EXPLAINING WEAPONS PROLIFERATION:

GOING BEYOND THE SECURITY DILEMMA

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The author would like to thank the entire Comparative Regional Proliferation project team for their efforts in conducting the INSS study of the same name. This paper builds from their work. In particular, he is indebted to Lt Col Brenda Vallance and Maj Ann Campbell for their sections on the Newly Independent States and Latin America respectively. As always, however, all opinions expressed in this publication are the responsibility of the author.

Comments pertaining to this report are invited and should be forwarded to: Director, Institute for National Security Studies, HQ USAFA/DFEA, 2354 Fairchild Drive, Suite 4K25, US Air Force Academy, Colorado Springs, CO 80840. Comments may also be conveyed directly to the author by calling (719) 333-2717 or DSN 333-2717.

FOREWORD

I am pleased to present the first monograph in an Occasional Paper series to be published by the US Air Force Institute for National Security Studies (INSS). We plan to publish these reports frequently to highlight the research undertaken by our growing number of staff and adjunct analysts, in fields of interest to our sponsoring agencies.

INSS is cosponsored by the National Security Negotiations Division, Policy and Operations Directorate, Headquarters US Air Force (USAF/XOXI) and the Dean of the Faculty, US Air Force Academy, with offices in Fairchild Hall at the Academy. The primary purpose of the Institute is to promote research done within the DOD community in the fields of arms control, national security, and area studies. INSS coordinates and focuses outside thinking in various disciplines and across services to develop new ideas for USAF policy making. The Institute develops research topics, selects researchers from within the military academic community, and administers sponsored research. We also host conferences and workshops which facilitate the dissemination of information to a wide range of private and government organizations. INSS is in its second year of providing valuable, cost-effective research to mee the needs of the Air Staff. This report considers the crucial issue of weapons proliferation by addressing a question of serious debate in the international community: what causes states to acquire weapons of mass destruction? Why do states become proliferators? By summarizing the findings of three cases examined in his group's effort of last year, Captain Rattray sheds light on possible answers to this question, with implications for US and USAF policy. Taking a

comparative, regionally-based approach, the report highlights the key findings of a major INSS research project undertaken in 1993. It concludes that the US must look beyond the security dilemma in trying to understand the motivations behind proliferation, especially in emerging democracies. Along the same lines, the US should also consider a wide range of policy tools, to include economic and technological assistance, in attempting to influence proliferation outcomes.

I Thank you for your interest in INSS and its research products. We hope that we are meeting a need for this type of analysis and reflection, and we look forward to publishing these papers on a regular basis.

JEFFREY A. LARSEN, Lt Colonel, USAF
Director, Institute for National Security Studies

EXECUTIVE SUMMARY

Over the past year the USAF Institute for National Security Studies sponsored a major research effort by Air Force Academy faculty and cadets to compare the causes of weapons proliferation across different regions of the world. This effort focused on factors driving the political decision to acquire certain weapons capabilities rather than the more common approach of examing a country's economic and technological wherewithal to buy or produce weapons.

This paper presents some key findings regarding the factors influencing proliferation in those countries referred to as emerging democracies.

Most analyses addressing the subject of why states choose to proliferate focus on extemal motivations, particularly the security dilemma, facing a country's leaders. However, this paper concludes that other factors, such as prestige, regime type and stability, and economic status, can have as much, if not more impact in determining proliferation outcomes. In the case of Ukrainian decisions regarding nuclear weapons, leaders had to choose between the prestige and leverage the weapons might bring the new country against the economic costs incurred by likely losing Westem technological and economic assistance if the nuclear weapons were kept. In the case of the other Newly Independent States of the fonner Soviet Union, the domestic problems generated by intemal conflicts, arms remaining from the Cold War, excess defense industrial capacity, economic difficulties and the breakdown of central authority resulting in a loss of border control and corruption have all made the NIS an extremely fertile ground for weapons proliferation. A more positive "rollback " situation has emerged in Latin Amen'ca where both Argcntina and Brazil have seemingly decided to forgo the acquisition of nuclear weapons and ballistic missiles. The paper concludes that the shift in policy in both countries can be explained in large part by the different evaluations of the value of such weapons made by the recent democratically elected civilian leaders compared to past military regimes.

In all cases, the US must understand the "strategic personality" of each potential proliferator. Not all state behavior can be explained solely in terms of the security dilemma. One must also keep in mind the complexity of possible motivations. In some cases, the US will need to develop military forces to deter and possibly even disarm potential proliferators. However, certain countnes may respond to a more positive, less costly approach. Economic and technological

assistance and cooperative efforts at institution-building hold great potential to combating proliferation in the many emerging democracies throughout the world.

