The Denuclearization of Kazakhstan (1991-1995)

Dena Sholk
INAF 912
Advisor: Ambassador Steven Pifer
April 30, 2013

NOTE: Please contact the author at dsholk@gmail.com, for more information and/or if interested in citing paper for scholarly publication.
I. Introduction

When the Soviet Union disbanded on December 25, 1991, the Republic of Kazakhstan inherited, in an official count, 1,410 nuclear weapons deployed and in storage. The count had 1,040 warheads associated with 104 SS-18 intercontinental ballistic missiles (ICBMs) stationed at Derzhavinsk and Zhengis-Tobe.\(^1\) Forty Tu-95 Bear-H bombers and 370 associated Kh-55 “Kent” nuclear-armed air-launched cruise missile (ALCM) were at the Semipalatinsk Nuclear Test Site (STS).\(^2\) By April 1995, the entire Soviet nuclear missile, bomber and weapon arsenal left in Kazakhstan had been transported to Russia.

While the denuclearization of Kazakhstan is regarded as a “foregone conclusion,”\(^3\) in reality, it was a challenging diplomatic and technical experience for both Americans and Kazakhstani\(^4\) alike. Between December 1991 and April 1995, Kazakhstan signed the Lisbon Protocol to the START Treaty, joined the International Atomic Energy Agency (IAEA) and ratified the Nuclear Non-Proliferation Treaty (NPT) as a non-nuclear weapons state (NNWS). Among other things, Kazakhstan and the United States established diplomatic relations, concluded the Budapest Memorandum on Security Assurances, eliminated Kazakhstan’s nuclear weapons infrastructure with the support of the Nunn-Lugar Cooperative Threat Reduction (CTR) program, and completed a top-secret joint operation to remove weapons-grade uranium. U.S. investment in Kazakhstan’s oil industry and support for its scientific institutions helped to expand the scope of the bilateral relations beyond non-proliferation issues.

To date, this brief, yet important episode in history is known to the handful of U.S., Kazakhstani and Russian officials involved. In this paper, I tell the story of how U.S. and Kazakhstani officials worked together to remove the world’s fourth largest nuclear weapons arsenal and negotiate strategic policy agreements between 1991 and 1995.\(^5\) I explore the questions: What were the technical, diplomatic and political challenges of denuclearization between 1991 and 1995? What conditions existed, or were created, by U.S. diplomatic and strategic engagement, that allowed for the successful denuclearization of Kazakhstan?

Much of this paper is based on interviews, conducted between September 2012 and April 2013, with American and Kazakhstani officials who were directly involved in the U.S.-Kazakhstan relationship in the early 1990s. After nearly twenty years, recollections on some points invariably differed. In reconciling those differences, I have used my judgment as to what seemed

---


\(^3\) I thank Assistant Secretary of Defense Andrew C. Weber for this term.

\(^4\) “Kazakh” is an ethnic Kazakh while “Kazakhstani” is a citizen of the Republic of Kazakhstan and includes all ethnicities.

\(^5\) While I focus on the disarmament and dismantlement efforts between 1991 and 1995, it is important to note that the denuclearization of Kazakhstan continues to the present day. Kazakhstan’s scientists partner with the international community to clean up residual materials, secure test tunnels and conduct environmental impact assessments. In October 2012, Kazakhstan, Russia and the U.S. completed the Degelen Mountain project, which sealed and secured underground test tunnels around the Semipalatinsk test site.
the most logical, taking into account individuals’ professional positions, geographic location and personal experiences during this time period.

American and Kazakhstani diplomats confronted the challenges of ineffective communication and inadequate or incomplete access to reliable information. The United States had to work closely with Russia to advance denuclearization, while reassuring Kazakhstan, as well as Ukraine and Belarus, of U.S. support for their newfound independence. Kazakhstan confronted numerous challenges, chief among them were safeguarding its sovereignty, independence and territorial integrity with limited human, financial and institutional resources. Ultimately, the successful denuclearization of Kazakhstan was made possible by six conditions:

- President Nursultan Nazarbayev’s commitment to denuclearization and his ability to actualize such a policy within Kazakhstan without opposition,
- Kazakhstan’s need for Western, particularly U.S., investment and technology to develop its hard-to-access energy resources, which would not have been forthcoming unless the country agreed to denuclearize,
- Russia’s determination to become the sole inheritor of the Soviet nuclear weapons arsenal, and willingness to cooperate with the United States and Kazakhstan in pursuit of that goal,
- Security assurances to Kazakhstan provided by Permanent Five (P-5) states of the United Nations (UN) Security Council (UNSC),
- The personal involvement of senior-level policy officials on all sides, and
- U.S. technical and financial assistance through the Nunn-Lugar CTR program to support the elimination of weapons of mass destruction (WMD) infrastructure and expand the scope of U.S.-Kazakhstani relations.

II. Kazakhstan’s Internal Politics

As the first President of an independent Kazakhstan, Nazarbayev enjoyed widespread support among the Kazakhstani public. The country contained a Kazakh-dominated Supreme Kenges (Parliament), newly disenfranchised Russian-dominated industrial sector long accustomed to taking guidance from Moscow, a modest military and a small, apolitical scientific community. This combination of factors created the systemic conditions that allowed Nazarbayev to exercise uncontested authority over most matters concerning foreign policy and security. In other words, Nazarbayev’s support for, and ability to lead the political process without domestic opposition, helps to explain the success of denuclearization.

a. Kazakhstani Population
The Kazakhstani public was largely opposed to retaining nuclear weapons, having suffered the environmental and health effects from Soviet nuclear weapons testing. At the Semipalatinsk Test Site (STS), between 1949 and 1989, the Soviet military conducted 456 nuclear tests, 116 of which were above ground. From 1966 to 1979, seventeen underground nuclear explosions occurred at the Azgir test site in the western Atyrau oblast. Nearly 1.6 million people were exposed to significant doses of radiation, and thirteen of the underground test tunnels at the STS leaked radiation into the atmosphere. While aware of the disastrous health and environmental effects of weapons testing, Moscow repeatedly denied information to Kazakhstani officials and citizens living near test sites. Since the early 1950s, the Soviet Ministry of Health “ignored legal aspects of the question” and issued orders regulating permissible levels of exposure to citizens living near the STS, also known as the Polygon. One Kazakh scientist who worked at Semipalatinsk recalls, “we did not receive any details on the yield and extent of radiological contamination, we did not have the right to take notes and nonetheless we were obliged to not divulge the dark secrets.” In other instances, Soviet doctors were directed to lie to radiation-infected citizens about the cause of illness.

By the 1980s, the Kazakhstani public came to resent Moscow for the secrecy under which it conducted nuclear explosions throughout the country. In 1989, poet Olzhas Suleimenov spearheaded the organization of the Nevada-Semipalatinsk movement, an anti-nuclear, grass-roots organization that pushed for the closure of the STS. Over one million people, including ethnic Russians and Kazakhs, signed petitions demanding a ban on testing in Kazakhstan. Nazarbayev publically appeared alongside Suleimenov in street rallies protesting Soviet nuclear weapons testing. In August 1991, as President of the Kazakh Soviet Socialist Republic, Nazarbayev issued a decree for the closure of the STS. Nazarbayev’s affiliation with the Nevada-Semipalatinsk movement made him a popular and well-regarded leader.

b. Supreme Kenges

Nazarbayev manipulated the configuration of Kazakhstan’s political system to reinforce his dictatorial powers between 1991 and 1995. The Supreme Kenges was repeatedly disbanded, reconstituted and weakened between 1991 and 1995: Kazakhstan operated without a parliament.

---

6 See Map of Soviet nuclear weapons test sites in Kazakhstan in Annex I.
8 “Institute of Nuclear Physics under National Nuclear Center of the Republic of Kazakhstan,” Pamphlet obtained by author Dr. Chakrov in Almaty, Kazakhstan, December 27, 2012.
12 See Werner and Purvis-Roberts.
13 I define the Nevada-Semipalatinsk movement as an eco-nationalist movement. See Jane Dawson, Econationalism: Anti-Nuclear Activism and National Identity in Russia, Lithuania and Ukraine (Durham: Duke University Press, 1996). As such, given that eco-nationalist movements are traditionally proxies for larger political issues, Nazarbayev would have enjoyed widespread support had the Nevada-Semipalatinsk movement not taken place.
from December 1993 to May 1994. The first post-Soviet constitution was adopted in January 1993 and remained in force until December 1993, when Nazarbayev invited the Supreme Kenges to dissolve itself. From March 1995 to August 1995, Nazarbayev ruled by Presidential Decree. It was not until September 1995, when the second constitution was adopted, that local governments gained more defined responsibilities. Even then, the constitution preserved the presidential republic. The changing structure of the Kazakhstani government prevented the formation of a legitimate opposition, party factions, while eliminating legal limits to Nazarbayev’s executive powers in domestic and foreign matters.

When in session, members of the Supreme Kenges did not challenge Nazarbayev’s policies on issues regarding international and security relations. Unlike Ukrainian President Leonid Kravchuk, who wrestled with the Verkhovna Rada (Ukrainian Parliament), or Russian President Boris Yeltsin, who confronted a hostile State Duma (the lower house of the Russian parliament), Nazarbayev did not inherit a legislature opposed to his foreign policy. Elected in 1990, the Supreme Kenges was “disproportionately Kazakh.” There was broad support for denuclearization and moving closer to the West for economic reasons. While the ethnic-Kazakh nationalist political parties Zheltoksan and Alash opposed denuclearization, they were marginal forces and lacked the seats in parliament to wield influence. Given the popularity of the Nevada-Semipalatinsk movement, Zheltoksan and Alash’s policies fell on deaf ears.

After 1991, the Supreme Kenges followed Nazarbayev’s lead and rubber-stamped approval of foreign treaties. Officials in the Supreme Kenges did not have access to documents on the nuclear military-industrial complex in Kazakhstan as well as on the history of nuclear tests. The Supreme Kenges was a lean institution devoid of resources to draft legislation, commission independent investigations, collect data and critically review Nazarbayev’s policies. Many members of the Supreme Soviet relied on Russian sources and cited Russian-language newspapers during the debates of the 1990s. The Supreme Kenges was also grappling with numerous issues in the aftermath of Soviet disintegration, including language, citizenship, land ownership and the privatization of industry.

c. Kazakhstan’s Scientific Community

The scientific community was excluded from political decision-making and physical removal of nuclear weapons from Kazakhstan between 1991 and 1995. Kazakhstani scientists largely viewed the decision to forgo nuclear weapons as a political one made to ensure the country’s security. Dr. Peter Chakrov, director of the Institute for Nuclear Physics (INP) and Dr. Natalia Tomarovskaya, director of the Almaty office of the International Science and Technology Center

---

17 Olcott (2002), 97.
18 Ibid., 92.
22 Nikolai Chakrov and Natalia Tomarovskaya, interview by author, Almaty, Kazakhstan, December 27, 2012.
(ISTC) characterized this period of denuclearization as one when, “the Russians came, took the weapons, and [left] us [the Kazakhstanis] to deal with the rest.” Dr. Sergei Lukashenko, director of the National Nuclear Center (NNC) in Semey added, “Besides, what could we have done?” Moscow retained very narrow conceptions of what scientists, who were not citizens of the Russian Federation, could and could not do during the dismantlement of WMD infrastructure. Had Kazakhstani scientists touched nuclear weapons, this could have violated Kazakhstan’s prospective membership in the NPT as a NNWS, in Moscow’s eyes.

