR, Bernstein, Barton J. *The Quest for Security: American Foreign Policy and International Control of Atomic Energy, 1942-1946.* The Journal of American History, vol. 60, no. 4, 1974, pp. 1028-1029. Available on the website <u>https://www.jstor.org/stable/1901011</u> consulted on April 2024.

JSTOR, Chace, James. *Sharing the Atom Bomb*. Foreign Affairs, vol. 75, no. 1, 1996, pp. 140-141. Available on the website <u>https://www.jstor.org/stable/20047473</u> consulted on April 2024.

JSTOR, Kohl, Wilfrid L. Nuclear Sharing in Nato and the Multilateral Force. Political Science Quarterly, vol. 80, no. 1, 1965, pp. 88–109. Available on the website https://doi.org/10.2307/2147185 consulted on May 2024.

JSTOR, Mezzalama, Francesco. L' U.R.S.S. e Il Disarmo Atomico, Rivista Di Studi Politici Internazionali, vol. 21, no. 4, 1954, p. 560. Available on the website http://www.jstor.org/stable/43785345 consulted on April 2024.

JSTOR. Agar, Jon. *The Strategic Defense Initiative and the Politics of Research*. Science Policy under Thatcher, UCL Press, 2019, pp. 188–220. Available on the website <u>https://doi.org/10.2307/j.ctv8xnfk4.11</u> consulted on June 2024.

Library of Congress, *Three-Nation Declaration on Atomic Energy*, Washington, November 15, 1945. Available on the website <u>https://maint.loc.gov/law/help/us-treaties/bevans/m-ust000003-1304.pdf</u> consulted on April 2024.

National Security Archive, The George Washington University, *Notes of the Interim Committee Meeting*, Thursday, 31 May 1945, p.14. Available on the website <u>https://nsarchive2.gwu.edu/NSAEBB/NSAEBB162/12.pdf</u> consulted on April 2024.

National Security Archive, The George Washington University, Summary of Target Committee Meetings on 10 and 11 May 1945. Available on the website <u>https://nsarchive2.gwu.edu/NSAEBB/NSAEBB162/6.pdf</u> consulted on March 2024.

New York Times, *Summit Aftermath: The View from Moscow; Excerpts from Speech by Gorbachev About Iceland Meeting*, Section A, p. 12. October 15, 1986. Available on the website https://www.nytimes.com/1986/10/15/world/summit-aftermath-view-moscow-excerpts-speech-gorbachev-about-iceland-meeting.html consulted on June 2024.

NTI, Building a Safer World. *Treaty Between the United States of America and the Union of Socialist Soviet Republics on Further Reduction and Limitation of Strategic Offensive Arms (Start I)*, 31 July 1991. Available on the website https://media.nti.org/documents/start_1_treaty.pdf consulted on June 2024.

Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, *Conferences at Washington and Quebec*, 1943. Available on the website <u>https://history.state.gov/historicaldocuments/frus1943/d521</u> consulted on March 2024.

Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States: Diplomatic papers, 1945, the Far East, China, Volume VII. Available on the website <u>https://history.state.gov/historicaldocuments/frus1945v06/d412</u> consulted on April 2024.

Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, National Security Affairs, Volume I, Document 211, *Report of the General Advisory Committee*, Washington, October 30, 1949. Available on the website https://history.state.gov/historicaldocuments/frus1949v01/d211 consulted on April 2024.

Office of the Historian, Foreign Service Institute, US Department of State. Foreign Relations of the United States, National Security Affairs, Volume I, Document 162, *Report by the Special Committee of the National Security Council to the President*, Washington, October 30, 1949. Available on the website <u>https://history.state.gov/historicaldocuments/frus1950v01/d162</u> consulted on April 2024.

Online Archive of California, Committee on the Present Danger records, No. 92073. Available om the website <u>https://oac.cdlib.org/findaid/ark:/13030/kt6w1038fh/</u> consulted on June 2024.

Pacific Northwest National Laboratory, National Security Training. Bunn, George, *Brief History* of NPT Safeguard Article, February 2006. Available on the website <u>https://nationalsecuritytraining.pnnl.gov/fois/doclib/NPTNegHist.Art.III.6%20Feb.06.pdf</u> consulted on May 2024.

