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**National Independence and Nonproliferation
in the New States of Central Asia**

Gregory Gleason

December 1993

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National Independence and Nonproliferation
in the New States of Central Asia

A Research Report Prepared for
Lawrence Livermore National Laboratory
December 1993

by

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Abstract

Five independent states emerged in Central Asia from the breakup of the USSR. One of these states, Kazakhstan, possesses nuclear weapons. The other four of these states, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, are not known to possess nuclear weapons, however they occupy a geostrategic position which makes them important to non-proliferation efforts. The present report profiles the capabilities and intentions of these four Central Asian states. The analysis of capabilities suggests that none of these states has the capability to develop a usable nuclear weapon. However, all of these countries--especially Uzbekistan--have components of the old Soviet nuclear weapons complex which are now orphans. They have no use for these facilities and must either re-profile them, destroy them, or transfer them. The analysis of intentions suggests that the dynamics of national independence have created a situation in which Uzbekistan has hegemonic designs in the region. Implications for retarding nuclear proliferation in the Central Asian region are examined. Opportunities for outside influence are assessed.

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Executive Summary

The collapse of the USSR changed the international nuclear non-proliferation regime in three important ways. First, it altered negotiations by substituting four new negotiating parties (Belorus, Kazakhstan, Russia, and Ukraine) where one (USSR) previously existed. Second, it increased the complexity of negotiations by introducing competitive relationships among these new parties. Third, it increased domestic political and economic instability in the successor states of the former USSR, thereby raising the possibility of the transfer of technology outside the confines of the previously existing non-proliferation regime.

Although the four newly independent states of Central Asia (Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) are not currently believed to possess nuclear weapons production, storage, or deployment facilities on their territory, the current situation in Central Asia suggests a number of challenges to the maintenance of the existing non-proliferation regime.

These challenges are of three types. First, the states of Central Asia (or independent actors located within these states) may present a danger of trans-shipment of weapons or weapons-related technology to third parties. Second, given political, ethnic, or religious affinities with neighboring Middle Eastern and West Asian states, these states (or independent actors within the states) may present a danger of brokerage of technology or know-how. Third, the states of Central Asia may present a danger of a transfer to third parties of know-how in the area of advanced materials. In all three of these cases, motivations may be either financial or ideological or some combination of both.

This report describes the situation in the four Central Asian states. This report summarizes political situations in each of these states with respect to three key factors: 1) the intentions of these states; 2) the capabilities of these states; and 3) the likelihood that the states will encounter internal or external influences which might subvert intentions or augment capabilities. The report also provides a summary description of the nuclear weapons related infrastructure in these countries.

The report is in two parts. The first part, dealing with intentions, may be read as an analysis of the political situation in Central Asia. The second part, dealing with capabilities, may be read as an analysis of the infrastructure relating to the proliferation of nuclear weapons in the region.

Determinants of Proliferation

The proliferation of weapons has both technical and political determinants. Neither technical capability nor political intention is in itself sufficient to sustain proliferation. When proliferation occurs, it is because both capability and intention are present. The first case--where capability impels intention--is called the technological imperative. It is a modern version of the "law of the hammer" (give a child a hammer and the child will soon discover that everything needs hammering). The second case--where intention seeks capability--is simply called aggression. In either case, a country that seeks to vertically proliferate, (say by moving from conventional war fighting capability to nuclear capability), or that seeks to laterally proliferate, (say by selling or giving arms to a neighbor), can only succeed if both determinants are present.

It follows that a nonproliferation regime will succeed if it can either retard a potential proliferator's technical capabilities or if it can discourage a potential proliferator's will to arm or to help others to arm. The choice of the appropriate measures to implement nonproliferation policy depends upon the mix of intention and capability. If there is a sufficient capability to proliferate but ambivalent intention, the most successful nonproliferation measures include: diplomacy, treaties, conversion assistance, and export controls. If there is a will to proliferate, but insufficient capability, the most successful measures include: diplomacy, treaties, multilateral inspections, and counter-proliferation activities (interdiction, preemption).

If either intention or if capability is present, it will tend to foster the development of the other. Consequently, nonproliferation regimes will be most successful when they combine instruments to simultaneously discourage intention and retard capability.

This report is prepared in two main parts. The first section addresses the intentions of the Central Asian states. The second section addresses the capabilities of these states. A brief concluding section offers suggestions regarding opportunities for influence.

PART I INTENTIONS

Central Asian States: A Profile

Prior to political independence, the countries of Central Asia shared common structural and cultural features. Economic and political differences were negligible in comparison to the strong similarities among the republics. As the Soviet Union collapsed, however, the newly independent states of Central Asia--Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan--adopted widely divergent trajectories. The following survey summarizes recent developments in these states that are relevant to an assessment of the states' political intentions. Kazakhstan, while not detailed in the body of this report, deserves mention in this survey because of its influence on the political dynamics of its Central Asian neighbors.

Kazakhstan: Asian Liberalism under Nazarbaev: Kazakhstan was the last of the Central Asian republics to declare political independence formally but, in reality, was one of the first to adopt policies oriented in that direction. By the time the Kazakhstan declaration of independence was adopted in December 1991, the USSR had already officially ceased to exist. The late date of the declaration does not indicate a lack of commitment to independence. Rather, it reflects the unique features of Kazakhstan among the other Central Asian states. Thirty-seven percent of the population of Kazakhstan is ethnically Russian. Many of the better educated Kazakhs are heavily Russified. And Kazakhstan was more closely integrated into the Soviet

physical infrastructures of communication, energy and transportation than the other Central Asian states. Kazakhstan's economy is structured around the production of raw materials and primary commodities. It is a major wheat, oil, and coal supplier. To a greater degree than any of other Central Asian states, however, Kazakhstan has major industrial facilities. At independence, Kazakhstan set out to define itself as a liberal Asian democratic power. Its industrial base, its agricultural potential, its oil wealth, its nuclear status, and its mixed Kazakh and Russian populations are the defining features of the domestic economic context. Democratic political institutions that reflect the varied interests of this new state stand a good chance of early success.