Meanwhile, the exodus of most Russian and Ukrainian scientists after 1991 left Kazakhstan with a small technical constituency. Chakrov estimates that the engineers employed at the INP dropped from nearly 1,200 prior to 1991, to 300 in the early 1990s. Lukashenko guesses that the number of scientists at his institution in Almaty declined from some 800 to 350 after 1990. Despite the outflow of scientists, both Chakrov and Tomarovskaya asserted that Kazakhstan was not entirely drained of its scientific talent. After all, Chakrov, Tomarovskaya and Lukashenko, all ethnic Russians in senior-level positions at research institutions, chose to stay in Kazakhstan. Lukashenko added, “Why go somewhere else equally worse? I like my job…we heard it was just as bad if not worse in other parts of the former Soviet Union…they had no heat and had to wear coats inside.” As I will discuss later, Kazakhstan’s scientific community found alternative research opportunities with support from international donors.

d. The Military

Kazakhstan’s armed forces did not interfere with the decision to give up nuclear weapons because the Kazakhstani National Army did not exist until Nazarbayev signed a decree on May 7, 1992. Nazarbayev had intentionally postponed forming the Kazakhstani military until after Yeltsin established the Russian Ministry of Defense, which he had done only a few hours earlier. At the time of independence in December 1991, 95% of the nearly 200,000 former Soviet military personnel stationed in Kazakhstan were ethnic Slavs from Russia, Ukraine and Belarus. The Russian military leaders still in Kazakhstan neither supported its retaining nuclear weapons nor played a significant role in decision-making on the issue. While some Russian generals sought to maintain their positions under Kazakhstani authority, many were focused on returning to Russia: by 1993, nearly 70% of the Russian officers in Kazakhstan requested Russian citizenship.

Moscow resisted accepting Russian officers from neighboring republics, as the Russian military was suffering from funding and housing shortfalls. By encouraging ethnic Russian officers to

---

23 Ibid.
24 Sergei Lukashenko, phone interview by author, Astana, Kazakhstan, January 3, 2013.
25 Nikolai Sokov, email message to author, April 09, 2013.
26 Chakrov, interview.
27 Lukashenko, interview.
28 Ibid.
31 Barylski, 135.
remain in Kazakhstan, Moscow could use their presence as a source of leverage in negotiations over the fate of non-nuclear military assets Russia desired, such as the Baikonur Cosmodrome and the Sary Shagan anti-aircraft and anti-missile testing facility.\textsuperscript{32}

By late 1993/early 1994, ethnic Russians constituted 80\% of the officer corps, while ethnic Kazaks comprised 45\% of the military personnel, but less than 10\% of the officer corps.\textsuperscript{33} The limited constituency of ethnic Kazakh generals in the Soviet officer corps meant that there was little potential for any of them, who might have favored retaining nuclear weapons, to represent a serious opposition to Nazarbayev. Even if they had wanted to, which I have yet to encounter evidence that suggests ethnic Kazakh generals sought to retain nuclear weapons, they were not capable of contesting Nazarbayev. Whereas the Russian military elite comprised an existential threat to Yeltsin, Kazakhstani officers neither challenged Nazarbayev’s powers nor his policies.

Once organized, the Kazakhstani military did not see a need for nuclear weapons and lacked the technical competence to maintain them.\textsuperscript{34} Rather, the military proved to be a useful tool in advancing Nazarbayev’s policies bilaterally and within the structures of the Commonwealth of Independent States (CIS) and the Collective Security Treaty Organization (CSTO). Nazarbayev appointed Sagadat K. Nurmagambetov, a five-star ethnic Kazakh, Soviet general and World War II veteran, to serve as Kazakhstan’s first Minister of Defense.\textsuperscript{35} In January 1992, still in his Soviet uniform, Nurmagambetov entertained a U.S. delegation, one member of which recalls that he appeared to support Nazarbayev and graciously cooperated with U.S. officials.\textsuperscript{36}

While Nazarbayev’s support for denuclearization was critical, his ability to implement this policy in an environment of fragile domestic institutions, helps to explain the success of denuclearization.

III. Kazakhstan’s Policy and Diplomacy: View from Almaty

The systemic weaknesses of Kazakhstan’s legislature, judiciary, scientific community and armed forces, left no stakeholders capable of stalling or preventing Nazarbayev, allowing him to centralize authority, streamline the decision-making process and eliminate time lags resulting from bureaucratic involvement in matters of foreign policy. Nazarbayev, in effect, possessed a carte blanche in determining Kazakhstan’s future role in the international community. At the time of independence, he technically had several options for handling Kazakhstan’s nuclear weapons.

First, Kazakhstan could have negotiated a leasing agreement with Russia whereby Russian-owned weapons would remain on Kazakhstani soil. However, as already discussed, the Kazakhstani public opposed retaining nuclear weapons, particularly those owned by Russia. Why would an independent Kazakhstan want to serve as a storage site for Russian nuclear

\textsuperscript{32} Courtney, email message to author, April 21, 2013.
\textsuperscript{33} Barylski, 134.
\textsuperscript{34} Courtney, email.
\textsuperscript{36} Susan Koch, interview by author, Washington, D.C., October 22, 2012.
weapons? For its part, Russia would not have wanted nuclear forces or weapons in a locale that it did not control.\(^{37}\)

The second option was to sell its nuclear stockpile piecemeal. In January 1992, Nazarbayev told Under Secretary of State Reginald Bartholomew that several Middle Eastern nations offered to purchase nuclear warheads from the SS-18 ICBMs.\(^ {38}\) Libyan President Mohommar Qaddafi reportedly offered to pay Nazarbayev $5 million for a single weapon.\(^ {39}\) It was later discovered that Iran sought to acquire beryllium, an element frequently used in nuclear weapons to surround the plutonium pit, from the Ulba Metallurgical plant in Ust-Kamenogorsk.\(^ {40}\) This option would have made Kazakhstan an international pariah and kept it from establishing relations with, and securing investment from, the West.

Third, Kazakhstan could have attempted to retain its nuclear weapons stockpile. As a nuclear weapons state (NWS), Kazakhstan would have had to finance the development of a nuclear weapons program and raise a cadre of atomic scientists, engineers, technicians and military officers.\(^ {41}\) The scientists that remained in Kazakhstan after the breakup of the Soviet Union lacked access to the command and control structure, launch and unlock codes, maps, satellite technology and information necessary to operate Kazakhstan’s nuclear weapons. As a NWS, Kazakhstan would have had to recover such information from Moscow, install new circuit and control systems and upgrade its domestic military-industrial infrastructure. Furthermore, retaining Kazakhstan’s nuclear weapons would likely have required restarting nuclear tests, a politically objectionable move.\(^ {42}\) Kazakhstan might have tried to maintain an arsenal without testing, at a risk of less confidence in its safety and reliability. It could not, however, have stopped Russia from seizing the highly sensitive stockpile by force.\(^ {43}\)

Above all, Kazakhstan lacked the industrial base, financial liquidity and economic capacity to build, let alone maintain, a nuclear weapons program. Deciding to retain nuclear weapons would have resulted in political isolation at a time when Kazakhstan could least afford it. To that end, devolution of its nuclear arsenal was necessary for Kazakhstan to welcome Western, particularly American, investment in its oil and gas (O&G) reserves. The Kazakhstani leadership knew that retaining its arsenal would deter Western O&G investment. In 1990, Chevron Oil’s CEO Kenn Derr began negotiating directly with Nazarbayev for rights to develop the Tengiz oil field in Western Kazakhstan along the Caspian.\(^ {44}\) In April 1993, Nazarbayev and Derr signed an agreement creating the joint venture Tengizchevroil (TCO), in which Chevron owned 50% and the remaining half went to Kazmunaigaz.\(^ {45}\) Chevron even sweetened the deal by promising the

\(^{37}\) Courtney, interview.

\(^{38}\) Thomas Graham, Jr., *Disarmament Sketches: Three Decades of Arms Control and International Law* (Seattle: University of Washington, 2002), 135.

\(^{39}\) Roman Vassilenko, speech given at the ATOM Project exhibit, Washington, D.C., December 10, 2012.

\(^{40}\) Jeffrey Starr, phone interview by author, December 12, 2012.

\(^{41}\) Ambassador Larry Napper, phone interview by author, October 18, 2012.

\(^{42}\) Ibid.

\(^{43}\) Courtney, interview.


Kazakhstanis a bonus of $450 million after building and ensuring the operation of a dedicated pipeline from a seaport oil terminal.  

While Kazakhstan’s renunciation of nuclear weapons was not a quid-pro-quo exchange for oil investment, Chevron’s interest in Tengiz presented an immediate, tangible, and credible opportunity for Nazarbayev to generate income in the form of convertible, hard currency. Furthermore, securing the TCO deal with Chevron strengthened Kazakhstan’s ability to control its oil assets. Denuclearization proved to be essential in order for Kazakhstan to cultivate a normal relationship with the United States and clear the way for future Western investment.

The final option, which many considered to be the only real option, was for Kazakhstan to give up its nuclear weapons and become a NNWS. According to former head of the National Security Council Tulegen Zhukeyev, denuclearization was the optimal decision (optimalnoe reshenie) in order to secure Kazakhstan’s long-term “stability, independence, sovereignty, and unity,” (stabilnost’, nezavisimost’, suverennost’ i edinstvo), while providing the foundation for future economic growth. Forgoing nuclear weapons was a strategic mechanism for Kazakhstan to emerge from isolation and join the international community. Above all, Kazakhstan did not want to become a “Central Asian North Korea.”

IV. Kazakhstan’s Policy and Diplomacy: View from Washington

In the aftermath of the collapse of the Soviet Union, the cornerstone of U.S. foreign policy was to ensure that Russia would be the sole inheritor of the Soviet nuclear weapon arsenal. Devolution of the nuclear arsenal to four states would have heightened nuclear terrorism, proliferation and accident risks. In December 1991, U.S. Secretary of State James Baker III met with leaders in Moscow, Minsk, Kiev, and Almaty, where he made clear that only by giving up their nuclear weapons, could Belarus, Kazakhstan and Ukraine have a normal relationship with the United States.

On December 16th, Baker met with Nazarbayev, who was still closely identified with the Nevada-Semipalatinsk movement. While in favor of denuclearization, Nazarbayev notified Baker that he would for the time being keep nuclear weapons for Kazakhstan’s defense and security. Nazarbayev was unwilling to give up the weapons without receiving “firm guarantees” for the new state’s security and was prepared to solve the nuclear issue “when we [people of Kazakhstan] knew we were safe.” In the meantime, he agreed to maintain the existing arsenal in a safe, secure, and responsible manner and adhere to safeguards administered by the IAEA.

