From RYaN to Reykjavik:

The Role of Nuclear Weapons in Ending the Cold War

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At a time of increased tensions between Russia and the West over its annexation of Crimea and engagement in a bloody civil war in eastern Ukraine, it is right and appropriate to reflect upon the terrible tensions of the late Cold War at the end of 1970s and early 1980s. By ordering a strategic nuclear exercise during the current crisis President Vladimir Putin has sought to reassert the role of nuclear weapons as the defining element in strategic stability. Timed to begin on the day before "Victory Day," May 9th, the exercise was intended to demonstrate Russia's ability to defend its sovereignty and territorial integrity in case of a global, thermonuclear war. At the end of the exercise Putin noted: "We all had a chance to observe the high readiness and coherent grouping of the country's strategic offensive and defensive forces.... This is a reliable guarantor of sovereignty and territorial integrity of Russia and plays an essential role in ensuring global and regional security." Today the nuclear arsenals are considerably smaller than three decades ago, but they still remain a defining element of national power. And operational strategic exercises involving nuclear forces reflect both readiness and not-too-subtle political signaling. But a Russo-Ukraine confron-

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tation and the risks of nuclear war have been recognized since the end of the Cold War.³ Some experts see the situation as particularly threatening because of advances in nuclear weapons technology, including super EMP (electro-magnetic pulse) weapons. Their employment could, according to Peter Pry, lead to a world war, involving the employment of nuclear weapons.⁴

Nuclear Weapons and the Cold War

In that period three decades ago the nuclear arsenals of the two super powers greatly shaped their bilateral tensions and raised the prospect of the Cold War ending in a very hot nuclear exchange, which could, given the size of the arsenals, destroy civilization and even threaten the existence of life on this planet. By 1980 the U.S. arsenal of nuclear warheads had declined from a peak of 32,450 in the mid-1960s to 24,300. American warheads had gotten smaller and more accurate. The Soviet Union over the same period had reached nuclear parity with the United States—and continued to grow its nuclear arsenal until 1985 when it possessed over 44,000 warheads and had a significant advantage in throw-weight. By 1983 scientists in United States and Soviet Union had come to the same ominous conclusion. As Carl Sagan stated:

The delicate ecological relations that bind together organisms on Earth in a fabric of mutual dependency would be torn, perhaps irreparably. There is little question that our global civilization would be destroyed. The human population would be reduced to prehistoric levels, or less. Life for any survivors would be extremely hard.⁶

By that stage of the Cold War the size and capabilities of each arsenal had turned such weapons into means of strategic deterrence without any effective role in war-fighting to achieve political ends. But each side feared the other's ability to engage in a disarming first strike, which would leave the attacked power incapable of retaliation. Secrecy, distrust and apprehension regarding the intentions of the other side kept the arsenals on full-time alert in case the opponent might just take some insane risk and use such weapons. ABM defense of the two sides had been limited by the ABM Treaty of 1972 to one national sight each. The United States invested in the protection of its land-based ballistic missiles at Grand Forks Air Force Base, North Dakota, with the ABM sys-

tem operational for only two years in 1975-1976. The Soviets placed their ABM system around Moscow in an effort to protect national command authority. Both systems were unable to deal with the offensive challenge created by MIRV technology.⁷ This situation turned MAD into the national security strategy by default, precisely when both super powers had to confront serious and complex international crisis, affecting their alliance systems and raising the issue of the relationship among conventional military power, theater nuclear forces, and strategic nuclear forces. In Washington there were those who were certain that detente or "the relaxation of international tensions" had advanced Soviet interests at the expense of the United States and were quite sure that the USSR was preparing to fight and win a nuclear war. Albert Wohlsetter had raised the issue in 1974 and criticized the CIA's National Intelligence Estimates on Soviet nuclear capabilities. At the end of the Gerald Ford administration, the newly appointed CIA director, George H. W. Bush, authorized a competitive analytical exercise pitting the CIA's analysts against a team of outside experts, known to be "hawks" on the Soviet threat. Team B concluded that the CIA had been wrong in their assessment of the USSR's capabilities and intentions, seeing more defensive motives than strategic offensive plans in their actions and accrediting to the USSR a massive capability for defense research and development and weapons procurement. The political consequences of Team B were to raise the charge of "dovishness" against CIA's own analysts while promoting an alternative vision, noted for its avowed "hawkishness" toward the Soviet Union and its leadership.⁹ This dispute over intelligence in 1976 had deep roots in U.S. policy towards the Soviet Union during World War II and the Cold War.