Kyrgyzstan: Asia's Democratic Experiment under Akaev Kyrgyzstan declared national independence on August 31, 1991, just days after the outcome of the August 1991 coup attempt became clear. After independence, Kyrgyzstan quickly became the favorite of European, North American, and Asian diplomats. Kyrgyz citizens took pride in asserting that Kyrgyzstan was not a an "Islamic-communist-feudal" society of backward Asia, but rather a society seeking to develop advanced, participatory, citizen-based, democratic institutions and social programs that were distinctively Asian. Kyrgyzstan was the first Central Asian country to adopt IMF-sponsored liberalization policies. But Kyrgyzstan faces greater development challenges than the other Central Asian states. A mountainous country with largely underdeveloped hydroelectric generating potential, Kyrgyzstan has mineral deposits of coal, gold, mercury, and uranium. While Kyrgyzstan is potentially a rich country, it has a higher level of

trade dependence on the outside world than any of the other Central Asia countries. Political stability in Kyrgyzstan will depend heavily on the ability of the society to weather the economic vicissitudes of the early years of the democratic transition.

Tajikistan: Land in Conflict After the failure of the August 1991 coup attempt, Tajikistan was quick to announce national independence, adopting a declaration in September 1991. But Tajikistan independence was a merely a symbolic act in light of the scale of the national dissensus. Tajikistan was the least prepared of the Central Asian states to embark upon policies of national consolidation. Remote, poor, internally divided, and bordering war-torn Afghanistan, Tajikistan was under paralyzing internal and external pressures. Independence produced new opportunities for political opposition to openly challenge the claim of the former members of the communist apparat to lead the post-communist government. The political conflicts that emerged soon after independence appeared to represent conflicting ideological viewpoints. Judging from formal statements, a coalition of "democrats" and "Islamic revivalists" vied with "former communists" for control of the new state. But in reality, the fault lines in the post-independence conflicts were regional rather than ideological. The contest for power plunged the country into turmoil. After months of internecine conflict in 1992, a relatively stable Tajikistan government emerged, but continued to rule without a national consensus. The establishment of a stable government in Tajikistan is problematic. Moreover, Tajikistan has the distinction of being a country that physically links the developed world with the underdeveloped world. It shares borders with China, Afghanistan,

Kyrgyzstan, and Uzbekistan. It is in close proximity to Pakistan and relatively close to Iran.

Turkmenistan: Niyazov's Central Asian Emirate At independence, Turkmenistan, the small tribal civilization on the southern fringe of Central Asia, adopted an assertive posture of national self-reliance based on its gas and agricultural wealth. Turkmenistan moved more swiftly than the other Central Asian countries to accommodate the circumstances of independence. With an air of self-satisfaction, the Turkmenistan government announced that it would adopt a new constitution in May, 1992, the first of Soviet successor states to do so. President Niyazov announced a "10 Years to Prosperity Program," claiming that the standard of living in Turkmenistan would soon approach that of Kuwait and that Turkmenistan would pursue a policy of "positive neutrality" in foreign affairs, establishing good relations with all countries. Meanwhile, Niyazov consolidated his political authority on the model of a Middle Eastern potentate. During the autumn of 1992, a number of schools, streets, academies, cooperative farms, and other institutions changed their names in honor of President Niyazov. Even the famed "Lenin Kara-kum Canal" became the "Niyazov Kara-kum Canal." A new medal of National Distinction was introduced to honor extraordinary service to the Turkmenistan state. President Niyazov became the first bearer of this new honor. Democratic government in Turkmenistan faces special challenges given the nature of the present leadership--a legacy of the corrupt and hierarchical superordination of the Soviet period.

Uzbekistan: Authoritarian Populism under Karimov Uzbekistan moved quickly to declare national independence after the collapse of

the attempted coup in August, 1991, in Moscow. August 31st is the day that Uzbekistan now celebrates as the day of national independence. But in Uzbekistan even more than in the other Central Asian republics, the transfer of power from the Soviet elite to the national elite was mainly a matter of changing names on office doors. Political opposition did emerge upon independence, but the leading faction of beneficiaries of the old Soviet system used their powers to quickly brush the opposition aside. Uzbekistan embarked upon a Chinese-style path of cautious national consolidation that emphasized the state as the "leading and guiding force" of the society. The government publicly emphasized the symbolism of Central Asian traditions of strong but benign leadership. Uzbekistan is the richest and most important Central Asian state. It is the heir to a rich classical intellectual tradition as well as to a developed (albeit badly developed) infrastructure. Democratic change in Uzbekistan will have to counter the strong statist, neo-mercantilist orientation of the state.

Collapse of the USSR and the Dynamics of National Independence

The collapse of the USSR begins with the 19th party conference in June-July, 1988. At this convocation Gorbachev proposed a package of political reforms which included free elections. Gorbachev's perestroika reforms gave a boost to supporters of independence movements. They began to test the limits of the decentralizing trends. In November, 1988, the legislature of the Estonian republic adopted changes in the Estonian constitution. The changes gave

Estonia the right to veto legislation passed in Moscow. They declared that the land, natural resources, and industrial plant located on the territory of Estonia belonged to Estonia and not the USSR. The "Estonian Clause" rent the fabric of the Soviet state. Over the next three years the process of disintegration accelerated. Popularly elected legislatures convened in the republics and localities in 1989. They began to challenge the predominance of Moscow. A "war of laws" ensued, as republican legislatures vied with the USSR legislature.

Moscow authorities attempted to appease nationalist sentiment. To bolster the authority of Moscow, Gorbachev called for a popular referendum. On March 17, 1991, a question was put to voters: "Do you consider it necessary to preserve the USSR as a renewed federation of equal sovereign republics, in which the rights and freedoms of all national groups be fully guaranteed?"¹ Official results for the whole USSR put the vote at 76.4 percent in favor of keeping the USSR, 21,7 percent opposed. The Central Asian republics, however, voted overwhelmingly in favor of retaining the USSR. Uzbekistan's voters said "yes" with a majority of 97 percent. Under intense pressure to decentralize, Gorbachev embarked on repeated rounds of negotiation designed to save the Union. He finally managed to obtain a version of a new treaty among the republics that was scheduled to be signed on August 20, 1991. Party conservatives, anticipating that the treaty would bring an end to the old USSR, made a desperate move. They declared a state of emergency on August 19, 1991.