46 Levine, 141.
51 Courtney, interview.
52 Unidentified U.S. official, interview by author.
In February 1992, coming off four years of Geneva negotiations with the Soviets on strategic defense and nuclear testing, William Courtney arrived in Almaty as Charge d’Affairs (in August, he presented credentials as Ambassador). His initial priorities were to encourage the Kazakhstani leadership to agree to accept the removal of nuclear weapons from Kazakhstani territory and to become a party to the NPT as a NNWS. Between February and May 1992, Courtney negotiated with Nazarbayev and his national security advisor, Tulegen Zhukeyev, Kazakhstan’s signature to the Lisbon Protocol to the START Treaty, which required Kazakhstan, along with Belarus and Ukraine, to eliminate all strategic nuclear arms on its territory within seven years, renounce possession of nuclear weapons and accede to the NPT as a NNWS. As the chief U.S. diplomat in Almaty, Courtney also sought to reassure other political actors that denuclearization would serve Kazakhstan’s long-term interests, including the attraction of large-scale energy investment.

In Almaty, Courtney’s direct access to Nazarbayev and Zhukeyev streamlined the decision-making process. The three statesmen discussed, alone and in Russian, “international relations theory 101,” the benefits of forgoing nuclear weapons and opportunities for the United States to support Kazakhstan’s economic development. Courtney regularly met with Nazarbayev, who demonstrated a willingness to relinquish nuclear weapons. Nazarbayev saw United States support for Kazakhstan’s sovereignty, independence and territorial integrity as essential, given the uncertainty of Kazakhstan’s future relationship with Russia.

Courtney also met alone with Zhukeyev. Initially, Zhukeyev and Courtney clashed over Kazakhstan’s policies, and in the words of Zhukeyev, “strongly debated” (my silno rugalis’s). Yet, both statesmen noted that they were able to overcome their differences and developed a friendship that continues today (my khoroshie znakomie). They discussed potential investment in Kazakhstan’s O&G sector and how retaining a nuclear-status could deter Western money. Zhukeyev was well aware of his country’s energy potential and investment and technology needs.

Courtney offered American economic assistance, what Zhukeyev called a sort of “Marshall Plan,” that would facilitate Kazakhstan’s economic development. In the early 1990s, Kazakhstan was experiencing rampant inflation, widespread unemployment and socio-political disorder. To Zhukeyev, ensuring Kazakhstan’s sovereignty, territorial integrity and independence while creating an environment conducive to economic development, were necessary to develop the state and prevent radical revolutions in the future.

Diplomats in Washington involved in START negotiations note that Kazakhstani domestic politics did not interfere with the denuclearization question. Ambassador Thomas Graham Jr., a lawyer and seasoned negotiator of nuclear non-proliferation and arms control treaties, characterized negotiations with his Kazakhstani counterparts as “constructive and

55 Courtney, interview.
56 Pifer, 12.
57 Courtney, interview.
58 Zhukeyev, interview. Sentiment also expressed by Courtney.
59 Both Zhukeyev and Courtney brought up O&G investments in their respective interviews with the author.
60 Zhukeyev, interview.
straightforward.” While Graham had to personally appeal before the Ukrainian Rada to support the Lisbon Protocol, in Kazakhstan, he dealt directly with Nazarbayev and never appeared before the Supreme Kenges. Courtney adds that negotiating Kazakhstan’s agreement to denuclearize was not insurmountably challenging, and was facilitated by negotiations directly with the highest levels of authority. In May 1992, after meeting with Yeltsin in Moscow, Nazarbayev conducted his first official visit to Washington, D.C. where he met with President Bush and confirmed his support for acceding to the NPT.


V. Negotiating Security Assurances: Views from Almaty and Moscow

The driving goal of Kazakhstan’s policy, and as well as its foremost diplomatic challenge, was securing “a solid commitment of the [UNSC P-5] nuclear powers to guarantee the sovereignty and territorial integrity of [Kazakhstan] in case of an outside aggression.” Because the security assurances provided to Kazakhstan in the Budapest Memorandum by the United States, Russia and the United Kingdom were not finalized until December 1994, many Kazakhstanis felt that their young country’s national security and sovereignty remained vulnerable and potentially threatened by Russian influence. From December 1991 to December 1994, Kazakhstani diplomats navigated bilateral and multilateral channels conscious of these challenges.

a. Russian Security Assurances to Kazakhstan

Kazakhstan’s main security threat was Russia, with its potential to mobilize ethnic Russian unrest, and its capacity to coerce or intimidate Kazakhstan. Some Kazakhstanis were concerned that Russia would try to reclaim and conquer territory in the industrial north, which contained several million ethnic Russians. While Nazarbayev supported a policy of denuclearization, he was concerned about Russia’s future treatment of an independent Kazakhstan. Attempting to eliminate the potential for ethnic-Russian officers to undermine Kazakhstan’s defense structure, Nazarbayev supported the creation of the CIS unified command under CIS Supreme Commander General Yevgeny Shaposhnikov. Under a unified structure, ethnic Russians officers would retain some connections to Russia and be less likely to undermine Kazakhstan’s military.

For its part, Russia feared that Ukraine’s reluctance to forgo its weapons would jeopardize progress in Kazakhstan. According to Dr. Nikolai Sokov, who was at the time working at the Ministry of Foreign Affairs in Moscow, in early 1992, Nazarbayev "apparently contemplated what might have to do if Ukraine went nuclear: just relinquishing nuclear weapons would have been hardly acceptable." Nazarbayev’s proposal to become a basing country for Russian

---

62 Ibid.
64 Unnamed Kazakhstani official, e-mail message to author, February 1, 2013. Sentiment echoed by Zhukeyev.
66 Alexandrov, 203.
67 Nikolai Sokov, email message to author, April 7, 2013.
nuclear weapons was likely his back-up strategy. Courtney, however, notes that this could have slowed access to Western investment and ignited broader debates in Kazakhstan: in Almaty, he saw no sign that this option was seriously considered. Meanwhile, Washington was concerned that if Ukraine attempted to retain its nuclear arsenal, this would create a “demonstration effect” that would complicate Nazarbayev’s ability to commit to denuclearization.

Following Kravchuk’s visit to Washington in May 1992, Nazarbayev exclaimed “[O]ur neighbor China has nuclear weapons, our neighbor Russia has nuclear weapons. Some Russian politicians have territorial claims on Kazakhstan. There are Chinese textbooks that claim that parts of Siberia and Kazakhstan belong to China. Under these circumstances, how do you expect Kazakhstan to react?” Nazarbayev’s public statements such as this, which indicate a reluctance to forgo weapons, were simply media tactics used to keep Kazakhstan on Moscow and Washington’s radars. In actuality, Ukrainian actions were not about to sidetrack progress made in Kazakhstan’s denuclearization, as Zhukeyev was in constant contact with his Ukrainian counterparts. Ukrainians and Kazakhstanis were aware of the policies each side would publically advocate and privately pursue.

Determined to be the sole inheritor of the Soviet nuclear arsenal, Russia included Kazakhstan in its nuclear umbrella and extended security assurances through the Russian-Kazakh Treaty of Friendship Cooperation and Mutual Assistance (Russian-Kazakh Friendship Treaty) and the Collective Security Treaty (Tashkent Treaty), both of May 1992. Signed by Yeltsin and Nazarbayev in Moscow in May 1992, the Russian-Kazakh friendship treaty crystallized bilateral relations as one between independent, sovereign states. Drafters of the relevant articles in both agreements were motivated by Article 5 of the North Atlantic Treaty (NATO Charter). Enshrining the principle of collective defense, the Tashkent Treaty stipulated that “if an aggression is committed against one of the States’ Parties by any state or a group of states, it will be considered as an aggression against all the States Parties to this Treaty.” Signed by Armenia, Russia and the Central Asian republics, the Tashkent Treaty formally admitted Kazakhstan to the collective security committee of the CIS, thereby “prov[iding] [Kazakhstan] with a nuclear umbrella” and the security guarantees Nazarbayev sought. The Tashkent Treaty obligated Russia to not only refrain from attacking Kazakhstan, but also to defend Kazakhstan, as a sovereign ally and part of Russia’s “nuclear umbrella.”

b. Debates within Kazakhstan over Security Assurances

---

68 Ibid.
69 Napper, interview.
71 Zhukeyev, interview.
72 In Russian, the document is Dogovor o drujbe, sotrudnichestve i vsaimnoi pomoshchi mejdu Rossiiiskoi Federalatsei i Respublikoi Kazakhstan. Most sources I have encountered refer to it as the “Russian-Kazakh Treaty,” rather than “Russian-Kazakhstani Treaty.”
73 Sokov, email.
75 Alexandrov, 78.
Despite the uncertainty surrounding Kazakhstan’s future relationship with Russia, some Kazakhstani scholars argued that the country continued to depend on Russia for its nuclear security. In May 1992, “Kazakhstan was not yet ready to leave the strategic defense system of the former USSR.” In a 1994 publication, Dr. Murat Laumulin, who was at the time the Second Secretary in the Department of International Security and Arms Control of the Ministry of Foreign Affairs, along with Dr. Umirserik Kasenov and Dr. Dastan Yeleukenov, characterized the period between December 1991 and December 1993 as one in which Kazakhstan, lacking sufficient security assurances from the United States, remained under Russia’s nuclear umbrella (pod yadernym zontikom Rossii).

As late as 1995, Kazakhstani scholar Erlan Abenov criticized Kazakhstan’s reliance on “the security guarantees” from the P-5, arguing instead that the country’s only formal security guarantee was provided by Russia through the bilateral Friendship Treaty of May 1992. In December 1993, Laumulin, wrote that “issues related to Kazakhstan’s national security…remain unresolved,” due to the fact that U.S. security assurances were only provided orally and not in writing. The Russian nuclear umbrella extended to Kazakhstan under the provisions of the Tashkent Treaty of May 1992 helped to mitigate, but did not fully resolve, Kazakhstani concerns over their country’s national security.

In this context of uncertainty among members of the foreign policy elite, Kazakhstan’s willingness to work with the United States in dismantling and removing its nuclear weapons arsenal prior to receiving formal, written security assurances, was a strategic risk. While Kazakhstani did not advocate abstaining from establishing relations with the United States – certainly many Kazakhstansis desired close relations with the West – some Kazakhstansis were anxious over their country’s national security and favored a prompt resolution to the question of security assurances from the P-5 states. Given the United States’ capacity to act as a counterweight to Russia and the lure of the TCO contract, Nazarbayev was willing to temporarily overlook the absence of a formal written security assurance in pursuit of denuclearization efforts.

### c. Kazakhstan’s Strategic Pursuit of Security Assurances

Linking Kazakhstan’s right to administratively control the nuclear weapons on its territory with the issue of acquiring security assurances was another media and negotiating tactic used by Nazarbayev to influence the technical and financial assistance Kazakhstan would receive from the United States, and obtain security assurances from the P-5 states.