Cold War Strategy: Containment vs. Rollback and the Role of Military Power

For well over three decades the United States and the Soviet Union had been locked in a competition to define which power would dominate the international order that emerged after World War II. The United States was the great engine of a democratic-capitalist order based upon the rule of law and global markets. World War II had been the good war for a generation of Americans coming out of the Great Depression and mobilizing for warfare across the globe. The Roosevelt administration had gambled in its national strategy by emphasizing the creation of naval and air power to project across the globe while relying upon Lend Lease to keep foreign allied armies in the field against the Germans and

Japanese. That gamble had by 1944-1945 had paid off in the defeat of Germany, but it had meant that one allied army, the Red Army, was reshaping the map of Europe to include much of Eastern Europe into a *de facto* sphere of influence for the USSR. Already by the fall of 1944, after the Soviet failure to intervene to support the Warsaw Uprising led by elements of the Polish Resistance loyal to the Government of Poland in exile, Britain's Imperial General Staff was treating the USSR as a potential adversary following the end of the war in Europe.¹⁰ In May 1945 Churchill had ordered the Imperial General Staff to do a study of a possible war over Germany starting on 1 July 1945 and pitting the armed forces of the United Kingdom and the United States with assistance from rearmed Wehrmacht divisions and Free Polish divisions against the Red Army. The staff officers' conclusions were pessimistic about the outcome of such a war, and they labeled the exercise Operation Unthinkable. By late May Churchill knew that the chance of any such operation was over as American troops began to leave Europe for the Pacific.¹¹

The United States with its concerns for ending the war against Japan at that time saw the USSR as a vital ally and had agreed at Yalta to provide Lend Lease assistance to the USSR to ensure a Soviet force of 60 divisions would strike Japanese forces in Manchuria three months after the end of the war in Europe. 12 American pragmatism had downplayed profound difference between the Anglo-American Allies and Stalin's Soviet Union during the war in Europe. But following the death of Franklin D. Roosevelt in April 1945, the Harry S. Truman administration began a reassessment of U.S.-Soviet relations. When the war in the Pacific ended with the use of two atomic bombs and Soviet offensive in Manchuria, Washington had not yet adopted Churchill's dark view of Stalin's empire-building, but the direction of relations moved steadily toward giving up on the wartime alliance serving as the basis for future positive relations.¹³ Seeking a stable post-war order under the auspices of the United Nations, Washington saw the USSR as practicing revolutionary politics, anti-imperialism, and sphere-of-interest diplomacy with the objective of Soviet hegemony across Europe and Asia. Moscow understood its own weakness as a result of its territory being the chief battleground for total war and the accompanying loss of lives and material goods. The geo-strategic dilemma which would shape military-political relations between Washington and Moscow during the Cold War can be understood by asking a seemingly absurd question: who would win a battle between a whale and an elephant? The answer, of course, depends upon just where that battle would be fought, on the ocean or the steppe.¹⁴ Some later came to

think that nuclear weapons had made such a war an irrational choice.¹⁵ In the absence of a Soviet atomic bomb in 1945, Stalin set out to get one as rapidly as possible while convincing Washington that the Soviet Union would not be intimidated.¹⁶

In the absence of a common threat, the differences between Washington and Moscow seemed monumental. The Soviet Union was a revolutionary power, governed by a Party intent upon imposing an ideology on the world. Soviet Marxism-Leninism held out the hope of state-dominated order via centralized planning to bring about massive transformations of society at the will of its political leadership. Soviet communism under Stalin had used terror to impose massive human costs on its own population during collectivization and industrialization in the name of creating a military-industrial power.¹⁷ Stalin had envisioned "Socialism in One Country" as a means to protect a pariah state from attack, but in 1945 the Kremlin saw much of Europe at its feet and expected national Communist Parties to support the expansion of Soviet influence to the west. Victory in what the Soviets called the Great Patriotic War had come at horrendous costs which the regime sought to conceal from the population, even as it sought to use that victory as a new rationale for the legitimacy of Soviet power. Within a year of the end of the war in Europe, George Kennan was writing from Moscow to the State Department advising that the USSR would be a military, political, and ideological challenge to the United States and recommending a strategy of containment to deal with that threat.¹⁸ In April 1950, less than a year after the detonation of the first Soviet atomic bomb, NSC-68 outlined a policy to use increased military pressure on the Soviet Union through the development of the Hydrogen Bomb to strengthen containment and force change upon the Soviet regime.¹⁹

There would be a continuing tension in U.S. grand strategy between policy makers who accepted a militarized containment as the best choice for those envisioning the struggle as a protracted one and other leaders who championed a robust effort to "roll back" Soviet power by swift and decisive actions. Chinese intervention in the Korean War and the Truman administration's decision to forego nuclear use and with it the expansion of that war into Manchuria was a serious setback to rollback as a strategy. And the Dwight D. Eisenhower administration chose to strengthen containment and give it global character rather than intervene in the periodic crisis which affected communist Eastern Europe from the death of Stalin to the crises in Poland and Hungary in 1956, when de-Stalinization threatened revolts against Soviet hegemony.²⁰