The leaders of the Central Asian states responded to the coup very differently. Askar Akaev in Kyrgyzstan was the first to openly denounce the coup. Nazarbaev in Kazakhstan was initially cautious,

offering neither support nor condemnation. On August 20, however, Nazarbaev issued a statement denouncing the emergency committee as illegal. As the coup collapsed, Nazarbaev resigned from the Politburo and the CPSU Central Committee. Tajikistan's Nabiev, Uzbekistan's Karimov, and Turkmenistan's Niyazov all avoided explicit commitment.

Following the failure of the coup, a series of impromptu negotiations took place among the republican leaders. In the confusion, the leaders of the three large Slavic republics, Ukraine, Belarus, Russia, took a bold step. They signed a resolution dissolving the USSR and creating a new formation, a Commonwealth of Independent States (CIS).² Five days later, the Central Asian leaders met in Ashgabat, Turkmenistan, to discuss creating a separate "Central Asian Commonwealth." They decided, however, to first seek participation in an enlarged CIS. Arrangements were made for yet another summit. On December 21, 1991, the representatives of eleven of the former republics gathered in Almaty (Alma-Ata), Kazakhstan, to sign a new agreement to form a broader based Commonwealth.³ Gorbachev resigned as President of the Soviet Union on December 25, 1991.

By the time of the creation of the CIS, all Central Asian states had already adopted declarations of "national sovereignty." But this meant sovereignty within the confines of the USSR. None of the Central Asian socialist republics had strong nationalist movements. Nor did they expect that the center would collapse. Indeed, the Central Asian states were Gorbachev's strongest allies in his struggle against separatists in Ukraine and the Baltic states. The Central Asian states had not prepared for the collapse of the USSR. But once it happened, the leaders of the Central Asian states embraced the

change as an opportunity to recreate their societies along the lines of indigenous traditions.

During 1992, the new states entered the process of transition from colonial appendage to independent member of the international community. The process of transition from colony to membership in the international community has many historical examples and is well understood. The two most important pressures that are exerted during this process are economic nationalism and the security dilemma.⁴

Economic nationalism refers to a country's competitive search for unilateral economic advantage.⁵ It usually involves mechanisms to increase the foreign trade surplus of a country. To increase exports states employ trade promotion inducements such as subsidies or the creation of parastatal enterprises. At the same time, tariffs, quotas, and trade barriers are established in an effort to discourage imports. A good example of the wages of economic nationalism is given by the experience of interwar Europe. Between 1919 and 1939, each of the countries of Western Europe was faced with a series of domestic problems that each assumed could only be solved by adopting foreign policies which improved their positions relative to that of their neighbors. The ensuing proliferation of tariffs, trade barriers, currency exchange controls, competitive devaluations and, in general, beggar-thy-neighbor policies led to economic disaster.⁶

The security dilemma refers to a country's competitive search for assurance that its territorial integrity will not be compromised by its neighbors. Countries existing in the anarchic state of the international community naturally want to increase their security from being attacked, subjugated, or annihilated by other countries. But,

as these countries to maintain security from foreign threat, they are driven to acquire more and more power in order to escape the power of others. "This renders the others more insecure and compels them to prepare for the worst. Since none can ever feel entirely secure in such a world of competing units, power competition ensues, and the vicious circle of security and power accumulation is on."⁷ Thus, in the modern international system, even the minimalist assumption that states seek only legitimate goals of self-preservation--and obviously countries often have other more aggressive goals than this--countries can find themselves driven by policies which impel them toward conflict with their neighbors.

Both of these problems are known as collection action problems. A collective action problem is one that has the form that rational, value-maximizing agents, although they can identify a desired, optimal outcome, are compelled by the distribution of incentives to chose sub-optimal outcomes. In the international community, the solution to collective action dilemmas is usually the creation of a supra-national organization which is delegated the responsibility for the hierarchical coordination of national interests.

The traditional solution to the problem of economic nationalism is the creation of a trade community. If states act individually to improve their trading position, no one country can be expected to unilaterally reduce subsidies and ease trade restrictions. To do so would result in the flooding of its market with large quantities of its neighbor's highly subsidized products. Hence, since no single country can be expected to act independently for fear that others will take advantage of it. Coordination does not appear to emerge from

individual action. Consequently, states rely upon a centrally managed institution to "impose" coordination.

During 1992, the Central Asian states entered into a number of economic agreements with the goal of coordination. On February 9, 1992, shortly after the CIS came into existence, the CIS states met to agree on provisions regulating trade. On March 13, 1992, the four Central Asian states signed an agreement to provide for free movement of goods across borders and establish a common customs policy with other countries. The Central Asian presidents met in Ashgabat on May 9 and 10, 1992, to discuss simplification of customs procedures among themselves. On January 3, and 4, 1993, the Central Asian presidents met in Tashkent with the goal of establishing a Central Asian "common market." On January 22, 1993, the CIS states signed documents creating a single interstate banking system. Persistent economic problems during 1993 increased the awareness of the need for more coordination. On September 24, 1993, seven CIS countries met in Moscow to sign a document creating a new economic union. (Turkmenistan and Ukraine did not sign). On September 7, 1993, six CIS members, including Kazakhstan, Uzbekistan, and Tajikistan signed an agreement to create a new ruble zone.

The answer to the security dilemma is the creation of a collective security institution. According to the traditional definition, a collective security agreement is one which obligates the members to abstain from recourse to violence against one another and to participate collectively in suppressing the unlawful use of force by any member.⁸ In addition, collective security agreements also address technological coordination and inter-operability of forces.