---

76 Kasenov, et al., 5. Author’s translation of Russian text, “…shto Kazakhstan eshe ne gotov vyiti iz strategicheskoi oboronitel’noi sistemy hyvshego CCCР.”

77 Murat Laumulin, Umirserik Kasenov, Dastan Yeleukenov, *Kazakhstan i Dogovor o nerasprostraneniiya yadernogo orujiya* (Almaty: Kazakhstanski institut strategicheskix issledovanii pri presidente respubliki Kazakhstan, 1994), 4. “…kharakterno stremlenie vyshikh эshelonov vlasti v Kazakhstane ostat’sya pod yadernym zontikom Rossii, neuzhelanie rasstat’nya pod yadernym oruzhiem bez dostatochnykh garantii bezopasnosti…”

78 Alexandrov, 211. In translating a Russian-language source, Alexandrov uses the English term “security guarantees.”

By May 1992, Nazarbayev was cautious of forgoing Kazakhstan’s *de jure* ownership over the country’s nuclear assets without receiving security assurances from all of the P-5 powers, and advocated joint-CIS ownership and Kazakhstani administrative control over the nuclear weapons on its territory. The Minsk and Almaty Agreements of December 1991 created the Joint Armed Forces of the Commonwealth (JAFC) and Strategic Forces of the CIS to manage the nuclear weapons in Kazakhstan, Belarus, Ukraine and Kazakhstan. While these agreements did not specify an individual or state that legally owned the nuclear weapons, they designated the President of the Russian Federation as the one with the authority to launch nuclear weapons in consultation with the heads of Belarus, Kazakhstan and Ukraine.

Persistent in their efforts, Kazakhstan, Ukraine and Belarus in April 1992, issued a joint statement declaring that they, along with Russia, legally owned the nuclear weapons and military assets of the Soviet Union on their territory. At the CIS JAFC meeting in January 1993, Nurmagambetov reinforced the Almaty and Minsk agreements; “We do not say the nuclear weapons are under Russian control. They are under unified command….implemented through the Supreme Command of CIS Strategic Forces.” Despite Kazakhstan’s efforts, Russia managed to diplomatically undermine Nazarbayev’s multilateral strategy. Yeltsin’s appointment of Shaposhnikov as head of the Russian Security Council in June 1993, and the liquidation of CIS High Command at the CIS Defense Ministers’ Meeting in Moscow, eliminated the option of a joint-CIS control over nuclear weapons.

Nazarbayev’s affirmation of Kazakhstan’s right to serve as a “temporary nuclear state” after the signing of the Lisbon Protocol reaffirms the importance of obtaining security assurances to the Kazakhstani leadership from December 1991 to the 1995 NPT Review conference. By 1995, Kazakhstan obtained formal security assurances from all P-5 states. The United Kingdom provided security assurances to Kazakhstan as part of the Budapest Memorandum, which it signed along with the United States and Russia; China and France extended security assurances separately. China, in recognizing Kazakhstan’s sovereignty in January 1992, signaled to Kazakhstan that its nuclear neighbor would respect its sovereignty and the two concluded a bilateral agreement in 1995. The UN Security Council Resolution 948 in 1995 confirmed the security assurances that were presented at the 1995 NPT Review Conference.

Russian security assurances were a top priority – but U.S. security assurances were important. Kazakhstan saw U.S. support as a deterrent to any potential Russian aggression and essential to enhancing Kazakhstan’s security. Zhukeyev asserted that Kazakhstan would not have given up its nuclear weapons had the U.S. failed to provide security assurances. Given Kazakhstan’s geographical position in between nuclear-armed Russia and China, obtaining U.S. security assurances was necessary to counter security threats from Kazakhstan’s neighbors.

---

80 Sokov (2000), 97.
81 Ibid.
82 Ibid., 100.
83 Alexandrov, 205.
84 Ibid., 206.
85 I asked this question in Russian, using *garantiya bezopasnosti* for “security assurances.” The Russian language does not distinguish between “security assurance” and “security guarantee.”
86 Zhukeyev, interview.
VI. U.S. Security Assurances to Kazakhstan

The challenge for American diplomacy was to ensure that Kazakhstan’s predisposition to adopt a policy of denuclearization was actualized and codified by Kazakhstan’s accession to the NPT as a NNWS, while satisfying Kazakhstan’s demands for security assurances. This was accomplished through high-level diplomatic interactions, expanding the scope of bilateral relations, and the encouragement of large-scale U.S. energy investment, such as the TCO project. Written security assurances came in the December 1994 Budapest Memorandum.

Kazakhstan first asked the United States to provide a NATO Article 5 guarantee, what Ambassador Larry Napper labels “the Gold Standard.” While Kazakhstan’s leadership did not seriously believe the country would gain NATO membership, it wanted a promise from the United States of equal significance. In response, the United States offered to refer any complaint by Kazakhstan to the Organization for Security and Co-Operation in Europe (OSCE) or UN if Kazakhstan were to face the prospect of invasion or some other threat to its territorial integrity. The initial U.S. offer, however, was too soft for Kazakhstan.

While the United States was prepared to provide security assurances, a security guarantee, which resembles NATO Article 5, was out of the question. Distinguishing this language is important, as “security assurances” neither creates a collective security alliance nor obligates the United States to intervene militarily. One Kazakhstani diplomat wrote to the author that there was a dispute surrounding the term “guarantee” and “assurances,” as American diplomats “insisted that ‘guarantee’ is a too strong modality, and ‘assurances’ is just a word.”

In December 1993, Vice President Al Gore and Nazarbayev met in Almaty, where they signed the Safe, Secure Dismantlement (SSD) Agreement, establishing the legal framework for the transportation, storage and destruction of nuclear and other forms of weapons of mass destruction on Kazakhstan’s territory. The leaders signed the Nunn-Lugar umbrella agreement and five implementing agreements, which provided $85 million in U.S. denuclearization assistance to Kazakhstan. They also signed a Framework Agreement on elimination of consequences of emergency situations and prevention of proliferation of nuclear weapons and a Bilateral Investment Treaty (BIT).

During Gore’s visit, the Supreme Kenges ratified the NPT, as he was not about to go to Almaty without this. While Kazakhstan was the first of the former Soviet republics to ratify the NPT, Nazarbayev intentionally engineered its ratification to coincide with Gore’s December visit. During his October 1993 visit to Almaty, Secretary of State Warren Christopher notified Nazarbayev of Gore’s intent to visit in Almaty and urged him to ratify the NPT.

---

87 Unnamed Kazakhstani official, e-mail.
91 Koch, interview.
92 Courtney, interview.
refused to ratify the NPT in October, as he wanted to give Gore the “gift” of Kazakhstan’s ratification of the NPT to maximize his international prestige. While courting international officials, Nazarbayev was consolidating power domestically. He invited the Parliament to dissolve itself on December 8th, which voted on December 10th to grant Nazarbayev the right to rule by decree until the March 1994 elections. Nonetheless, on December 13th, the body regrouped to ratify the NPT. In return, Gore came to Kazakhstan with an invitation for Nazarbayev to visit President Bill Clinton in Washington two months later.

Nazarbayev’s February 1994 visit to Washington reaffirmed bilateral cooperation in the areas of nuclear disarmament and nonproliferation. Nazarbayev handed Clinton the original, signed copies of the NPT instruments of ratification, formalizing Kazakhstan’s accession to the NPT as a NNWS. Clinton pledged to increase U.S. assistance to Kazakhstan from $91 million in 1993 to over $311 million in 1994, with $85 million for SSD activities in 1994 and 1995. The meeting also marked the inception of the U.S.-Kazakhstan Joint Commission, or the Gore-Nazarbayev Commission. Modeled after the Gore-Chernomyrdin Commission (est. April 1993), the Gore-Nazarbayev Commission was formed to serve as a permanent framework to manage bilateral relations, discuss nuclear issues, and foster cooperation in Science and Technology (S&T).

The February 1994 meeting provided the venue for the signing of the Bilateral Charter on Democratic Partnership, which asserted bilateral cooperation in strengthening the rule of law, market reforms and human rights, and provided “very soft security assurances.” At the White House press conference, Nazarbayev stated that the “security guarantees, provided by the United States as contained in the Charter as well as by our participation in multilateral cooperation within the framework of partnership in the name of peace … strengthened our confidence in the future of Kazakhstan as a sovereign state.”

For Nazarbayev, public press time with Clinton coupled with the signing of the Bilateral Charter strengthened his legitimacy domestically and internationally on the eve of the March 1994 parliamentary elections. The symbolism of his Nazarbayev’s visit endowed him with room to maneuver diplomatically vis-à-vis Russia and helped to keep Kazakhstan on track towards achieving full denuclearization. While Kazakhstan failed to honor all of its commitments in the Charter, particularly in the areas of rule of law and human rights, the February 1994 visit was nonetheless invaluable in perpetuating Nazarbayev’s leadership, thereby ensuring the continuation of U.S.-supported denuclearization efforts.

The primary component of U.S. security assurance were contained in the “Memorandum on Security Assurances in connection with the Republic of Kazakhstan’s Accession to the Treaty on the Non-Proliferation of Nuclear Weapons” (Budapest Memorandum) signed on December 5, 1994. The Memorandum crystallized what Napper labeled a “grand bargain,” as a compromise

---

94 Napper, interview.
96 Larry Napper, email message to author, March 1, 2013.
97 “The President’s News Conference with President Nursultan Nazarbayev,” 289.
between the NATO Article 5 “gold standard” and the “soft” UN security assurance.98 In the Memorandum, Russia, the United States and the United Kingdom, “reaffirm their commitment to the Republic of Kazakhstan…to respect the independence and sovereignty and the existing borders.” The Memorandum asserted “their obligation to refrain from the threat or use of force against the territorial integrity or political independence” of Kazakhstan.”99 Parties to the Memorandum agreed to use nuclear weapons only in the case of an attack on themselves in accordance with the UN Charter. The language of the Budapest Memorandum was such that it neither required U.S. Congressional approval nor bound the United States to act militarily in Kazakhstan’s defense. The document nevertheless served as an affirmation of Kazakhstan’s sovereignty and committed the United States, Russia and the United Kingdom to “consult with” Kazakhstan in a crisis scenario, at Kazakhstan’s request. By satisfying Kazakhstan’s security concerns without burdening the U.S. with additional security alliances in Russia’s “Near Abroad”, the Budapest Memorandum was in fact a “grand bargain.”

VII. Technical Diplomacy: Negotiating and Implementing CTR

I have so far described the political diplomacy, or to use the Russian term “vneshnyaya politika,” of the denuclearization of Kazakhstan between December 1991 and December 1994. The other equally important component of denuclearization involved technical diplomacy, which I define for this paper as the negotiations over the development of CTR projects, drafting of the CTR umbrella and implementing agreements and the physical implementation of CTR programs. The successful conduct of technical diplomacy was critical for Kazakhstan to honor its commitments as a signatory to the Lisbon Protocol and a NNWS to the NPT. In other words, technical diplomacy was necessary to realize the agreements determined through political channels.