Reaching Critical Will, Disarmament Fora, *History of the NPT 1975-1995*. Available on the website <u>https://www.reachingcriticalwill.org/disarmament-fora/npt/history-of-the-npt-1975-1995</u> consulted on May 2024.

San Diego State University, NSC 68: United States Objectives and Programs for National Security, Washington, April 7, 1950. Available on the website https://loveman.sdsu.edu/docs/1950NationalSecurityCouncilnsc68.pdf consulted on April 2024.

The American Presidency Project, *Text of the "Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics."* May 29, 1972. Available on the website <u>https://www.presidency.ucsb.edu/documents/text-the-basic-principles-relations-between-the-united-states-america-and-the-union-soviet</u> consulted on May 2024.

The Atomic Archive, *Einstein's Letter to President Roosevelt*- August 2, 1939. Available on the website <u>https://www.atomicarchive.com/resources/documents/beginnings/einstein.html</u> consulted on March 2024.

The committee met from June 1970 to March 1971 and was attended by approximately 45 states. International Atomic Energy Agency, *IAEA/INFCIRC/153*. Available on the website <u>https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc153.pdf</u> consulted on May 2024.

The Harry S. Truman Library and Museum, *Statement by the President Announcing the Use of the A-Bomb at Hiroshima*. <u>https://www.trumanlibrary.gov/library/public-papers/93/statement-president-announcing-use-bomb-hiroshima</u> consulted on March 2024.

The Harry S. Truman Library and Museum, United States Strategic Bombing Survey: The Effects of the Atomic Bombs on Hiroshima and Nagasaki, June 30, 1946. Available on the website <u>https://www.trumanlibrary.gov/library/research-files/united-states-strategic-bombing-</u>

<u>survey-effects-atomic-bombs-hiroshima-and?documentid=NA&pagenumber=2</u> consulted on April 2024.

The John F. Kennedy Presidential Library and Museum, Historic Speeches. *Adress during the Cuban missile crisis*, 22 October 1962. Available on the website <u>https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-during-the-cuban-missile-crisis</u> consulted on April 2024.

The National Archives and Records Administrations, Ronald Reagan Presidential Library and Museum, *Address to the Nation on Defense and National Security*, March 23, 1983. Available on the website <u>https://www.reaganlibrary.gov/archives/speech/address-nation-defense-and-national-security</u> consulted on June 2024.

The National Archives and Records Administrations, The Harry S. Truman Library and Museum. *Statement by the President on the Hydrogen Bomb*, January 31, 1950. Available on the website <u>https://www.trumanlibrary.gov/library/public-papers/26/statement-president-hydrogenbomb</u> consulted on April 2024.

The National Security Archive, The George Washington University. *Background Papers for the Declaration on Disarmament*, 1961, p. 6. Available on the website <u>https://nsarchive2.gwu.edu/nukevault/ebb321/16.PDF</u> consulted on May 2024.

The treaty was signed by all Latin American states except Guyana and Cuba. United Nations Treaty Collection, *Treaty for the Prohibition of Nuclear Weapons in Latin America*. Mexico, Federal District, February 14, 1967. Available on the website https://treaties.un.org/doc/Publication/UNTS/Volume%20634/volume-634-I-9068-English.pdf consulted on May 2024.

The U.S. National Archives and Records Administration, *Instrument of Surrender*; September 2, 1945; Records of the U.S. Joint Chiefs of Staff; Record Group 218. Available on the website <u>https://www.archives.gov/milestone-documents/surrender-of-japan</u> consulted on April 2024.

The U.S. National Archives and Records Administration, The Harry S. Truman Library and Museum, *The Potsdam Declaration*, Proclamation, July 26, 1945 (point 13 p. C-2). Available on the website <u>https://www.trumanlibrary.gov/library/personal-papers/subject-file-1943-1980/president-trumans-travel-logs-1945?documentid=NA&pagenumber=118</u> consulted on March 2024.

U. S. Department of Energy, Office of History and Heritage Resources, *Order to Drop the Atomic Bomb*, July 25, 1945. Available on the website <u>https://www.osti.gov/opennet/manhattan-project-history/Resources/order_drop.htm consulted on April 2024</u>.