By 1960 General Secretary Nikita Khrushchev was quite certain that nuclear weapons were a way for the USSR to escape from massive conventional forces and to concentrate on acquiring sufficient nuclear weapons to counter the American arsenal. Colonel-General Adrian Danilevich, who was a senior special assistant to the Chief of the Operations Directorate of the General Staff in the 1970s and early 1980s, places Soviet nuclear history into distinct periods: the decade of acquisition from 1950 to 1960, followed by an era of "nuclear euphoria" from 1960-1965—missiles produced like sausages, super bombs and a dangerous foreign adventure. The euphoria cost Khrushchev his hold on power and brought to power a new leadership intent upon achieving strategic parity, and with that, greater freedom of action in the Soviet Union's global competition with the United States.²¹

Detente and the Emergence of Strategic Parity

Nuclear weapons were a prominent feature of the Cold War from its very beginning. An American nuclear monopoly in atomic weapons and the means to deliver them shaped the first few years of the conflict until the Soviet Union detonated its own atomic bomb, code-named First Lightning, on 29 August 1949 at the Semipalatinsk test site in the Kazakh SSR. Thereafter, U.S. and Soviet officials understood that they were in a race to develop more sophisticated weapons of greater destructive power and more reliable means of delivery of such weapons. The arsenals grew in their destructive power, the means of delivery moved from manned aircraft to ballistic missiles of intercontinental ranges, and geometrically in the numbers of nuclear weapons in each arsenal. Both sides deployed tactical nuclear weapons for battlefield use and thus created a linkage between theater war and a general nuclear exchange. Thus began a race between Washington and Moscow to produce a sufficient quantity of nuclear weapons to ensure that each side would possess a sufficient and stable arsenal of offensive nuclear weapons to make any gamble on a strategic nuclear first-strike unlikely to succeed. Thermonuclear weapons of geometrically greater destructive power appeared in each side's arsenal in the early-mid 1950s. According to Andrei Kokoshin, a leading Russian expert on defense and security policy, the advent of such weapons shifted nuclear strategy from warfighting to deterrence.²² Kokoshin, then a senior researcher at The Institute for the Study of the United States of America and Canada (ISKAN), had by the 1980s become

one of the Soviet Union's leading experts on the evolution of U.S. defense and security policy.²³

This strategic situation had gotten a name in the 1960s: Mutual Assured Destruction (MAD). It led to bilateral arms control conversations beginning in the late 1960s which placed limits on Ballistic Missile Defenses and gave structure to the modernization of offensive strategic nuclear weapons over the next decade. The Richard Nixon administration defined this approach to bilateral relations as detente. In 1972, U.S. and Soviet officials signed the first Strategic Arms Limitation Treaty (SALT) agreement and continued their arms control negotiations into the late 1970s. This became the era of detente and lessened super power tensions. But it did not remove the risk of nuclear confrontation. Local crises involving allies of each of the superpowers could create situations where nuclear weapons figured prominently in crisis termination as was the case during the Yom Kippur War of October 1973.²⁴ By the late 1970s it was quite clear that the two sides had reached nuclear parity in their strategic arsenals, even if they were profoundly different in their composition and capabilities. The SALT II negotiations between 1972 and 1979 had been aimed at managing nuclear force modernization in such a fashion as to reduce the threat of strategic breakout by either side. President Carter and General Secretary Brezhnev signed the agreement in Vienna in June 1979.

1979: A Bad Year for Super Powers

By that date, the rose was well off the bloom of detente, and both the Soviet Union and the United States had serious concerns about an international system, which seemed beyond the control of either power. In January 1979, an Islamic Revolution swept the Shah of Iran from power to be replaced as by a Shiite clerical regime hostile to the United States. Bilateral relations between the United States and Iran continued to deteriorate until November 1979 when students seized U.S. embassy staff as hostages in Tehran, a crisis that would last until January 1980 and profoundly affect U.S. domestic politics and serve as the nation's first introduction to dealing with radical Islam.²⁵

Moscow had its own troubles in 1979. After a decade of tremors with its satellites in Eastern Europe, the Brezhnev regime faced another serious challenge to Soviet hegemony, when John Paul II undertook a visit to his native Poland, where, as Karol Józef Wojtyla, he had served as Archbishop of Krakow and became a powerful voice for human rights in Poland before becoming Pope