In Kazakhstan, the initial phase of technical diplomacy began with Bartholomew’s January 1992 trip to Almaty, and culminated with Gore’s December 1993 with Gore’s visit.100 Subsequent periods of technical diplomacy entailed the negotiation of projects, the hiring of contractors, and the full implementation of weapons removal and silo destruction.101 Technical diplomacy continued, as additional funds were made available on a yearly basis, expanding existing projects and creating new ones. Because all tactical nuclear weapons (TNWs) had been removed from Kazakhstan by the SRF by February 1992, in accordance with the December 1991 Belovezhskoe Agreement,102 the first phase of U.S. technical diplomacy focused on facilitating the removal and transport of strategic nuclear weapons from Kazakhstan to Russia.103

At the time of independence, the Russian Strategic Rocket Forces (SRF) guarded the STS, Derzhavinsk, a storage facility for SS-18 ICBMs, and Zhengis-Tobe, an ICBM base site. The

98 Napper, interview.
100 Mike DeMeo, interview by author, Washington, D.C., November 9, 2012
101 Ibid.
103 Pifer, 7. START required that the 308 SS-18 silo launchers be reduced by half.
SRF patrolled the STS as late as 1994.104 Kazakhstan and Russia agreed that the SRF would carry out the physical removal of weapons, as Moscow sought to safeguard what it considered sensitive information and Kazakhstan lacked military personnel with the necessary training.

With $400 million for Fiscal Year (FY) 1992 to support CTR projects all of the former-Soviet republics, the Department of Defense (DoD) worked to facilitate the safe and secure removal and transport of strategic nuclear missiles and warheads from Kazakhstan to Russia and help it comply with its START commitments through the elimination of strategic offensive arms delivery systems, such as ICBM silos. Of the initial $400 million, Kazakhstan received two tranches of $85 million for these goals.105 Between FY1992 and FY2008, cumulative CTR assistance to Kazakhstan totaled $341 million.106

### a. CTR Negotiations

While the United States and Kazakhstan shared the goal of disarmament, they diverged over how best to spend CTR funds. Kazakhstan’s diplomats prioritized environmental assessment and public health programs in the regions surrounding the Soviet nuclear test sites, whereas American officials were obligated to first fulfill their Congressional mandate to “prevent the proliferation of weapons of mass destruction.”107 Reconciling these differences required intensive diplomacy. Neither the Americans nor the Kazakhstanis received 100% of their demands for every CTR project, as the number of proposals on the table created negotiation room for each side. Zhukeyev insists that negotiating Kazakhstan’s CTR package was a positive and constructive exercise, as each final project reflected a “60-40 or 70-30 compromise.”108

The American and Kazakhstani officials negotiating the details of CTR projects confronted the challenge of the lack of effective communication. Kazakhstan had a small diplomatic corps, many of whom lacked technical expertise and professional experience conducting international negotiations, as during the Soviet period, Moscow handled all foreign relations.109 One American official observed that, during the earliest negotiations, Kazakhstani diplomats presented a map with black, paint-ball like splotches, exclaiming, “look, look,” while failing to explain that those areas represented Soviet weapons test sites. The Kazakhstani diplomats did not know how to articulate their requests for CTR funds to be used in projects to clean up residual, radioactive materials and assess the damages done to the population and land.

In accordance with traditional Kazakh cultural etiquette, Kazakhstani diplomats demonstrated exceptional hospitality and smiled when negotiating with their U.S. counterparts, yet hesitated to indicate when they had an objection or were lost in translation. “I wish they told us when they did not agree,” one U.S. official shared. In some instances, Kazakhstani scientists simply lacked

---

104 Weber, interview.
105 Barylski, 136.
108 Zhukeyev, interview.
109 Phillip Dolliff, interview by author, Washington, D.C., November 9, 2012
the answers to questions posed by U.S. officials, as they previously followed orders from Moscow.\textsuperscript{110} In other cases, Kazakhstan’s diplomats did not appreciate the size and complexity of the U.S. bureaucratic system. One young, junior DoD official who negotiated CTR packages in Almaty, Scott Schless, brought a Kazakhstani delegation to Washington to meet with senior-level officials. Following protocol, Schless did not sit in on the senior-level Washington meeting, only to be approached by his Kazakhstani colleague afterwards asking, “why weren’t you in the meeting, are you okay?” Given the emphasis of Central Asian culture on personal relationships, the Kazakhstanis did not understand why they were dealing with a new individual in Washington, rather than with Schless.

While anecdotal, these vignettes highlight the communication challenges faced by both American and Kazakhstani diplomats: this was a “training wheels” experience for both sides.

\textbf{b. CTR Implementation}

The technical implementation of Nunn-Lugar assistance was not so simple. Kazakhstanis were anxious about Russian treatment of Kazakhstani territory during the transportation of SS-18 warheads. In 1993, American engineers from the Lawrence Livermore Laboratory modified a Russian design of the nuclear weapons transportation railcar, installing heat-reflecting materials, alarms, and control systems, among other features in the railcars to improve safety.\textsuperscript{111} Upgrade kits with these modifications were retrofitted into Russian weapons transportation railcars. The U.S. also provided to Russia a train of rail cars filled with emergency equipment that could be used to deal with any accident involving a train shipping nuclear weapons. Kazakhstan also requested a similar train of railcars filled with emergency equipment.\textsuperscript{112}

When shipping nuclear weapons, Russia usually employed one train of railcars filled with emergency gear following a train of railcars containing nuclear weapons, but for shipments in Kazakhstan, the Kazakhstan train of railcars filled with emergency equipment followed behind the Russian weapons and emergency equipment trains, at the Kazakhstanis insistence. DoD official Michael DeMeo oversaw the SS-18 removal program in Kazakhstan, and suspects that the Kazakhstanis insisted on the additional emergency equipment train because they did not trust the Russians to fully and properly clean up Kazakhstani territory were an accident to occur. After enduring forty years of environmental damage at the STS, the Kazakhstanis wanted the weapons to return to Russia without incurring additional destruction. The transportation of SS-18 warheads to Russia cost more than it should have, but the United States was willing to fund the extra train to facilitate the shipment of nuclear warheads out of Kazakhstan to Russia.\textsuperscript{113}

While U.S. officials adopted a facilitative role in implementing CTR projects in Kazakhstan in order to not offend Russia, problems arose over gaining access to information, as Moscow sought to protect what it considered to be sensitive data. Moscow’s control over information obstructed the process of blowing up the 104 SS-18 missile silos in Kazakhstan, a $78 million

\textsuperscript{110} Scott Schless, interview by author, Crystal City, Virginia, January 31, 2013.
\textsuperscript{111} DeMeo, interview.
\textsuperscript{112} Ibid.
\textsuperscript{113} Ibid.
CTR project.114 In January 1994, a DoD official traveled to Kazakhstan to measure the empty SS-18 missile silos at Zhengiz-Tobe to prepare a call for Request for Proposals (RFP) from contractors for the silos’ destruction. Upon discovering that the DoD posted the dimensions of the SS-18 silos on the Internet, which Washington considered to be typical of the bidding process, Moscow was upset and complained to Kazakhstan, which notified Washington. The missile design was removed from public domain.115 At the time, the dimensions of the SS-18 silos were still considered highly classified in Russia, so the United States’ release of this information was considered offensive.116 An October 1994 Pentagon report asserted that, “assistance requirements for the dismantlement of the SS-18 silos in Kazakhstan has been delayed until Kazakhstan and Russia resolve several question of control and responsibility for the elimination of the silos.”117 In 1995, the Pentagon publicly stated “that progress has been delayed due to Russian concerns over responsibilities for silo destruction and potential U.S. access to sensitive silo design templates.”118 Only after explaining to the Russians that they were following standard procedures, were officials able to proceed. All SS-18 silos were destroyed by August 1996.

Neither Kazakhstan nor the United States gained full access to historical and more recent data on Soviet nuclear weapons tests, stockpiles and programs in Kazakhstan. Only Moscow possessed the command-and-control structure, launch and unlock codes, maps, target coordinates, satellite control and data on the weapons throughout the Soviet Union. After 1991, Moscow was understandably unwilling to share such information with the FSU states.119 Because Russia inherited most of the Soviet military hardware, it is understandable that it did not want the United States to have access to information about the nuclear weapons tests, silo design and missile operations; no sovereign military would want to disclose the technical details of their weaponry. At the same time, Moscow resisted releasing data on the environmental consequences of nuclear tests, which was a particularly contentious issue for the Kazakhstani public. Furthermore, many of the Soviet government archives had been relocated from Almaty to Moscow.120 According to Togzhan Kassenova’s archival research, several cables were sent from Almaty to Moscow requesting information on Kazakhstan’s nuclear history, which were repeatedly ignored.121

In other instances, the United States overcame information shortages by including Russian scientists who were either stationed in Kazakhstan during Soviet times or were living in Russia and had access to the necessary data. American defense officials went through Kazakhstani channels rather than approach their Russian colleagues directly.122 Officials were cautious not to appear too aggressive to Russians while affirming their support for Kazakhstan’s

115 DeMeo, interview.
116 Sokov, email.
119 Craig Bell, interview by author, Astana, Kazakhstan, January 3, 2013. Sentiment also expressed by Weber.
120 Weber, interview.
121 Kassenova, interview.
122 Schless, interview.
denuclearization. For example, at the STS, American officials provided equipment, financial support and physical security, then stood by and watched while the SRF performed the manual work of inspecting test tunnels and surveying test sites, among other things.\textsuperscript{123}

There were several obstacles within the U.S. government (USG) to the denuclearization of Kazakhstan. While the CTR Act passed in 1991, authorizing $400 million in assistance for all of the former Soviet republics, the first appropriation came in response to the National Defense Authorization Act for FY1994.\textsuperscript{124} The lack of previous Congressional appropriations forced DoD to generate resources from its Operations and Maintenance (O&M) accounts in FY1992 and FY1993.\textsuperscript{125} Officials negotiated agreements in Kazakhstan, returned to the Pentagon and requested funds from the DoD Comptroller, who then withdrew resources from one of the Services, such as the Air Force or the Marines.\textsuperscript{126} The DoD was later authorized to spend $400 million in FY1994, $380 million in FY1995 and $300 million in FY1996 to all of the former Soviet republics.\textsuperscript{127} While Congress authorized the transfer of $800 million from DoD budgets for CTR programs, the lack of a clear funding mechanism and appropriations was a source of frustration for DoD officials, who at times felt as if they were “running on empty.”

In addition to intra-USG financial challenges, officials struggled in determining how to best allocate funds. While the National Security Council (NSC) staff initially led the budget allocation efforts for CTR, responsibility for administering CTR funds shifted to the DoD under the Clinton Administration.\textsuperscript{128} While DoD was responsible for administering CTR funds, it was required to consult with other agencies. DoD sought to support projects that would eliminate former Soviet strategic weapons, while regional specialists advocated environmental assessment programs. Most agencies realized that for the short term, weapons-elimination was all the United States could afford. DoD officials were forced to balance the demands of the Kazakhstanis, interests of other USG agencies, and regional geopolitics, when determining CTR projects.