Explaining Weapons Proliferation:
Going Beyond the Security Dilemma

The Proliferation Challenge

The end of the Cold War has left profound uncertainties as to the nature and extent of future military threats facing the United States and its allies. Increasingly, our most challenging military threat may come from a variety of heavily armed countries opposing US interests and forces in places and for reasons we can not easily anticipate. The republics of the former Soviet

Union could also contribute to these challenges by assisting others to acquire advanced weapons capabilities or by directly confronting the U.S. in a variety of situations. In the post-Cold War world, the threat of sporadic militarism will be reinforced and magm'fied by the availability of potent weapons, to include weapons of mass destruction, and the knowledge of how to acquire and use them. This threat could involve those states moving towards democratic, capitalist systems as well as the more commonly addressed pariahs such as North Korea and Iraq. This paper will focus on the causes of proliferation and appropriate U.S. responses in dealing with these critical emerging democracies.

Combating weapons proliferation of all types has become one of -- if not *the* -- highest priority missions for the Department of Defense (DOD). The Clinton administration's non-proliferation policy released on September 27th, 1993 states: "Our national security requires us to accord higher priority to non-proliferation, and to make it an integral element of our relations with other nations."[1] Nuclear weapons in unstable hands remain a primary concern. The Director of Naval Intelligence stated in July 1993: "I am convinced somewhere, someplace, sometime in the next decade, somebody is going to set off a nuclear weapon in deadly eamest."[2] But as the Iran-Iraq war and the chemical threat during Desert Storm illustrated, countries may resort to less expensive means of mass destruction. Since November 1990 an Executive Order has existed which states: "proliferation of chemical and biological weapons constitutes an unusual and extraordinary threat to the foreign policy and national security of the United States [I] hereby declare a national emergency to deal with that threat"[3] Conventional proliferation presents its own unique problems. A recent Office of Technology Assessment report found that conventional arms transfers present the U.S. with "a major policy dillema - how to balance the use of arms exports as 'instruments of foreign policy, pressure by companies for greater access to

foreign markets, the need to stem a dangerous world-wide arms buildup, and the increasing proliferation of defense equipment and industry."[4]

Our concern is based as much on pragmatism as on principle: we must now learn to deal with opponents who increasingly have advanced weaponry. The Deputy Director of the Arms Control and Disarmament Agency has said the United States is "less secure than we were a few years ago because of the much greater potential for proliferation of the weapons of mass destruction into the hands of entities that are unstable."[5] In the fall of 1993, DOD launched a major counterproliferation initiative focusing on the need to prepare to confront those states who may attempt to acquire these weapons. As DOD and the Air Force plan their roles in dealing with this crucial challenge, we must start by understanding why other states choose to acquire or forgo different sorts of advanced weapons capabilities.

Studying Proliferation: Past Efforts and Current Purpose

Over the past year, the USAF Institute for National Security Studies sponsored a major research effort by Air Force Academy faculty, former faculty and cadets to compare the causes of weapons proliferation across different regions of the world. The study focused on factors driving the political decision to acquire certain weapons capabilities rather than on the more common approach of examining a county's economic and/or technological wherewithal to buy or produce weapons. Teams of researchers with academic and practical expertise with sensitivity to the politics in the regions of concern performed the analysis.[6] My article draws substantially on the research and analyses of Lt Col Brenda Vallance and Major Ann Campbell as cited throughout the article. I am heavily indebted to their efforts.

Most analyses addressing the subject of why states choose to acquire weapons, whether nuclear or conventional, focus on external motivations for a country's leaders. According to these explanations, leaders see the international environment as inherently competitive and hostile, presenting them with a "security dilemma," A state with inadequate military might finds itself at the mercy of other states with stronger armed forces. If adversaries choose to acquire new, more advanced weapons, a state has little choice but to follow suit by buying or producing advanced weapons of its own. In turn, of course, adversaries also perceive these actions as threatening, resulting in an upward spiral of armaments acquisition known as an arms race. This scenario is often the cause of weapons acquisition -- but not always the primary causal factor. Past analytical preoccupation with the significance of the security dilenuna has under-emphasized the importance of other motivations that may influence leaders decisions to acquire or forgo certain weapons capabilities.

Our study indicated that in many regions other factors had as much, if not more, influence in determining proliferation outcomes than the unperatives of the security dilemma. In particular, factors such as prestige, regime type, regime stability, and economic status all seem to play important roles in certain situations. T'his article will highlight the importance of such internal factors in analyzing the proliferation problem facing the U.S. by pulling three examples from our larger study: Ukrainian resistance to giving up nuclear weapons; the danger of weapons proliferation from the Newly Independent States (NIS) of the former Soviet Union; and the rollback of nuclear weapons and ballistic missile programs in Latin America. Using the deeper understanding provided by looking beyond the security dillema to explain state's decisions regarding weapons capabilities, the article concludes by suggesting implications for U.S. policy.