in 1978. The visit in 1979 brought out huge crowds everywhere he traveled in Poland, and set in motion a powerful alliance between the Church and a broad movement of workers, which began at the Lenin Shipyards in Gdansk in August 1980 and became a national movement under the leadership of Lech Walesa, challenging the authority of the ruling PZPR, Moscow's agent in Warsaw. In the fall 1968 General Secretary Leonid Brezhnev had used the PZPR Party Congress to declare the so-called "Brezhnev Doctrine" justifying the Soviet-led intervention of the Warsaw Pact to end the Prague Spring and its promise of "socialism with a human face." Brezhnev proclaimed: "When forces that are hostile to socialism try to turn the development of some socialist country towards capitalism it becomes not only a problem of the country concerned, but a common problem and concern of all socialist countries."26 Military intervention in the internal affairs of fellow socialist state became an explicit feature of Soviet foreign policy. In the case of Poland in the decade after 1968 there had been several mass demonstrations challenging party rule, but now had seemed severe enough to require Soviet military intervention. As the crisis in Poland weakened the position of the PZPR, Moscow mounted a series of military maneuvers to push the new leader of Poland, General Wojciech Jaruzelski to use Polish forces to impose martial law and break Solidarity's power. On 13 December 1981 Jaruzelski imposed martial law and kept it in place until July 1982.²⁷

December 1979 was a desperate month in Moscow. In early December NATO hosted a meeting of Defense and Foreign Ministers in Brussels to respond to Soviet deployment of advanced theater nuclear weapons systems, i.e., the SS-20 IRBM with MIRVs and the Tu-22M, a super-sonic plane with variable-geometry wings, designed to serve as a long-range bomber and marine strike aircraft armed with the AS-4 Kitchen missile. NATO adopted the "Double Track" response to this Soviet qualitative and quantitative modernization of long range theater-nuclear forces. The "Double Track" called for an increase in long-range theater nuclear forces in the form of nuclear-capable IRBM Pershing II missiles and Ground Launched Cruise Missiles (GLCMs) with a total number of 572 warheads. NATO held out the prospect of arms control talks to bring about reductions in Intermediate Range Nuclear Forces.²⁸

In late December the Soviet leadership, against the advice of its General Staff, decided to mount a limited intervention in Afghanistan to bring about a *coup d'état* and place in power a government both loyal to Moscow and capable of restoring order across Afghanistan.²⁹ The situation seemed to stabilize in the first months of 1980, but by February the Politburo, confronted by the fact of

an Afghan Army that could not pacify the countryside, decided to employ the Soviet contingent to fight the anti-Soviet Afghan resistance, the Mujahedeen.³⁰ This was the Soviet equivalent of "mission creep." From then until the withdrawal of Soviet forces from Afghanistan in February 1989, the Soviet-Afghan War became a protracted struggle against radical Islam, which enjoyed the covert support of Pakistan, other Islamic states, the United States, China, and other powers. The Carter administration announced that the Soviet military intervention in Afghanistan would bring fundamental changes in U.S.-Soviet relations, including a boycott of the Moscow Olympics and an embargo on U.S. grain sales to Moscow. After cutting the defense budget in 1977-1978, the Carter administration increased defense spending over the next three years to \$317.4 billion. In Washington, even before the November election of 1980, detente was dead.

Finally, by late 1979, it was evident to most people in Moscow that the long-time leader of the Soviet Union was in very bad health, and there were questions about what would follow Leonid Ilich Brezhnev's death. Brezhnev's speech was slurred during his election appearance in March 1979 and he appeared to need help walking when he attended a Central Sports Club of the Army (TsSKA) hockey match that same spring. By this time Brezhnev, who had been a heavy smoker and drinker, had reduced both. His health continued to deteriorate over the next two years, mirroring the sluggishness of the Soviet economy during the same period. While Brezhnev clung to his post as General Secretary of the CPSU, a quartet of senior politburo members (Iurii Andropov, Andrei Gromyko, Mikhail Suslov and Dmitri Ustinov) representing the KGB, Foreign Ministry, Party Secretariat, and Ministry of Defense became the de facto leaders. The last years of Brezhnev's were a period of competition to replace the ailing leader. On 7 November 1982, Brezhnev stood on Lenin's Mausoleum to observe the annual celebration of the October Revolution. Three days later, he was dead of a heart attack. Brezhnev had made the USSR into a major nuclear power and a rival to the United States, but at the cost of mortgaging the entire national economy to militarization. Many in Moscow spoke of a creeping corruption in the Nomenklatura and a pervasive attitude that an aging elite had no plan to deal with the problems confronting the Soviet Union beyond "Après moi, le déluge." And ordinary Soviet citizens were feeling their own anxieties, confronted by "the eternal state" and no evident mechanisms to reform an ossified regime and transform society.31 Confronted by stiffened resistance to

the Soviet Union, Moscow turned its global propaganda effort to the struggle to unite all "progress forces" to prevent war.³²

President Reagan Confronts the "Evil Empire"