U.S. Government Information, *Public Papers of the Presidents of the United States: John F. Kennedy*.1961, p. 626. Available on the website <u>https://www.govinfo.gov/app/details/PPP-1961-book1</u> consulted on May 2024.

U.S. National Archives, Washington D.C.: Record Group 77, Manhattan Engineer District Records, Harrison-Bundy File, folder #76, *Franck Report*, June 11, 1945. Available on the website <u>https://www.atomicarchive.com/resources/documents/manhattan-project/franck-report.html</u> consulted on April 2024.

United Nations Digital Library, Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, A_RES_1962(XVIII)-EN, December 13,

1963. Available on the website <u>https://digitallibrary.un.org/record/203965?v=pdf</u> consulted on May 2024.

United Nations Digital Library, Resolution A/RES/1(I), *Establishment of a Commission to Deal* with the Problems Raised by the Discovery of Atomic Energy, (Adopted at the 17th plenary meeting, 24 Jan. 1946, Meeting record A/PV.17). Available on the website https://digitallibrary.un.org/record/671200 consulted on April 2024.

United Nations General Assembly, *Prevention of the Wider Dissemination of Nuclear Weapons*, A/RES/1380/XIV, 20 November 1959. Available on the website <u>https://documents.un.org/doc/resolution/gen/nr0/142/02/pdf/nr014202.pdf?token=rwwq04vNL6</u> <u>WvfLocYF&fe=true</u> consulted on May 2024.

United Nations General Assembly, *Question of disarmament*, A/RES/1722 (XVI), 20 December 1961. Available on the website <u>https://documents.un.org/doc/resolution/gen/nr0/167/75/pdf/nr016775.pdf?token=4d2rO2hPRJf</u> <u>dqVrj2b&fe=true</u> consulted on May 2024

United Nations Office for Disarmament Affairs, Review Conference of the Parties to the Treaty on the non-proliferation of nuclear weapons, NPT/CONF.II/C.II/6, *Working paper containing formulations for the final declaration on article III of the Treaty*, 21 August 1980, p. 113. Available on the website <u>https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/assets/WMD/Nuclear/pdf/finaldocs/1980%20-%20Geneva%20-%20NPT%20Review%20Conference%20-%20Final%20Document%20Part%20I.pdf consulted on May 2024.</u>

United Nations Treaty Collection, Interim Agreement on certain measures with respect to the limitation of strategic offensive arms (with protocol), Document No. 13445, May 26, 1972. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20944/volume944-I-13445-English.pdf</u> consulted on May 2024.

United Nations Treaty Collection, *Partial Nuclear Test-Ban Treaty*, Document No. 6964, August 5, 1963. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20480/volume-480-I-6964-English.pdf</u> consulted on May 2024.

United Nations Treaty Collection, *Treaty on the Non-proliferation of Nuclear Weapons*, Document No. 10485, March 5, 1970. Available on the website <u>https://treaties.un.org/doc/Publication/UNTS/Volume%20729/volume-729-I-10485-English.pdf</u> consulted on May 2024.

US Department of State. Secretary of Arms Control and International Security, *Treaty Between* the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems. May 26, 1972. Available on the website <u>https://2009-2017.state.gov/t/avc/trty/101888.htm</u> consulted on May 2024.

US Department of State. Secretary of Arms Control and International Security, *Treaty Between the United States of America and The Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms (SALT II)*, June 18, 1979. Available on the website <u>https://2009-2017.state.gov/t/isn/5195.htm</u> consulted on June 2024.

US Department of State. Secretary of Arms Control and International Security, *Treaty Between* the United States of America and the Union of Soviet Socialist Republics on the Limitation of

Strategic Offensive Arms. Available on the website <u>https://1997-</u>2001.state.gov/www/global/arms/treaties/salt2-1.html consulted on June 2024.

Vienna Center for Disarmement and Non-proliferation, Policy Brief No. 47 Sokov, Nikolai. US-Soviet Arms Control During Détente: Lessons for the Present, Toda Peace Institute, September 2019, p. 1. Available on the website <u>https://vcdnp.org/wp-content/uploads/2019/09/Nikolai-Sokov_Arms-Control-During-Detente.pdf</u> consulted on May 2024.