During 1992, the Central Asian states entered into a number of security agreements within the CIS. At the February 9, 1992, summit, the CIS presidents reached agreement on several issues but failed to reach agreement on a proposal "On the Financing of the Armed Forces." At the CIS summit in Kiev on March 20, 1992, leaders reached agreement on defense matters, although Turkmenistan alone of the Central Asian states elected not to sign the Kiev protocol. (However, in June, 1992, Turkmenistan entered into a bilateral agreement with Russia). On March 25, 1992, CIS intelligence service chiefs met in Moscow and reportedly reached some agreements, the details of which are not available. The Central Asian presidents met in Bishkek on April 23, 1992, with the intention of developing a coordinated regional security policy. The CIS heads of state met in Tashkent on May 15, 1992, to sign the basic collective security agreement of the CIS. Only six CIS states--Russia, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Armenia--signed this agreement. Turkmenistan did not. The inability of Russia to provide leadership for the CIS joint forces led to their dissolution in August, 1993. But this was followed on August 24, 1993, by the adoption of a new collective security treaty and the establishment of a Collective Security Council. The new agreement was signed by all the Central Asian states except Turkmenistan.

The foregoing account of repeated attempts to forge coordinating agreements and institutions illustrates a basic fact--the transition to national independence produced economic and security problems for the Central Asian states which disposed them toward cooperation. At the same time, the long list of repeated attempts to forge working

associations also suggests the failure of the states to achieve a structure which would impose or induce cooperation.

Consequently, the Central Asian states are relying on three mechanisms to achieve their individual ends: 1) uncoordinated individual action and self-help; 2) bilateral assistance (mainly from Russia); and 3) assistance from international organizations. These strategies have produced different policies in different states. Kyrgyzstan has found reliance upon international organizations the most successful policy. Turkmenistan, confident of its financial prospects because of its oil and gas reserves, has adopted a "go it alone" policy which it labels "diplomatic neutrality." Tajikistan, ravaged by civil war and divided by internecine conflict, has been split between those groups who have sought assistance from Iran and Afghanistan and those groups who sought security assistance from Russia and Uzbekistan. Uzbekistan has adopted a path of development which would make it the guarantor of stability in Central Asia.

Uzbekistan's Bid for Regional Hegemony

The single most important political issue in Central Asian domestic politics is the war in Tajikistan. Leaders throughout the region, particularly in Uzbekistan, view the Tajik situation as a precursor of the "Yugoslavia syndrome." At independence, Tajikistan was a remote, poor, internally divided, country bordering Afghanistan. Given its meager resource base and its proximity to the conflict in war-torn Afghanistan, Tajikistan was under extreme pressure during the first months of the post-communist transition. Political independence

produced new opportunities for political opposition to openly challenge the claim of the former members of the communist apparat to lead the post-communist government. Rather than producing democracy, this produced civil war.

By mid 1992, the Tajik civil war became the defining element in the Central Asian security regime. After the failure of the August 1991 coup attempt in Moscow, Tajikistan was quick to announce national independence, adopting a declaration on September 8, 1991. But Tajik independence was a purely symbolic act in light of the scale of the national dissensus. The political conflicts that emerged soon after independence appeared to represent conflicting ideological viewpoints and positions. Judging from formal statements, a coalition of "democrats" and "Islamic revivalists" vied with "former communists" for control of the new state. In reality, the fault lines in the conflicts were regional rather than ideological. Leaders from the eastern areas of the Tajikistan, particularly the Garm valley, aligned with leaders from the Kurgan-Tiube region in a coalition which sought to unseat the ruling groups from the Kuliab and Hojent (Leninabad) regions. The political contest produced paralysis, eventually deteriorating into armed conflict. The Hojent-Kuliab coalition held power from independence until early May, 1992, when the Garm-Kurgan-Tiube coalition took over. In November, 1992, the Hojent-Kuliab group wrested back control of the government and maintained power throughout 1993.

The restoration of the Hojent government in Tajikistan was only possible with assistance from outside. On September 3, 1992, the Presidents of Uzbekistan, Kazakhstan, Kyrgyzstan, and Russia issued a

warning that if civil war in Tajikistan continued it would present a threat to the CIS and would be grounds for military intervention. While the leaders talked, the war raged on in the south of the country. On September 7, 1992, Tajik president Nabiev resigned when armed opponents took him into custody at the Dushanbe airport. Nabiev handed over his powers to Supreme Soviet Chairman Akbarsho Iskandarov. But fighting between pro and anti-Nabiev forces continued throughout September. In late October, 1992, Safarali Kinzhaev, former speaker of the Tajik parliament and a Nabiev supporter, descended on Dushanbe with an Uzbekistan supported motorized division. Kinzhaev's forces were initially repulsed in heavy street fighting. Another attempt was mounted by troops under the command of a local mafia kingpin, Sangak Safarov, attacking Dushanbe from the north. Both Sangak and Kinzhaev received clandestine military support from Uzbekistan.⁹ The victory reestablished the Hojenti faction in power.

The burden for the Tajik operation fell most heavily on Uzbekistan. Under pressure of the Tajik events, Uzbekistan drew a very old conclusion of realist international politics: si vis pacem para bellum (if you seek peace, prepare for war). Uzbekistan began developing alliances and extending its influence into its neighboring states. By early 1993, Uzbekistan had moved to essentially annex the northern province of Tajikistan. Uzbek president Karimov reportedly took control over the appointment of all the local leaders and the province's Hakim. In the spring of 1993, Uzbekistan reportedly conducted military exercises on the adjacent territory of Kyrgyzstan without even requesting permission.

Uzbekistan repeatedly sought outside assistance to counter the conflict in Tajikistan. Karimov's unsuccessful appeals to the United Nations for peacekeeping forces convinced him that the regional problems would have to be solved locally.