The election of Ronald Reagan in 1980 put in power an administration committed to a strategy of political and military confrontation with the Soviet Union and its allies around the world. The Carter administration had set the stage for such a policy but it had been reactive and still committed to arms control and containment. Reagan actively embraced roll back as the appropriate strategy for dealing with the Soviet Union and its allies. This policy included supporting anticommunist resistance forces in not just Afghanistan but in Central America and Africa. Reagan expanded the military build-up begun by Carter and staunchly supported NATO's "Double Track" on theater nuclear weapons. The administration, however, was open to a fresh approach to structuring the strategic military competition with the USSR in a fashion that would enhance U.S. strategic advantages and impose greater costs upon the Soviet Union. Andrew Marshall, the Director of the Office of Net Assessment in the Pentagon since its founding in 1974, had championed such an approach in a study that he had done in the early 1970s.³³ The approach became known as "competitive strategies" and it represented a paradigm shift in how the US would mount a long-term approach to the military-political rivalry with the USSR.34 By directing the military-technical competitions in directions, which would challenge the ossified command economy in the Soviet Union, Marshall recommended imposing additional costs, which that economy could not sustain over the long haul. Marshall spoke in terms of trends and transformations, which would take decades to be realized. His ideas influenced many of those who were associated with the Office of NET Assessment and would in 1986 serve as the basis of Secretary of Defense Casper Weinberger's initiative to use competitive strategies as the foundation for a formal program for enhancing long-range strategic planning on the advice of his special advisor, Dr. Graham Allison, Dean of the John F. Kennedy School of Government at Harvard University and Marshall's colleague years earlier at RAND.35

One feature of the Soviet system which the U.S. intelligence community considered a potential vulnerability was the Soviet Union's espionage effort to steal advanced Western technology and integrate it into Soviet systems. The Carter administration had sought to tighten technological transfers, but the

Intelligence Community was interested in more active measures, including feeding corrupted technology into the KGB and GRU program run by Directorate T and known as Line X. The Reagan administration benefited from the French government's willingness to share access to Soviet defector, Vladimir Ippolitovich Vetrov, who had served as a collector for Line X in France for five years but was now inside Directorate T in Moscow. The French Intelligence Service, DST, had given Vetrov the code name "Farewell," and so "Operation Farewell" was born.³⁶ Vetrov's career as a spy reflected one of the great changes in the world of espionage in the late Cold War. From the 1920s to the 1940s the Soviet security services had been able to count on recruiting spies on the basis of ideology. In the Vetrov case the French were successful because a Soviet intelligence officer had been willing to spy for ideological reasons: Vetrov saw the Soviet system as corrupt and collapsing and set out at great personal risk to bring it down.³⁷ From 1981 on Vetrov provided masses of information on Line X's operations and its entire network of collectors abroad. This created a perfect opportunity to cut off Soviet access to advanced technology via espionage and to actively pass to the Soviets technology and control documents with defects concealed in them. As the late Gus W. Weiss, Director of International Economics for the National Security Council during the Reagan Administration, wrote:

Contrived computer chips found their way into Soviet military equipment, flawed turbines were installed on a gas pipe line, and defective plans disrupted the output of chemical plants and a tractor factory. The Pentagon introduced misleading information pertinent to stealth aircraft, space defense, and tactical aircraft.³⁸

Vetrov's career as "agent Farewell," however, was cut short by that most Russian failing—excessive drinking and violence while drunk. Vetrov stabbed his mistress in a car and then killed a policeman who came up to investigate. He was caught and sentenced to fifteen years in a penal colony for the murder of the policeman in the fall of 1982. In 1984 Vetrov was brought back to Lubianka in Moscow and tried for treason and executed as a traitor in 1985. Some of the sabotage of technology led to major catastrophes. Thomas C. Reed, an advisor to President Reagan, wrote that the United States had successfully inserted corrupted software into computing equipment that the Soviet Union had bought

from Canadian suppliers. Used as part of the control system for a Trans-Siberian gas pipeline, the doctored software caused the pipeline's pumps to operate in such a manner as to overload the pipes, leading to a spectacular explosion in 1982.³⁹