The personal involvement of senior-level DoD officials helped ensure the success of technical diplomacy in Kazakhstan. Secretary of Defense William Perry travelled to Almaty in March 1994 to sign an agreement providing Kazakhstan with $15 million for defense industry conversion projects. In turn, Nazarbayev reassured Perry that the SS-18 ICBMs in Kazakhstan would be sent to Russia for dismantling.\textsuperscript{129}

Negotiating the compensation package for the fissile material recovered from the SS-18 warheads on Kazakhstani territory was another challenge.\textsuperscript{130} In February 1994, after 12 SS-18 missiles had been removed, Kazakhstan suspended the process of deactivating warheads until it

\begin{thebibliography}{99}
\bibitem{123} Ibid.
\bibitem{125} Susan Koch, email message to author, April 3, 2013.
\bibitem{126} Ibid.
\bibitem{127} Woolf, “91144: Nuclear Weapons in the Former Soviet Union: Location, Command and Control.”
\bibitem{128} Koch, email.
\bibitem{129} Alexandrov, 207.
\end{thebibliography}
reached an agreement with Russia over compensation for the value of the fissile material.\textsuperscript{131} A month later, Yeltsin and Nazarbayev reportedly agreed to terms of compensation but did not release details. In compensation for the cruise missiles that were transferred to Russia by the end of 1994, Kazakhstan received 42 modern aircraft, including 21 Mig 29s in 1995 and 30 additional aircraft to be delivered in the future.\textsuperscript{132}

I have been unable to locate information on how precisely, if at all, Russia compensated Kazakhstan for the fissile material recovered from the TNWs previously on its territory. If such an agreement exists, it is possible that the two parties agreed to keep it a secret indefinitely. For example, Moscow agreed to provide Ukraine compensation for the fissile material recovered from the warheads of TNWs previously on Ukrainian territory, but insisted that the deal be kept secret, likely to avoid triggering demands from other post-Soviet states from which TNWs had been removed.\textsuperscript{133}

After overcoming communication challenges and information shortages, the implementation of CTR, in the areas of weapons dismantlement and removal, proceeded without major disruptions. By September 1994, 44 SS-18 ICBMs were deactivated with their warheads removed.\textsuperscript{134} As of December 1994, all 370 AS-15 nuclear-tipped ALCMs, plus 12 SS-18 ICBMs and associated 120 warheads had been transported to Russia for dismantlement.\textsuperscript{135} According to one SRF commander, between December 1994 and September 1996, 989 warheads, 98 ICBMs, 104 combat silos for SS-18 ICBMs and two training silos were dismantled.\textsuperscript{136} By April 1995, all SS-18s had been transported back to Russia for dismantlement.

VIII. Additional Components of CTR

In addition to weapons removal, Nunn-Lugar assistance to Russia and to Kazakhstan strengthened Kazakhstan’s capacity to adhere to its START commitments. In 1993, the U.S. provided to Russia Kevlar blankets from U.S. Army surplus stocks that could be draped over warheads or warhead canisters to provide an additional level of security. The U.S. also provided to Russia supercontainers designed for storing and transporting warheads. By early 1995, Kazakhstan received equipment for a government-to-government communications link (GGCL) that was used to transmit notifications to Washington, Russia, Ukraine and Belarus concerning strategic weapons movements and destruction of silos.\textsuperscript{137} “The GGCL was a DoD initiative to enable the non-Russian parties to the START Treaty to issue START-related notifications directly to the U.S. without having to communicate through Moscow, thereby strengthening their sovereignty as well as their ability to implement START and fulfill their Lisbon Protocol commitments.”\textsuperscript{138} To support the GCCL, the U.S. purchased computers and provided the Kazakhstani government with free satellite usage for one year.\textsuperscript{139}

\textsuperscript{131} Woolf, “91144: Nuclear Weapons in the Former Soviet Union: Location, Command and Control.”
\textsuperscript{132} Ibid.
\textsuperscript{133} Pifer, 18.
\textsuperscript{134} De Andreis and Calogero, 7.
\textsuperscript{135} Ibid., 14.
\textsuperscript{137} Lockwood, 13.
\textsuperscript{138} Scott Schless, email message to author, April 15, 2013.
\textsuperscript{139} DeMeo, interview.
The United States used Nunn-Lugar assistance to broaden the scope of relations between the U.S. and Kazakhstan by strengthening the country’s S&T institutions. In 1993, with support from the Soros Foundation, the Ministry of S&T provided individual grants of $500 to some 250 scientists.\textsuperscript{140} By 1994, the Ministry of S&T supported nearly 700 research projects in Kazakhstan.\textsuperscript{141} The U.S., European Union, Japan and Russia established the ISTC in November 1992 in Moscow to provide research grants to scientists who previously worked in the Soviet military-industrial complex, and Kazakhstani scientists were allowed to apply to the ISTC for grants.\textsuperscript{142} The ISTC created opportunities for scientists to apply their talents for peaceful purposes and learn how to conduct research in accordance with global best practices and standards for publishing. ISTC projects required that at least 50% of the grant-receiving scientists previously be employed in the Soviet nuclear-industrial complex.\textsuperscript{143} Many S&T projects that began in 1992 with Nunn-Lugar assistance continue today, with the scientists conducting quality research.\textsuperscript{144}

\section*{IX. Project Sapphire}

Project Sapphire was a top-secret bilateral operation to remove nearly 600 kg of highly enriched uranium (HEU) from the Ulba metallurgical plant in Ust-Kamenogorsk, Kazakhstan, to Oak Ridge National Laboratory in Tennessee in 1994. At an enrichment level of 90\%, the HEU at Ulba was usable for nuclear weapons. While Project Sapphire was an independent episode in the history of Kazakhstan’s denuclearization, the operation echoed the challenges associated with unclear communication and inadequate access to information evident in the negotiations surrounding security assurances and the initial provision of CTR assistance. Project Sapphire was made possible by the trust that had accumulated between Kazakhstan and the United States as well as the successful efforts of U.S. technical diplomacy and high-level political diplomacy.

Since 1976, the Ulba metallurgical plant had been storing HEU was produced in Russia and sent to Ulba to be fashioned into fuel rods for nuclear power reactors onboard Soviet Alfa submarines.\textsuperscript{145} The Ulba HEU was overlooked until 1993, when Kazakhstan was evaluating its domestic inventory of nuclear materials while concluding a safeguards agreement with the IAEA. According to a Kazakhstani official who got involved in Project Sapphire in early 1994:

\begin{quote}
“the inventory of fissile material became a priority in the framework of discussions with the IAEA over Kazakhstan[’s] ability to fulfill its obligations for nuclear safeguards. Hence the problem arose from discussions of what to do with the HEU from the Ulba facility. The Americans were told about the HEU stock at Ulba because Moscow expressed unwillingness to deal with remnants of an aborted experiment. The IAEA advised Kazakhstan that the US would be the second best option with appropriate
\end{quote}

\textsuperscript{140} Tomarovskaya, interview.
\textsuperscript{141} Ibid.
\textsuperscript{143} Tomarovskaya, interview.
\textsuperscript{144} Alice Gast, interview by author, Washington, D.C., October 14, 2012.
expertise and necessary tools, plus sure bet from the non-proliferation point of view. The Kazakh side informed Moscow that the Americans would take the load for safekeeping on their territory."146

In mid-1993, Vitaly Mette, factory manager at the Ulba plant, informed Courtney and Andrew (Andy) Weber, the political-military attaché at the U.S. Embassy, of the presence of 25 kg of HEU at his facility.147 Nazarbayev, of course, had previously given his approval for Mette to do so.148 Cables were exchanged between Washington and Almaty over the matter. Later that year, around November, Mette informed Weber that there was actually 600 kg, not 25 kg, of HEU sitting in Ulba. More cables were sent.149 Washington requested additional information on the HEU and was skeptical of Mette’s claim and motivations, given the reports of the black market sale of nuclear materials left over from the Soviet Union.150 While there was reportedly a lot of discussion within State over the Ulba HEU, it lacked the resources to do anything.151

The question of what to do with the Ulba HEU was brought up in a January 1994 meeting of a NSC interagency group at the White House chaired by Rose Gottemoeller, Director for Russia, Ukraine and Eurasia Affairs on the NSC staff.152 At the meeting, Assistant Secretary of Defense Ashton Carter volunteered the DoD, which had the financial capacity and legal authority to remove the HEU if needed, to assume the principal responsibility for resolving the Ulba HEU matter. Authority for removing the HEU thus transferred from DoS to the DoD. That day at the Pentagon, Carter appointed the Deputy Assistant Secretary of Defense for Russia, Ukraine and Eurasia, Jeffrey Starr to organize an interagency "Tiger Team" to plan and execute the removal of the HEU "within three months." Doing so, however, became an "eleven month odyssey."153

The Tiger Team first sent Elwood Gift, a chemical-nuclear engineer from Oak Ridge, to visit the Ulba facility with Weber in late February/early March 1994.154 Upon returning to Almaty, Gift and Weber informed Courtney that there was in fact 600 kg of HEU in Ulba, and that the HEU was stored in containers that allowed the oxidization of the uranium to occur, thereby producing an unstable chemistry. The facility’s lack of security provisions, including a “civil war padlock,” was another reason for concern. Courtney communicated this to the senior leadership in Washington and advised steps be taken to secure the HEU.155 The Tiger Team began discussions while Gift was still in Kazakhstan. A few weeks after Gift returned to the United States, his lab analysis of samples collected at Ulba confirmed that the uranium was, in fact, 90% enriched. Planning for Project Sapphire heated up. Washington instructed Courtney to engage Nazarbayev and offer to cooperate with Kazakhstan in securing the HEU.

146 Unnamed Kazakhstani official, email.
147 Courtney, interview.
148 Zhukayev, interview.
149 Weber, interview.
151 Starr, interview.
152 Ibid.
153 Ibid.
154 Courtney previously obtained permission from Nazarbayev to grant an American scientist access to Ulba.
155 Courtney, interview.
In Kazakhstan, Nazarbayev designated deputy prime minister S&T Galym Abilsiyitov to handle the matter. Over the next year, Courtney briefed Nazarbayev and Abilsiyitov on U.S. developments, plans, and on U.S. diplomatic engagement with senior Russian leaders about potential options for the disposition of the HEU. Nazarbayev also appointed Bolat Nurgaliyev, then Director of the International Security and Arms Control Department in the Ministry of Foreign Affairs, to serve as Deputy Foreign Minister in April 1994. Nurgaliyev subsequently assumed the responsibility of coordinating Project Sapphire’s ground operations, working with Weber. Vladimir Shkolnik, Minister of S&T, was sent to Washington during the summer of 1994 to negotiate a compensation package.