The Tajik war encouraged Uzbekistan to do two things. First, it pressed Uzbekistan into close political and military alliance with Russia. Russia became the main supplier of military technology for Uzbekistan. Russian politicians are glad to see the "burden" of administering Central Asia removed from their shoulders. At the same time, Russians continue to see the southern border of the old USSR--the "Curzon line" first drawn in the Nineteenth century--as the natural southern boundary of Russia's sphere of influence. Second, the Tajik war stirred back to life ancient Uzbek memories of the Uzbeks as the natural leaders of Central Asia. Uzbekistan comprehended the Tajik war as an irrefutable argument for Uzbekistan's assumption of the role of guarantor of regional stability in Central Asia.

It is unlikely that solutions to the problems of regional stability in Central Asia will come in any substantial sense from the actions of countries outside the region. That is, it is unlikely that Russia or the U.S. could provide stability in the region absent the cooperation of the local governments. For instance, the success of nonproliferation efforts in Central Asia will entail the achievement of regional political stability. A consensus is emerging among analysts looking at the large questions of international security in the post-Cold War period that "regional control regimes" stand the best chance of enhancing local stability in the absence of the

regimenting influences of the bipolarism of the Cold War period.¹⁰ 18
Uzbek regional hegemony, as an element in a regional security regime, might be the best way to achieve this. This outcome would require at least tacit consent from the U.S. and from Russia that Uzbekistan assume a position of leadership in Central Asia.

Throughout 1993, the political atmosphere was not conducive to this solution however. True, Russian policy has become increasingly "realistic" in the past year. Andrei Kozyrev, the Russian Foreign Minister, recently argued that the reasons for Russia's continued interest in Central Asia include the facts that there is a large "multinational" (i.e., Russian) population in the area, that the Tajik war is actually a struggle against Islamic extremism, that Russia's support for the current Tajik government will promote regional security in West Asia, and that Russia's assistance to Uzbekistan will enhance nuclear nonproliferation efforts.¹¹ But relations between Uzbekistan and other western countries remained extremely strained. In September 1993, Uzbekistan President Islam Karimov told Strobe Talbott, the U.S. Special Envoy for the CIS, who was seeking to link U.S. assistance to Uzbekistan to compliance with international standards of human rights, that Uzbekistan would not accept interference in its internal affairs. Karimov flatly refused to discuss human rights abuses or the release of political detainees.¹² A further indication of the scope of the problems in the Uzbekistan-western relationship is the fact that on November 20, 1993, the Uzbekistan Embassy announced that Muhammad Babur Malikov, the Uzbek Ambassador to the U.S., had relinquished his post and sought political asylum in the United States.

PART II CAPABILITIES

Central Asian States and Nonproliferation Policy

Before the breakup, tactical weapons were deployed in all of the Central Asian republics. In 1990, Turkmenistan was thought to have 125 tactical nuclear weapons, Uzbekistan was thought to have 105, and Kyrgyzstan and Tajikistan were each both believed to have 75.¹³ Kazakhstan, the only Central Asian country to have both strategic and tactical nuclear weapons, was believed to have a total 1,800 nuclear weapons, counting both categories. In an informal protocol to the Strategic Arms Reduction Treaty (SALT) signed by presidents Bush and Gorbachev in July, 1991, Gorbachev was asked expeditiously to direct the withdrawal of ground-based tactical nuclear weapons from their places of deployment to safe storage areas within Russia. Withdrawal of the Central Asian tactical nuclear weapons to secure facilities within Russia was reportedly carried out prior to the August, 1991, coup attempt.

On May 19, 1992, during a visit to Washington, DC, Kazakhstan's Nazarbaev agreed to comply with the terms of the START agreements and also work toward the goal of becoming a "nuclear-free" state. Four days later, in Lisbon, on May 23, 1992, the U.S., Belarus, Kazakhstan, Russia, and Ukraine signed an agreement, the Lisbon Protocol, to carry out the provisions of the 1991 Strategic Arms Reduction Treaty (START) signed in July 1991 by Soviet President Gorbachev and U.S. President Bush. According to the agreement, Kazakhstan was acknowledged to have

1,400 warheads.¹⁴ Kazakhstan has agreed to move toward non-nuclear status.¹⁵

The Central Asian states have undertaken individual initiatives in the direction of controlling nuclear technology. A presidential decree of July 17, 1992, in Turkmenistan was issued on the regulation of imports and exports. The decree explicitly banned the import or export of nuclear materials.¹⁶ In Uzbekistan, a law went into effect on August 6, 1992, that binds the republic to three non-nuclear principles: not to locate, not to produce, and not to acquire nuclear weapons.¹⁷

Nuclear Trade, Transshipment, and Export Controls

Throughout 1992, it appeared that the remnants of the Soviet nuclear weapons complex in the Central Asian states remained under the control of CIS joint forces.¹⁸ Yet reports continued to surface suggesting foreign interest in acquiring access to the area's production potential. For instance, on January 6, 1992, Tajik authorities denied reports of an attempt by the Tajik government to take control of uranium production facilities located in the northern part of the republic. As an aspect of agreements signed at the June 30, 1992, meeting between Tajikistan President Rakhmon Nabiev and Iranian President Rafsanjani, Iranian geologists were invited to Tajikistan to conduct mineral exploration.¹⁹

Unconfirmed press reports began circulating early in 1992 about nuclear weapons having been smuggled out of Kazakhstan in the last months of 1991. These reports were rapidly and repeatedly denied by

Kazakh officials. Bulat Bayenkenov, then Kazakhstan KGB chairman, denounced an article in The European about two warheads allegedly having been transferred to Iran as "just another hoax" aimed at poisoning relations between Kazakhstan and Russia.²⁰

The Kazakhstan Russian language newspaper, Kazakhstanskaia pravda, reported on September 23, 1992, that the local police were investigating a container of radioactive Cesium 137 which stolen from the Gurev Petroleum Processing Factory. The container reportedly was raised with the help of a crane from a specially designed mine that was closed with two massive metal tops. The newspaper correspondent speculated that the thieves would try to send the container across the border because of its value on the international market.