As these events were transpiring, Moscow was becoming more alarmed by the deterioration of U.S.-Soviet relations. In May 1981, on the basis of a briefing from senior KGB officers, the Politburo had concluded that there were sufficient indicators that the Reagan Administration Presidency was in the process of preparing for a nuclear first-strike against the USSR. Iurii Andropov, the head of the KGB since 1967, launched Operation RYaN (raketno-yadernoe napadenie) nuclear missile attack) and ordered the KGB and the GRU to mount a massive collection effort against this threat. This war scare drove the Soviet Union's relationship with the United States and NATO for three years with a steady increase in fear among the Soviet leadership, especially Andropov and Minister of Defense Ustinov. The Soviet collection effort has been judged poor spy craft by students of operation, but the general direction of events down to late 1983 only re-enforced the prudence of the effort. As NATO moved forward towards the deployment of INF forces and the arms control talks made no progress, the Soviets engaged in intimidation by exercises. In the summer of 1981 the Soviet General Staff ran the operational-strategic exercise, Zapad 81, simulating a large-scale offensive using airborne forces and testing the concept of the operational-maneuver group developed by General M. A. Gareev. This was supposed to be part of what Marshal Nikolai Ogarkov, the Chief of the Soviet General Staff, referred to as "the revolution in military affairs." 40 On 14 June 1982, the Soviet General Staff ran a major strategic exercise, *Shchit*-82 simulating a "seven hour" nuclear war with NATO, which included launches of nuclear-capable ICBMs, SLBMs, IRBM, air-mounted cruise missiles, an anti-satellite vehicle, and various communications and photo-reconnaissance satellites—some of which failed.⁴¹ During the same year Soviet intelligence followed the U.S. Strategic Command staff exercise Ivy League (March 1982), which involved a decapitating nuclear strike against Washington a massive U.S. retaliatory strike conducted according to the SIOP (Single Integrated Operation Plan) for the conduct of nuclear war.42

Soviet intelligence did not have to work very hard in learning about exercise Ivy League. There were German reports on the exercise and speculations about its content in February.⁴³ Reports on Ivy League also came from Karel Koecher, a double agents for the Czechoslovak Intelligence Service and the Central In-

telligence Agency before the arrest of him and his wife for espionage. Koecher has stated that he reported that Ivy League was a strategic exercise testing a concept for a limited but winnable nuclear war and has asserted that the exercise alone justified Operation RYaN and asserted that it was not a false alarm.⁴⁴ In August as rumors about the content of Exercise Ivy League were being raised internationally, Secretary of Defense Weinberger published a letter in a number of U.S. and European publications in which he outlined the justifications for modernization of U.S. strategic and other nuclear forces in the face of a growing and modernized Soviet arsenal and pledged that the United States national strategy did embrace deterrence: "Our entire strategy aims to deter war of all kinds, but most particularly to deter nuclear war." But deterrence, as a concept, was "difficult for some to grasp because it is based on a paradox" since it rested upon a policy of inflicting such damage on an attacking opponent that the costs would outweigh any expected benefits.⁴⁵

Relations remained tense throughout 1982. With Brezhnev's death in November Yurii Andropov became General Secretary of the CPSU. Andropov was increasingly concerned about a U.S. first nuclear strike upon the Soviet Union. His concerns got even stronger in 1983. On 8 March 1983, President Reagan spoke to the National Association of Evangelicals in Orlando, Florida, and spoke of the need to oppose the Soviet Union as "an evil empire." ⁴⁶ The Manichean tone of the speech setting up the Cold War as a struggle between good and evil was very much in the president's style. However, his target was not the USSR but rather those in the West advocating a nuclear freeze as the only sane course towards ending the nuclear arms race. Reagan was well aware of the dilemma of pushing confrontation when his only option if deterrence failed was to engage mutual nuclear suicide taking along a good part of the world's population. In late March 1983 he offered his own way out of the dilemma posed by MAD, a new look at strategic defense. Reagan stated:

I've become more and more deeply convinced that the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence. Feeling this way, I believe we must thoroughly examine every opportunity for reducing tensions and for introducing greater stability into the strategic calculus on both sides.

He labeled this effort the Strategic Defense Initiative and there was much discussion of how these advanced systems would make it impossible for the USSR to compete in the areas of advanced technology to create a global and space-based missile defense system. Skeptics, including many in the scientific and engineering community, called the program "Star Wars" and labeled it visionary and utterly impractical, given existing technology, software, space lift capabilities, and the untested state of much of the weapons technology, which was supposed to do the destruction in space.

The Soviet initial response was to see SDI as just another indicator of imminent conflict, but the assessment rapidly changed to "nothing more than a strategic bluff." ⁴⁷ After exploring the various proposed systems for space-based missile defense, Soviet specialists concluded that an asymmetric program to modernize ballistic missile forces could effectively counter those systems. "Such a system clearly will not be able, as it proponents argue, to make nuclear weapons ineffective and obsolete, or to provide a reliable protection of the territory of the United State, and even less its allies in Western Europe or in other regions of the globe." ⁴⁸

In the fall of 1983 the war scare in Moscow grew in intensity. On 1 September 1983 a Soviet interceptor shot down a South Korean Airliner KAL 007 as it was about to exit Soviet air space after it had flown for several hours inside Soviet airspace from Kamchatka then over the Sea of Okhotsk and Sakhalin. The Boeing 747 was destroyed and passengers and crew died. The Soviet General Staff responded to the incident by claiming that the aircraft had been a spy plane. The Reagan administration claimed that the Soviets had willfully shot down a civilian airliner, displaying the Soviets' lack of respect for human life. Later studies would conclude that Soviet incompetence had been a factor in the shoot down, but it also drew attention to US PSYOPS intended to intimidate the Soviets including a large fleet exercise near the Kurile Islands in which U.S. naval aviation deliberately violated Soviet space in May 1983.⁴⁹ Soviet intelligence knew about the details of this operation thanks to the fleet signals intelligence, which John Walker, a paid spy for the KGB had organized and recruited members of his family to serve as Soviet spies. Walker's own career lasted 17 years until he was arrested in 1985.50