U.S. participants had different views regarding the timeliness of U.S. and Kazakhstani actions. Courtney wishes that the United States had learned of the Ulba HEU sooner, but understood that Kazakhstan wanted to proceed carefully. Weber notes that the United States found out relatively early, as there were numerous complex issues being addressed in the early 1990s. Starr adds that the United States did not find out late, but was too slow to act.

In interviews with the author, several officials estimated that the Russians were “in denial” about the HEU at Ulba; it was the “incompetence of the Russians to not tell the Americans.” Even though information flows in Moscow were likely interrupted by the collapse of the USSR, certainly some Russian officials were aware of the HEU at Ulba. According to Zhukeyev, while the Kazakhstanis may not have been informed by Moscow, they were aware of the HEU at Ulba at the time of independence simply because it was on their territory. Zhukeyev commented that Project Sapphire did not necessarily occur late, but that the young government had to first secure Kazakhstan’s independence before addressing technical minutia.

Unaware of the extent of rapport between Kazakhstan and Russia over the Ulba HEU, the United States first asked Russia if it wanted to take the material back. The question was posed by a U.S. diplomat in Moscow to a senior Russian official who should have been aware, but denied that the HEU existed in Kazakhstan. The U.S. did not press Russia to accept the HEU from Ulba, but dealt with the issue “gently,” according to Courtney.

While Russia did not want the Ulba HEU, was the United States obligated to inform Russia of its intent to purchase the fissile material? Some officials feared that Russian knowledge of Project Sapphire could be a potential source of information leakage. At the Pentagon, after much internal debate as to whether to tell Russia of the U.S. intent to remove the HEU from Ulba and transport it to the United States, Starr’s Tiger Team brought the issue to the Russians through behind-the-scenes channels in the spring of 1994. The initial Russian response to Starr was that the Ulba HEU was Russian property and that the United States should compensate Russia, rather than Kazakhstan. Discussions between Starr’s office and Russian officials continued quietly: at one point, Starr feared having to cut a financial deal with Russia, in which the U.S. would have to pay Russia and Kazakhstan for the HEU at Ulba.

156 Courtney, interview.
157 Opinion expressed by Thomas Graham, Jr., supported by Starr and Pifer.
158 Zhukeyev, interview. View also expressed by Tokayev in Preodolenie.
159 Starr, interview.
By June 1994, Starr’s office reached an agreement with the Russians that the HEU was owned by Kazakhstan and would be purchased by the United States. At the meeting of the Gore-Chernomyrdin Commission in June 1994, Gore notified Chernomyrdin of the deal. When Chernomyrdin did not object, that gave the green light necessary for Starr in Washington, and Weber in Almaty, to move forward planning Project Sapphire. In fact, Chernomyrdin knew the details before Gore stated this at the meeting – it had all been arranged beforehand.160

During the summer of 1994, Shkolnik and the Tiger Team negotiated a two-part compensation package that included the cash purchase of the HEU at Ulba and in-kind assistance. The compensation package added funds to existing CTR projects while funding new ones.161 Shkolnik leveraged the negotiations to increase funding for existing CTR programs for S&T and Research and Development (R&D).162 Among other things, the United States provided Kazakhstan with medical equipment, assistance for persons possibly affected by the Soviet nuclear tests conducted at the STS, and support to outfit the KNB.163

Determining the fair price for nearly 600 kg of HEU was a challenge. In 1993, the United States and Russia concluded the nuclear non-proliferation agreement for the Megatons to Megawatts Program, in which the HEU recovered from dismantled strategic nuclear warheads would be blended down into low-enriched uranium (LEU) and sold to the United States as fuel to be used in nuclear power reactors.164 Having just negotiated the value of Russian HEU, Washington did not want to over-compensate Kazakhstan and lock itself into a price range for enriched uranium that it could not sustain in compensating Russia.165 At the same time, Washington sought to reward Kazakhstan for its openness and cooperation, enabling the “Kazakhstani leadership to show their people that they received something in return for giving up the HEU.”166 For its part, Almaty considered the value of the compensation for Ulba HEU to be a one-time transaction, separate from discussions over the HEU recovered from the strategic warheads167. The final value of compensation for the Ulba HEU was based off of the market value of the blended down variety of LEU commercially traded on the stock exchange and adjusted to reflect its quantity and enrichment level. The United States compensated Kazakhstan for the HEU as measured in separative work units (SWU),168 which reflects the value of energy put into separating the $^{235}$U and $^{238}$U isotopes in order to enrich uranium.169

While the value of U.S. compensation to Kazakhstan for Project Sapphire was never officially disclosed, Weber estimates that the U.S. paid $20,000/kg SWU HEU, totaling $3 million, and an additional $25 to $30 million in assistance programs. Starr puts the number at $16,000/kg SWU

160 Ibid.
161 Schless, interview.
162 Ibid.
163 DeMeo, interview.
165 Weber, interview.
166 Starr, interview.
167 Unnamed Kazakhstani official, email.
168 Courtney, interview.
between $10 to $20,000/kg SWU – and $40 million in assistance. One of the challenges faced by diplomats during negotiations for in-kind assistance and compensation was explaining that the U.S. was unable to pay cash, but was prepared to compensate Kazakhstan with structured assistance programs. The United States did, however, pay for the HEU in cash – Courtney personally delivered the check.

Bureaucratic infighting in Washington delayed Project Sapphire’s implementation. While Weber and Courtney characterize their involvement with their Kazakhstani colleagues as friendly and straightforward, they were frustrated by the delays back home, as over a year elapsed between the disclosure of the HEU and its removal.

During the summer of 1994, Starr’s Tiger Team was busy coordinating logistics and mobilizing resources from different agencies. The Tiger Team also prepared an environmental impact statement for the shipment of the Ulba HEU to Oak Ridge, Tennessee. It was decided that each U.S. government department was responsible for their contributions to Project Sapphire: State paid for the HEU and covered local costs for the packing team, DoE paid for the team, packing materials and shipment of HEU from Dover Air Force Base (AFB) to Oak Ridge, while DoD financed the C5 aircraft and fuel.

Meanwhile, Project Sapphire was considered top secret and very few officials in Washington were aware of the operation. The commitment of high-level officials, including Perry and Deputy Secretary of State Strobe Talbott, helped ensure Project Sapphire’s completion.

A team of thirty-one personnel, including twenty-five technicians from Oak Ridge and its support contractor Martin Marietta, spent six weeks in Ust-Kamenogorsk packaging 2,200 kg of material, including the 600 kg of HEU, into 448 shipping containers. On the ground, the team encountered more technical issues, uncovering additional stocks of chemical elements. Were they to be discovered, the scientists had prepared a cover story that they were helping Kazakhstan to prepare declarations for the IAEA. In fact, during this time, members of an Overseas Private Investment Corporation (OPIC) mission traveled to Ust-Kamenogorsk to meet with officials and inspect its factories, including Ulba. Special efforts were made by Courtney to prevent their coming into contact with the Oak Ridge personnel. They did not.

In late November, the scientists and containers boarded five C5 aircraft to return to the U.S. Refueling five times in the air, the aircraft flew nonstop to Dover AFB, where it landed on Monday evening, November 21. The shipping containers were transloaded onto special DoE trucks, which reached the Y-12 National Security Complex at Oak Ridge the following day. In anticipation of potential anti-nuclear demonstrations in front of the gate at Y-12, blocking the entrance of the trucks carrying the GEU, Gore engaged the Governor of Tennessee.

170 Hoffman, 447.
171 Courtney, interview.
172 Koch, interview.
173 Hoffman, 454-455.
174 Starr, interview.
175 Hoffman, 455.
176 Starr, interview.
177 Courtney, interview.
Kazakhstani and U.S. officials worked out the language of public statements beforehand. On Wednesday, November 23rd, Christopher, Perry and Secretary of Energy Hazel O’Leary convened an unprecedented joint press conference at the Pentagon, where they highlighted the nonproliferation benefits, productive collaboration with Kazakhstan and the fact that the United States was not accepting foreign-origin “dirty” (partly burned) uranium, but that the HEU was “clean” (unburned). Vitaly Mette and Foreign Minister Kasymzhomart Tokayev held one the following day in Almaty.

It is important to note that negotiations over the compensation package were not concluded until after the HEU was in Tennessee. Shkolnik was apparently concerned about removing the HEU prior to finalizing the details of the compensation package. Yet, time was of the essence, as the Siberian winter set in. Starr reassured Shkolnik, “Vlad, I promise you,” and a few months later, in early 1995, the compensation package was finalized.

Ultimately, Project Sapphire was a way for Kazakhstan to “test” the United States’ stated commitment to its security and sovereignty in the absence of a formal, written security assurance. The productive partnership between Washington and Almaty led the Kazakhstaniis to inform Starr and Weber in June 1995 about the illegal Soviet-era biological weapons production facility at Stepnogorsk.

For Kazakhstan, the removal of HEU allowed for the implementation of IAEA safeguards required for an NPT signatory to begin in December 1994. Kazakhstan also financially benefited for its compliance and cooperation. Meanwhile, Washington eliminated a potential source of fissile material leakage in Iran’s backyard. While a Hollywood-like story, Project Sapphire was a productive experience that crystallizes how U.S. diplomacy, technical and financial assistance was used to overcome the challenges of inadequate and incomplete access to information, communication shortfalls and the political tensions in the former Soviet Union, in order to create the conditions necessary for the denuclearization of Kazakhstan.

X. Analysis and Conclusions

The successful denuclearization of Kazakhstan involved numerous challenges – principle among them were ineffective communication, inadequate or insufficient access to information, and dealing with Russia to reassure it of U.S. cooperation in their mutual interest of preventing nuclear proliferation in Kazakhstan, Ukraine and Belarus. For the Kazakhstani leadership, the main challenges involved gaining security assurances from the P-5 states, safeguarding the country’s national security while not upsetting Russia and handling a plethora of issues with a small, inexperienced diplomatic corps and few resources.

The successful denuclearization of Kazakhstan was made possible by the following conditions:

178 Unnamed Kazakhstani official, email.
179 Courtney, interview.
180 Laumulin (Fall 1995), 85.
181 Starr, interview.
182 Sentiment expressed by Starr, Weber and Courtney.
183 Jeffrey Starr, email message to author, April 10, 2013.
First and foremost, Nazarbayev’s support for denuclearization and ability to decide and carry out economic and security policies in the environment of weak domestic institutions.

Second, forgoing nuclear weapons enabled Kazakhstan to establish a normal relationship with the United States, which was necessary to join the international economy and import Western investment and technology to develop its O&G reserves in the Caspian.

Third, Russia and the United States shared a coincidence of interests in ensuring the successful denuclearization of Kazakhstan. While there were challenges to cooperation, Russian resistance to sharing sensitive silo information with the United States, both sides were genuinely interested in cooperation in ridding Kazakhstan of its nuclear weapons.

Fourth, positive and negative security assurances from the UNSC P-5 states mitigated Kazakhstani concerns over their country’s ability to exist as a sovereign entity with secure, inviolable borders. U.S. security assurances to Kazakhstan, as stipulated in the Budapest Memorandum and more softly through the Bilateral Charter on Democratic Partnership, reaffirmed U.S. commitment to Kazakhstan’s statehood while creating a mechanism through which Kazakhstan could request bilateral consultations.