The export control regime faces special challenges in Central Asia. Generally, the elements of the export control process include: 1) international commitments; 2) national laws; 3) licensing bureaucracy; 4) customs organizations and a criminal justice system; 5) information sharing; and 6) a government-business/firm culture that suppresses non-proliferation. The typical export control process, accordingly, assumes a considerable amount of government capacity that is lacking in present circumstances in many of the Central Asian states.

Export Control Policies

	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Legal basis	decree		presidential statement	decree

CIS Export Control Agreement*	yes	yes	yes
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CIS CW Agreement	yes	yes	yes	yes
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CCF Membership**	yes	yes
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* Agreement of the Members of the Commonwealth of Independent States of June 26, 1992, binding member states to develop coordinated national export control systems.

** COCOM Cooperation Forum, inaugural meeting in Paris on November 23, 24, 1992.

Illicit trade in components of the former Soviet nuclear complex is complicated by the difficulties of trade in general. The poor Soviet highway system persuaded Soviet officials to move nuclear components by railway. Borders are not well connected with rail or road system. However, a considerable amount of illicit border traffic does take place. Kyrgyzstan's border with China is a conduit for contraband. A Uighur (Turkic-speaking) population lives on the other side of the border. Families divided by the border have reportedly maintained regular contact. Contraband, particularly traffickers in opium, reportedly move through the high mountain valleys on a periodic basis. Tajikistan's border is the most porous in Central Asia. No obstacles exist to industrious cross-border traffic in the Gorno-Badakhshan region. Legal trade between Badakhshan and Pakistan-based entrepreneurs has opened communication and transportation routes. Few

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obstacles if any can be expected to illegal traffic in this area. In Turkmenistan, there are currently about 60,000 Russian troops, mostly assigned to border patrols. Nevertheless, Turkmenistan's lengthy border with Iran is essentially uncontrollable.

The Central Asian states have agreed to comply with the norms of international regimes and the agreements established during the first phase of the Soviet breakup. Four states--Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Turkmenistan, and Uzbekistan have agreed to comply with both the CIS Export Control Agreement and the CIS chemical weapons accord. Turkmenistan, has agreed to comply with the CW accord, but has not signed the Export Control Agreement.²¹ Despite these assurances, many observers doubt the capacity of these states to implement the agreements. Bertsch and Cupitt argue that Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan are "sensitive states" which are "racked by internal and external conflict and are not in a position to put export control systems in place, even if they intended to do so."²²

Foreign contacts are of two types. One form of contact is between technical specialists in one country and technical specialists in other countries. Another form of contact is between technical specialists and intermediaries. The intermediaries may be private entrepreneurs anxious to seek profits in a context in which legality is not well-defined. Or they may be businessmen who knowingly and willingly work outside the bounds of legal authority. On February 29, 1992, the Frontier Post of Peshawar ran an interview with a Pakistani Parliament member, Mian Abdul Wahid. In the interview, Wahid said that Kazakhstan officials were prepared to assist Pakistan in the

field of nuclear technology, provided that it was for peaceful purposes. According to a report related by RFE/RL from the Iranian Press Agency (IRNA), Kazakhstan officials established a joint committee on transportation affairs at the ministerial level. The committee was investigating the creation of Caspian seaport links with Iran.²³

The Case of an "Orphaned" Nuclear Materials Facility: Chkalovsk

One vivid illustration of the potential problems associated with the collapse of the Soviet nuclear weapons complex is the case of the uranium enrichment facility in the town of Chkalvosk. The facility is now technically known as "Vostokredmet" (an acronym for "Eastern Precious Metals"). It appears that the facility is not now enriching uranium. Isotope separation probably took place at this facility from the late 1940s until about 1957. Milling operations probably continued for a longer period, probably until quite recently. In 1992, operations were apparently completely switched over to gold production and probably production of some other metals, such as vanadium. I visited this facility in the spring of 1993 and interviewed the former deputy director. A brief account of this interview follows.

Chkalvosk is located in the suburbs of Leninabad, one of Central Asia's ancient cities. Leninabad has now officially regained its pre-Soviet name, Hojent, although many people in the area continue to refer to it as Leninabad. It is located a few miles above the Syrdaria river in the foothills of the Turkestan mountain range, near the

narrow opening of the Ferghana Valley. The Ferghana Valley--a rough equivalent of California's San Joaquin Valley--is the most important agricultural region in Central Asia, and one of the most productive agricultural areas in the world. The Syr-daria river is one of Central Asia's two great rivers. It supplies water for irrigation purposes for Central Uzbekistan and Southern Kazakhstan.

In early March I began making attempts to see Vladimir Kuprianovich Cherkasov, the director of Vostokredmet. I sent him a letter through an intermediary. My intermediary was informed that Cherkasov would not meet me unless a meeting was approved by the Hakim (Mayor) of the city. The recently installed Hakim of the city at that time was Abdujalil Hamidov. Hamidov is a respected member of the community. He is the former director of Leninabad Carpet factory. As far as I could determine, he has no formal training in chemistry or physics. I sent another letter to Hamidov, but received the reply from his office that he was very busy. In mid-March I travelled to Hojent to meet with Vladimir Nestorov, the former Deputy Director of Vostokredmet. Nestorov had recently been removed from his position as Deputy Director and was preparing to leave the city of Chkalovsk to return to Russia. Nestorov was a nuclear engineer, trained in Moscow who had worked for several years at Vostokredmet. Nestorov was disgruntled about the fate of the nuclear field of nuclear engineering in the former Soviet Union, but even more disgruntled about the treatment of the Russian specialists by the Tajik authorities who had recently taken control of the facility.

Chkalovsk was a closed city, although now it is quite easy to simply drive in. The facilities are closed, but security precautions

are not visibly extensive. The small city was previously well-supplied. It was on a high priority list. The city had a modern motel with an adjacent lake. Modern, Soviet style high-rise buildings surround the facility, but there are some smaller, much more pleasant "dacha style" older buildings. I was told these were built in the 1940s by German prisoners of war. They are still viewed as the better housing in the area.