Operation RYaN moved into full swing thereafter. But its architect was no longer able to direct it. Within a month of the destruction of KAL 007 Andropov fell seriously ill, withdrew from public life, and died in February 1984. In late September there was a technical malfunction in one of the observation satellites

controlled from Serpukhov-15. The satellite reported the launch of 5 Minuteman missiles, each armed with ten warheads. Lt. Colonel Stanislav Petrov, the duty officer there, checked other indicators and concluded that satellite was malfunctioning and a major first strike would have involved many more missiles and therefore did not sound the alarm of a missile attack.⁵¹

In early November NATO ran a ten-day strategic exercise, Able Archer, simulating the use of nuclear weapons in Europe. Specific features of the exercise simulating an escalating conflict leading to full-scale nuclear war led some Soviet political and military leaders to conclude that the exercise was actually cover for real preparations for a first-strike against the USSR. RYaN went into panic mode as it seemed in the KGB's London station. ⁵² Benjamin Fischer in his excellent study of RYaN as a "Cold War Conundrum," concluded that the war scare reached its peak during Able Archer. He observes:

Gordievsky may have exaggerated the gravity of the Soviet reaction to ABLE ARCHER 83 by comparing it to the Cuban missile crisis, but that was a matter of interpretation—intended no doubt to enhance the importance of his own role—rather than a question of fact.⁵³

RYaN continued to be a major collection priority for KGB and GRU assets into 1984, but gradually lost its urgency. According to Robert Gates, a senior intelligence specialist on the Soviet Union at the CIA and Deputy Director for Intelligence in 1982, Washington had missed the degree of alarm among the Soviet leaders over the threat of a U.S. nuclear first strike. At the time, the Intelligence Community had assumed that Soviet concerns were nothing more than "posturing for political effect."⁵⁴

Such miscalculations with regard to intentions with nuclear weapons could have had tragic consequences. As RYaN was coming to an end, the Soviets did, however, carry out one very key change in their nuclear command and control system by introducing "*Perimetr*" (deadhand) to provide for the release of nuclear forces in case of the destruction of national command authority.⁵⁵ In a bizarre replay of the famous scene from popular movie *Dr. Strangelove*, when the Soviet ambassador informs the American president and his national security elite that the Soviet Union had built a doomsday machine as a way out of an unending and costly arms race that was bankrupting the USSR.

There are those of us who fought against it, but in the end we could not keep up with the expense involved in the arms race, the space race, and the peace race. And at the same time our people grumbled for more nylons and washing machines. Our doomsday scheme cost us just a small fraction of what we'd been spending on defense in a single year. But the deciding factor was when we learned that your country was working along similar lines, and we were afraid of a doomsday gap.⁵⁶

In November 1983 the American public got a different look at what such a nuclear exchange could mean to mid-America in the film *The Day After*. Reagan previewed a videotape of ABC's *The Day After*, before its showing on national television, and recorded in his diary that the production was "very effective & left me greatly depressed." Then Reagan wrote in his diary of his commitment "to see there is never a nuclear war." 58

Andropov died in February 1984 and was replaced by Brezhnev's loyal assistant in Party matters, Konstantin Chernenko. Chernenko stopped the reform experiments to revitalize the national economy which had begun under Andropov. His tenure was, however, brief. He was already ill when appointed General Secretary and he died in March 1985. At that juncture the interregnum which had begun in 1980 ended, the Politburo under the leadership of Andrei Gromyko picked a junior member, Mikhail Gorbachev, from its ranks and gave him a mandate for reform and experimentation in domestic policy, which led to Perestroyka and Glasnost' and a new approach to international relations. In the international arena Aleksandr Yakovlev recommended a course of strategic disengagement so as to remove the image of the Soviet threat in the West. Yakovley, having lived abroad, had a very good sense of the utter disconnect between the Soviet image of the West and the relative of a vibrant society and economy. He understood very well the historical distance which separated Soviet and Western experience, but was optimistic about ending Party hegemony at home and an arms race abroad.59