Fifth, the personal attention of senior-level officials on all sides legitimized the Kazakhstani leadership and ensured that denuclearization efforts would be fully implemented. The Gore December 1993 trip to Almaty, and Nazarbayev’s May 1992 and February 1994 visits to Washington and the establishment of the Gore-Nazarbayev Commission reinforced the U.S. commitment to Kazakhstan and enhances Nazarbayev’s personal prestige.

Sixth, Nunn-Lugar technical and financial assistance provided the resources necessary for the complete decommissioning, dismantlement of its WMD infrastructure, removal and transport of strategic nuclear weapons from Kazakhstan to Russia. U.S. assistance was also crucial in eliminating excess stockpiles of weapons-grade fissile material and enhancing Kazakhstan’s capacity to carry out its START commitments.

While Kazakhstan was willing to give up its nuclear weapons, it did so under the conditions of security assurances, the attention of senior-level officials and significant financial and technical assistance from the United States. The decision to forgo nuclear weapons was a strategic choice that accommodated Nazarbayev’s long-term strategy for Kazakhstan’s economic development and national security. The denuclearization of Kazakhstan was a success, but not a foregone conclusion.
XI. Acknowledgements

I am grateful to everyone who graciously shared their time, insights, and experiences with me, on more than one occasion, through in-person interviews, emails and phone calls. I thank Ambassador William Courtney, Ambassador Larry Napper, Ambassador Thomas Graham Jr., Assistant Secretary of Defense Andrew C. Weber, Dr. Susan Koch, Philip Dolloff, Michael J. DeMeo, Scott Schless and Dr. Jeffrey Starr for sharing their awesome, adventurous experiences preventing the massive proliferation of nuclear weapons after the collapse of the Soviet Union.

I thank Dr. Alice Gast, Dr. Natalia Tomarovskaya, Dr. Nikolai Chakrov, Dr. Sergei Lukashenko and the Professors at the Kazakhstan National University named after Al-Farabi, particularly Dr. Bulat Kenesov, for highlighting the importance of S&T to Kazakhstan.

I am indebted to Dr. Togzhan Kassenova, Tulegen Zhukeyev, Rustem Kubeyev, Anuar Ayazbekov, the librarians at the National Academy of Sciences in Almaty and an anonymous Kazakhstani official for helping me gain a better understanding of Kazakhstan’s history, identity and foreign policy in the aftermath of Soviet collapse. I thank Dr. Nikolai Sokov for highlighting Russian security and policy objectives.

I thank Marzhan Srymova, David Paradise, Katrisa Peffley, Craig Bell and Kristin Hirsch for speaking with me at the U.S. Embassy in Astana in January 2013. I thank Dasha Kosheleva for hosting me in Almaty. I thank Charles Dolgas and James Seevers at the Institute for the Study of Diplomacy, and Dr. James Millward, for affording the opportunity to pursue this research project. I thank Dr. Daniel Burghart for his feedback on an earlier draft of the paper.

Above all, I thank Ambassador Steven Pifer. Without his invaluable guidance, impeccable editorial eye, extensive knowledge and understanding of arms control issues in the former Soviet Union, this project would not have been possible. Thank you.
ANNEX I: Map of Soviet Nuclear Weapons Test Sites in Kazakhstan

ANNEX II: Timeline of the Denuclearization of Kazakhstan

August 1991
- President Nursultan Nazarbayev signs Decree No.409 “On Closing the Semipalatinsk Nuclear Test Site.”

December 1991
- The Republic of Kazakhstan declares its independence.
- U.S. Secretary of State James A. Baker III meets with Nazarbayev in Almaty.
- The leaders of the former Soviet republics meet in Minsk, Belarus to form the Commonwealth of Independent States (CIS).
- CIS leaders draft the Alma-Ata Declaration.
- The United States recognizes Kazakhstan as an independent state.

January 1992
- China and Kazakhstan establish diplomatic relations.
- Under Secretary of State for Arms Control and International Security Affairs Reginald Bartholomew visits Almaty to prepare for negotiations on nuclear weapons reductions.

February 1992
- William Courtney arrives in Almaty as the Charge d’Affaires.
- Russian President Boris Yeltsin and Nazarbayev announce that all tactical nuclear weapons previously in Kazakhstan have been transported back to Russia.

May 1992
- National Security Advisor Tulegen Zhukeyev signs the Lisbon Protocol, which requires Kazakhstan adhere to the START Treaty, eliminate all strategic offensive arms on its territory, and accede to the Non-Proliferation Treaty (NPT) as a non-nuclear weapons state (NNWS).
- Nazarbayev signs the presidential decree “On the Establishment of the Armed Forces of the Republic of Kazakhstan.”
- Yeltsin and Nazarbayev sign the Russian-Kazakh Treaty on Friendship, Cooperation and Mutual Assistance in Moscow.
- Nazarbayev visits President George W. Bush and Baker in Washington.

June 1992
- The Supreme Kenges (Parliament) approves the new draft constitution.

June/July 1992
- U.S. delegations visit Kazakhstan to discuss military-to-military agreements in order to meet START obligations and the secure storage of nuclear materials.

July 1992
- The Supreme Kenges ratifies the START Treaty.

September 1992
- Bush addresses the UN General Assembly and urges the Security Council, especially the P-5 states, to reaffirm “assurances made at the time that the Nuclear Non-Proliferation

---

184 This is not an exhaustive timeline of events.
Treaty was negotiated.”

He salutes Yeltsin, Nazarbayev, Ukrainian President Leonid Kravchuck and Belarusian President Stanislav Shushkevich for their efforts.

October 1992
- Leaders at the CIS Summit in Bishkek agree to gain legal ownership over the outstanding assets on their respective territories as of August 1, 1991.

November 1992
- U.S. Senators Sam Nunn and Richard Lugar lead a Congressional delegation to Almaty to meet with Nazarbayev.

January 1993
- The first constitution of an independent Kazakhstan is adopted.
- The CIS summit is held in Minsk, Belarus.

April 1993
- Nazarbayev and Ken Derr, Chevron CEO, sign an agreement creating the joint-venture Tengizchevroil.

July 1993
- Andrew Weber assumes the post of political-military attaché at the U.S. Embassy in Almaty.

September 1993
- Kazakhstan ratifies the framework agreement between the U.S. and Kazakhstan, in which the U.S. supplies technical and financial assistance for disarmament.\(^{186}\)

October 1993
- Nazarbayev and Chinese President Jing Zemin sign the “Joint Communiqué on the Establishment of Diplomatic Relations between the People's Republic of China and the Kazakh Republic.”\(^{187}\)
- Kazakhstan is admitted as a member of the International Atomic Energy Agency (IAEA).
- U.S. Secretary of State Warren Christopher visits Almaty.

November/December 1993
- Manager of the Ulba Metallurgical Plant Vitaly Mette notifies Weber about the presence of some 600 kg of Highly Enriched Uranium (HEU) (90%) at Ust-Kamenogorsk.

December 1993
- Nazarbayev invites the Supreme Kenges to dissolve itself and schedules parliamentary elections for March 1994.
- Vice President Al Gore and Nazarbayev in Almaty sign the Safe, Secure Dismantlement (SSD) agreements, marking the beginning of Nunn-Lugar in Kazakhstan. Weber and Courtney inform Gore about the HEU at Ust-Kamenogorsk.
- The Supreme Kenges ratifies the NPT.

January 1994
- Director for Russia, Ukraine and Eurasia Affairs on the NSC staff Rose Gottemoeller chairs an inter-agency meeting of the National Security Staff at the White House, in


\(^{186}\) Nazarbayev, 64.

which the HEU found at Ulba is discussed. Deputy Assistant Secretary of Defense Ashton Carter designates Jeffrey Starr to organize a tiger team to remove the HEU.

- Mike DeMeo measures the SS-18 ICBM silos at Zhengis-Tobe and Derzhavinsk.

February 1994
- Nazarbayev visits Washington and submits the original versions of Kazakhstan’s signed NPT instruments of ratification to Clinton. The United States pledges an additional $400 million in aid to Kazakhstan. The Bilateral Charter on Democratic Partnership is signed.
- All 40 TU-95 heavy bombers in Kazakhstan have been moved to Russia.188

March 1994
- American scientist Elwood Gift and Weber visit the Ulba Metallurgical plant and confirm the HEU (90%).
- Secretary of Defense William Perry visits Almaty and signs an agreement providing $15 million for defense industry conversion. Nazarbayev reassures Perry that the SS-18 ICBMs in Kazakhstan would be sent to Russia for dismantling.
- Parliamentary elections are held.

Spring 1994
- Starr’s Tiger Team at the Pentagon discusses the Ulba HEU with the Russians.

June 1994
- The Gore-Chernomyrdin Commission meets in Moscow, at which Gore notifies Chernomyrdin of U.S. plans to purchase the Ulba HEU from Kazakhstan.
- All 370 AS-15 nuclear-tipped ALCMs, plus 12 SS-18s and 120 warheads in Kazakhstan have been transported to Russia.189

October 1994
- Thirty-one officials, including 25 scientists from Oak Ridge National Laboratory, arrive in Ust-Kamenogorsk to pack the fissile material to ship to the United States.

November 1994
- Five C5 aircraft carrying 581 kg of HEU and additional materials from Ust-Kamenogorsk are flown to the U.S. The nuclear material is transported to Oakridge, Tennessee, marking the successful completion of Project Sapphire.
- Kazakhstan signs the agreement for continued implementation of INF agreement.190

December 1994
- The United States, United Kingdom, Russia, Belarus, Kazakhstan and Ukraine sign three separate memoranda on Security Assurances in Budapest, Hungary.
- The Ministry of Science and High Technology in Kazakhstan, with funding from the Soros Foundation, gives its first research grant to a scientist who formerly worked in the Soviet military-industrial complex.

January 1995
- China provides a Memorandum on Security guarantees to Kazakhstan.
- Leaders from Kazakhstan and Russia sign a packet of 17 documents in Moscow that reaffirms the security assurances stipulated in the Budapest Memorandum.191

April 1995

188 *Kazakhstan: Reducing Nuclear Dangers, Increasing Global Security*, 63
189 de Andreis and Calogero, 7.
• The UN Security Council adopts Resolution 984, in which the P-5 states provide positive security assurances to the NNWS that are parties to the NPT.
• The process of removing strategic nuclear weapons from Kazakhstan is complete. All 1,040 ICBM warheads and 370 ALCM warheads have been transported to Russia.

May 1995
• The last nuclear device at the STS is destroyed.

September 1995
• The second constitution of Kazakhstan is adopted.

September 1996
• Kazakhstan signs the Comprehensive Nuclear Test Ban Treaty (CTBT).
• All 104 ICBM silos in Kazakhstan have been destroyed and all SS-18 missile airframes have been returned to Russia.
Bibliography