I will not vouch for either the veracity or the accuracy of Nestorov's remarks. I conducted the interview in Russian. What he told me was that, contrary to some sensationalistic accounts in the Russian press, the Chkalovsk facility never produced bomb grade uranium (above 95% U 235) but did conduct isotope separation to about 70 percent until 1957. The facility did not have a reactor and thus did not produce plutonium. Plutonium was never stored there. After 1957, the facility was used primarily for uranium milling (or, as I understood it, "primary processing" and for the production of other metals. He said there were underground facilities, but nothing on the scale of the descriptions in the Russian press. He said that there were hazardous materials that had been produced in the early days of Chkalovsk and which had not been dealt with adequately. He gave me to understand that the current government leadership had no idea how to manage the facility. He said that many Russian scientists were planning to leave soon.

There are a number of small cities that were associated with the area's uranium ore production. Among these are Yangiobad, Taboshar, Offin-topkan, and Isfara. I was told that these cities supplied

Vostokredmet with uranium ore earlier. Now the emphasis had been changed to gold production in these other cities as well.

It should be noted that these facilities are located in Tajikistan. But this part of Tajikistan is essentially politically annexed to Uzbekistan. Most of the officials are trilingual in Uzbek, Tajik, and Russian. Uzbekistan has its own uranium production facilities. Apparently there are ore deposits near the city of Novoi and a main milling facility is located there.

Scientific Infrastructure and "Re-Profiling"

Technical capability concerns not only the nuclear weapons themselves, but the engineering technology and physical infrastructure necessary to build weapons. As the Soviet Union broke up, the Central Asian states became heir to various components of the Soviet military-industrial complex. Kazakhstan had the largest cadre of nuclear scientists. Most were employed at the republic's two major facilities, Shevchenko located in western Kazakhstan, and Semipalatinsk. Shevchenko housed the world's first fast-neutron nuclear reactor, a design which used a sodium coolant. Semipalatinsk was the USSR's main nuclear weapons test facility. Between 1949 and 1991 as many as 466 nuclear weapons tests were conducted at Semipalatinsk.²⁴ The Semipalatinsk complex also included the "Ray Production Association," ("Luch") a research and production complex that developed expertise in nuclear generators for space navigation. Scientists with expertise in ballistic missile technology worked at the Baikonur missile range.

The other four southern tier Central Asian states did not have comparable nuclear weapons design or production facilities. Nor did they have a large cadre of nuclear scientists. None of these states appears to have the capability to easily proliferate. This would seem to imply that these states, since they do not have the capability to produce nuclear weapons, are not apt to contribute to the problems of proliferation. The opposite is the case. All of these countries--especially Uzbekistan--have components of the old Soviet nuclear weapons complex which are now orphaned. They have no use for these facilities and must either re-profile them, destroy them, or transfer them.

With the probably exception of Turkmenistan, all of these states possessed some components of the Soviet nuclear weapons and military production complex. Kyrgyzstan, Tajikistan and Uzbekistan had uranium mines. The first operating Soviet uranium enrichment plant, Chkalovsk, was located in northern Tajikistan.²⁵ Uzbekistan had a 30 Megawatt research reactor at Uzbekistan's Institute of Nuclear Physics. Uzbekistan also had the Navoi Metal Works factory in Tashkent. Kyrgyzstan had the Stepagorsh Metal Works factories and Uzhpolimetal in Bishkek.

Basic research in physics was done in the Academy of Sciences and also in selected ministries. Under the old Soviet system of the organization of scientific activity, all of the states had branches of the USSR Academy of Sciences. The USSR Academy of Sciences underwent a de facto disintegration in the spring of 1991. A Russian Academy of Sciences was formed in the late summer of 1991. The Russian Academy assumed all of the physical facilities located in Russia. At this

point, the branch academies separated. All of the Central Asian states therefore quickly established their own Academies.

Uzbekistan's Academy of Sciences, for instance, acquired the Institute of Nuclear Physics located outside Tashkent. Similarly, Uzbekistan acquired the Arifov Institute of Electronics located in Tashkent.

Private and para-statal organizations which utilized scientific expertise were established in many of the republics during 1990 as the USSR moved toward the acceptance of a mixed economy. Most of the personnel in these organizations retained their positions within the Academies. Following the USSR breakup, many of the branches of the Academies were financially insolvent. Moreover, new state regulations on private enterprise were relaxed in each of the republics. Consequently, a large proportion of the researchers left the state sector for private enterprise. Although accounts vary, it appears that a large amount of physical state property (laboratory equipment) was "spontaneously privatized."

In June, 1993, Uzbekistan president Karimov announced a major program to reconfigure the scientific and engineering establishment of Uzbekistan to provide the low-tech answers to their regional security problems. For instance, a major diesel engine factory in Tashkent which previously supplied diesel's for Soviet tanks had been shuttered and closed for almost two years. In the spring of 1993 the factory was reopened to produce engines for troop transport vehicles for local needs. Small arms production is reported to begin in Uzbekistan shortly. The reprofiling of the high-tech capabilities of the former Soviet military complex in Uzbekistan to relatively low-tech precision munitions has not yet been reported. But it probably has already

begun. What are the legitimate security requirements of these countries? What are the effects of demontazh of the Soviet military complex on their security requirements? These are questions that need to be answered.

Conclusions: Opportunities for Outside Influence

In terms of capabilities, Kyrgyzstan has uranium deposits, but it does not have enrichment facilities or a cadres of scientific workers. Tajikistan had a research reactor in Dushanbe. Tajikistan has uranium mines. Tajikistan may still have enrichment facilities. It may have had a cadres of advanced scientific workers, but most of these have now left. Turkmenistan probably has no facilities of significance. Uzbekistan has advanced scientific institutes, uranium mines, and access to all the nuclear systems facilities located in northern Tajikistan.