How the Reagan administration would respond to a Soviet reformer was up for grabs in 1984. Reagan himself had not been unaffected by the events in 1983. Reagan with the advice of Secretary of State, George Shultz, began to prepare the U.S. government for serious negotiations with the Soviet Union. 60 Raymond Gartoff has credited Shultz and Soviet Foreign Minister Andrei Gromyko with opening the first significant diplomatic dialogue between the Rea-

gan administration and the Soviet leadership.⁶¹ Jack F. Matlock, Jr., a Foreign Service officer and one of the old Soviet hands, served as acting ambassador in Moscow (1981) and was later appointed by Reagan ambassador to Czechoslovakia. In 1983, he returned to Washington to join the NSC staff to develop a negotiating strategy to end the arms race. Matlock described 1984 as the year when Washington prepared for such negotiations and the Moscow "dawdled."⁶²

The dedicated Cold Warrior who had set out to destroy the USSR now began to consider the people of Russia in his strategic calculus. Suzanne Massie, the author of *Land of the Firebird: The Beauty of Old Russia* (1982) brought back a message to the president in the fall of 1983 from senior Russians regarding how great the risk of nuclear war was at that time. Reagan engaged Massie in a dialogue about Russia. In February she was sent on an unofficial trip to Russia to open a channel for discussions. This proved successful and Massie became a frequent unofficial advisor to the president on the Soviet Union, meeting with him twenty-two separate times over the next four years. She passed on to Reagan the peasant saying "Trust but verify." 63 In late 1984, after meeting Gorbachev, Margaret Thatcher, the Conservative Prime Minster of England, declared in a BBC television interview that she was cautiously optimistic and believed that "We can do business together." ⁶⁴ In 1985 Reagan and Gorbachev met for their first summit in Geneva but made no progress. In October 1986 they met again in Reykjavik. Although it resulted in no sweeping arms control deal, it did serve as the foundation for the INF Treaty removing such weapons from the U.S. and Soviet arsenals.

Thatcher's assertion that Gorbachev was a leader with whom the West could work proved true. Gorbachev's objective, the reform of the Soviet system, did not prove possible. But his approach emphasizing open debate and an end of Communist Party hegemony, created the climate for the Velvet Revolutions in Eastern Europe and a peaceful transformation from the Soviet Union to the Post-Soviet states. As Stephen Kotkin has noted, the myth of a non-Stalinist alternative, a communism with a human face, had already been denied by the Soviet leadership in the late 1960s, condemning the system to a protracted period of collapse. Perestroika created opportunities for reform-minded actors to call attention to the system's unchecked ability to lie to itself, even in areas vital to its own security. Vitaly Shlykov, a colonel in the GRU and a former spy in South Africa, used his position in the 10th Directorate of the GRU to call into question the mobilization assumptions about the US economy in case of a general war. Down to the mid-1980s the GRU and the General Staff had

put the war mobilization capacity of the United States at 70,000 units a year based upon an industrial model of the U.S. economy taken from World War II. Shylkov's own research put the annual production at 500 units and estimated peak mobilization capacity at 3,700. When Shlykov took his figures to the head of the mobilization section of GOSPLAN, he was asked if his figures were the official ones of the GRU? When he replied that they were his own, the official asked where the GRU had gotten the higher estimates of threat production upon which the entire Soviet economy was based. The end result in 1988 was the forced retirement of Colonel Shlykov but a reduction to the estimate of U.S. wartime tank production to 50,000. This change represented a back-of-the-hand admission that the system had lied to itself.⁶⁶

Against the background of RYaN and the nuclear balance of the 1980s, the collapse of communism in Eastern Europe and the Soviet Union could have unleashed Armageddon. Gorbachev and Reagan deserve credit for avoiding that outcome. As Andrei Kokoshin once remarked to the author, "Who won the Cold War is the wrong question." This was a win-win situation because we were able to avoid nuclear war. Had those arsenals been unleashed there would have been no winner only losers across the globe.

Jacob W. Kipp received his Ph.D. in Russian history from the Pennsylvania State University. From 1971 to 1985, he taught at the Kansas State University. He then joined the U.S. Army's Soviet Army Studies Office at Ft. Leavenworth, Kansas. From 2003 to 2006, he served as director of the U.S. Army's Foreign Military Studies Office. He later worked as deputy director of the School of Advanced Military Studies. Kipp has published extensively on Russian and Soviet naval and military history.

Notes

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and the USSR to send contingents to monitor the ceasefire. When President Nixon rejected sending U.S. troops, Brezhnev sent a reply saying that the Soviet Union would unilaterally send troops to Egypt. In the midst of the Watergate crisis, Alexander Haig, the President's Chief of Staff, Henry Kissinger, the Head of the National Security Council, James Schlessinger, Secretary of Defense, and Admiral Thomas Moorer, Chairman of the Joint Chiefs of Staff, met to cast a response to Brezhnev's message while President Nixon slept. They responded with a message warning the USSR not to unilaterally intervene and ordered the execution of a shift to DEFCON 3, which increased the level of readiness (or states of alert) for the U.S. military, as a signal of resolve. The Soviet leadership after some debate decided not to respond militarily and stood down the forces in preparation for the deployment to Egypt.

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