Assessing intentions is more difficult than assessing capabilities. Furthermore, intentions may change with a change of government, whereas capabilities can only change slowly. A rough approximation of the current distribution of intentions and capabilities is given in the following table.

	intention	capability	indicated nonproliferation measures
Kyrgyzstan	no	no	diplomacy treaties
Tajikistan	divided	yes	treaties monitoring

			inspection assistance
Turkmenistan	no	no	diplomacy treaties
Uzbekistan	no	yes	diplomacy treaties export control conversion assistance

Proliferation is not a random process. It is a caused event. Once the will to proliferate has been established, nonproliferation efforts must attempt to retard the development of capabilities. Yet at this late stage in the process, counterproliferation may be more costly and less successful than if the intention to proliferate had been discouraged initially. Therefore, solutions to the problems of proliferation in Central Asia will be most successful if they address the tensions and conflicts that may give rise to the intention to proliferate.

The proliferation of weapons, as we noted earlier, has both technical and political determinants. Neither technical capability nor political intention is in itself sufficient to sustain proliferation. When proliferation occurs, it is because both capability and intention are present. In the first two years of independence, U.S. policy sought options to strengthen Central Asian territorial unity and prevent the southern republics from peeling off toward the south. Central Asia is now at risk of splitting internally. It may be time for western policy--if it is to be oriented toward enhancing stability in the region--to consider supporting a greater role for Uzbekistan in maintaining conventional

military stability the region. This, in combination with efforts to constrain technical capabilities in the region, may be the best way of reducing intentions to proliferate.

Notes

1 For materials relating to the referendum, see Referendum in the Soviet Union A Compendium of Reports on the March 17, 1991 Referendum on the Future of the U.S.S.R. Compiled by the Staff of the Commission on Security and Cooperation in Europe. Washington D.C. (April 1991).

2 The text of the Minsk Declaration was reprinted in The New York Times (December 9, 1991): p. A4.

3 Original signatories to the Almaty (Alma-Ata) Declaration were: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. Moldova and Azerbaijan both withdrew and then later rejoined.

4 By way of contrast, Graham Fuller argues that in the Central States the internal problems are "at least as serious as interrepublican problems." Fuller goes on to argue that, if the opposition forces within the individual states gather momentum, each of the Central Asian leaders "will increasingly need to defend his nationalist credentials and will probably be pushed into adopting more sharply nationalist policies." Graham E. Fuller, "Central Asia: The New Geopolitics," Rand Report R-4219-USDP (1992): viii.

5 See Joan Edelman Spero, The Politics of International Economic Relations 4th ed. (New York: St. Martin's Press, 1990).

6 See Richard N. Garnder, Sterling-Dollar Diplomacy in Current Perspective: The Origins and Prospects of Our International Economic Order (New York: Columbia University Press, 1980).

7 John Herz, "Internationalist Idealism and the Security Dilemma," World Politics Vol. 2 (1950), p. 157.

8 See Robert E. Osgood, Alliances and American Foreign Policy (Baltimore: The Johns Hopkins University Press, 1968), p. 17.

9 Uzbekistan's Karimov supplied a large amount of military assistance to the Hojent faction. He also repeatedly requested military assistance from the CIS. Nazarbaev agreed to send troops in January, 1993, it was not until April that the Kazakhstan parliament gave its consent. Egemendy Qazaqstan (April 10, 1993), p. 1. Akaev sent a small detachment to the Tajik border in March, 1993, but it was withdrawn in April.

10 For arguments on the exhaustion of deterrence see William H. Lewis and Christopher C. Joyner, "Proliferation of Unconventional

Weapons: The Case for Coercive Arms Control," Comparative Strategy Vol. 10 (1991): 299-309; Juliet A. Swiecicki, "Severing the Ties that Bind: Moving Beyond Deterrence." Comparative Strategy Vol. 11, No. 3 (1992): 283-306. On the necessity for new forms of diplomatic initiative see Brad Roberts, "From Non-proliferation to Anti-proliferation," International Security Vol. 11, No. 1 (Summer 1993): 139-173.

11 Andrei Kozyrev, "Chego khochet Rossiia v Tadzhikistane," Izvestiia (August 4, 1993): 4.

12 RFE/RL Daily Report (16 September 1993).

13 In an informal protocol to the Strategic Arms Reduction Treaty signed by presidents Bush and Gorbachev in July, 1991, Gorbachev was asked expeditiously to direct the withdrawal of ground-based tactical nuclear weapons from their places of deployment to safe storage areas within Russia. In this way, the international community was requesting that tactical nuclear weapons be moved out of harm's way in the event of local hostilities. The withdrawal of the tactical nuclear weapons to secure facilities within Russia was reportedly carried out prior to the August, 1991, coup attempt.

14 This number probably includes 370 nuclear bombs and 1,040 nuclear warheads perched atop 104 SS-18 ICBMs.

15 Nazarbaev noted five conditions on Kazakhstan's intention to pursue non-nuclear status. He argued that there would have to be a willingness to allow Kazakhstan to: 1) use existing missile silos for commercial purposes; 2) keep stocks of uranium and plutonium; 3) keep test the facilities rather than destroying them; 4) receive a portion of technical assistance from western countries; 5) have security guarantees. Press conference of February 18, 1993.

16 Turkmenskaia iskra (19 July 1992): 1.

17 FBIS-SOV-92-153 (7 August 1992): 76.

18 The CIS joint command was abolished in August 1993.

19 ITAR-TASS Report of Oleg Kue'min. (30 June 1992).

20 ITAR-TASS report of May 4, 1992. FBIS-SOV-92-086 (4 May 1992): 47.

21 The CIS Export Control Agreement was a product of the June, 1992, CIS summit held in Minsk.

22 Gary K. Bertsch and Richard T. Cupitt, "Nonproliferation in the 1990s: Enhancing International Cooperation on Export Controls," The Washington Quarterly Vol. 16, No. 4 (Autumn 1993), pp. 530-70, at p. 66.

23 RFE/RL Research Report Vol. 1, No. 11 (13 March 1992): 69.

24 The first nuclear detonation in the USSR was at Semipalatinsk on August 29, 1949. On August 29, 1991, Kazakhstan leader Nazarbaev

order cessation to nuclear weapons testing on Kazakh territory.

25 Uranium isotope enrichment reportedly ceased at the plant in 1957.

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