Nuclear Proliferation 1: Ukrainian Flip-Flops

The fall of the Soviet Union created four nuclear powers where one previously existed. Tle political and economic disarray resulting from the breakup holds the potential to contribute to proliferation problems of all types of weapons. Of particular concern, Ukraine remains ambivalent about giving up the strategic nuclear weapons within its borders. We attribute this problem in large part to the influence of nationalism and economic imperatives on its newly chosen President and Parliament.

Soon after declaring its independence from the Soviet Union in August 1991, Ukraine also declared its intent to get rid of all its nuclear weapons. All tactical nuclear weapons would revert to Russia by July 1992 under the unilateral reciprocal declarations Presidents Bush and Gorbachev made late in 1991. Ukraine affirmed its pledge to achieve a non-nuclear status when it signed the Lisbon Protocol in May 1992, obligating the Ukraine to return all its strategic nuclear weapons to Russia and subsequently join the NPT as a non-nuclear state. Yet, while the Ukraine never officially reversed its position, events indicated Ukraine was very reluctant to simply give its weapons to Russia. Certainly, much of the hesitation springs from the security dillema and Ukrainian fears of confronting a more powerful, historically hostile, nuclear-armed Russia without similar weapons to deter armed aggression -- or even lesser threats.

However, such an analysis oversimplifies. The Ukrainian strategic ICBMs have severe constraints in how they might be targeted against nearby Russia. Constructed for long-range strikes, they have minimum range and required flight profiles which would make it extremely difficult to depress their trajectories for close-in strikes. Also, Ukraine would have to gain

physical control as well as develop the means to properly authorize their launch. In addition to these limitations, Ukrainian intransigence has other causes which help explain why its Parliament, the *Rada,* in particular, has demonstrated great reluctance to give up these weapons even when promised Russian and U.S. security guarantees. In June 1993, Leonid Kuchma, the Prime Minister of the *Rada,* proposed keeping 46 SS-24 railmobile missiles. He argued that this was allowable under the START I provisions; he seemed willing to renege on Ukraine's obligations under the Lisbon Protocol to Join the NPT as a non-nuclear state.

Viewing these weapons as national symbols of prestige as well as a source of leverage in getting aid to prop up a disastrous economy provide additional insights into Ukrainian actions in the past two years. While fearful of Russia, the Ukrainian people also want to see themselves and their country as Russia's equal. Many Ukrainians apparently believe Russia's importance in Western eyes is based primarily on its success in grabbing the nuclear assets of the former Soviet Union. By possessing these weapons, Russia quickly gained the West's diplomatic and economic attention to the detriment of the Ukrainians who felt their legitimate concerns were being ignored. This perceived lack of respect affronted Ukrainian pride, prompting threats to back out of earlier agreements as a way of reorienting Western attention and reaffirming their nation as an equal oftheir Russian neighbors.[7] The Ukrainian defense minister, Constanin Morozov, told his NATO counterparts on March 30, 1993, that, "the West will take heed of what the Ukraine says only as long as there are nuclear weapons on its soil."[8] Ukraine therefore threatened to keep its weapons even at the risk of losing U.S. and Western offers of assistance.

Yet the Ukrainians are involved in a difficult balancing act. While they might be correct in believing these weapons enhance their prestige, the Ukrainians have also realized, more importantly, their nuclear weapons policy is also intertwined with prospects for Western

economic and technical assistance. The Ukrainian economy is in a steady decline with hyperinflation and a budget deficit that exceeded 40 percent of GDP of 1992. Ukrainian spokesman have taken to discussing the nuclear weapons on Ukraine's soil not in military terms, but as economic resources. During a March 1993 visit to Washington, Ukrainian foreign minister Anatoly Zlenko put a price tag of $2.8 billion on eliminating their nuclear weapons.[9] Simultaneously, the negotiations regarding Ukraine's position on START I and NPT have focused on guarantees of western assistance. The Ukrainian parliament's November 1993 ratification of the START I treaty included provisions which stated "all assets of the nuclear forces stationed in the Ukraine, including the nuclear warheads, are the property of Ukraine"; Iplementation [of START 1] shall be possible only if sufficient financial and technical assistance is made available"; and demanded "Russia return components for use by Ukraine for peaceful purposes, or to provide compensation for the value of the components."[10] Ukraine has attempted to capitalize on its possession of nuclear warheads to produce income to assist its troubled economy.

The flurry of activity attending President Clinton's January 1994 trip to Europe demonstrates the multiplicity of Ukrainian motivations concerning their nuclear weapons status. President Kravchuk's signature of yet another pledge to rid his nation of these weapons was tied not only to Russian and U.S. security guarantees, but also to Russian pledges of about $1 billion to compensate for nuclear fuel produced from the warheads of dismantled Ukrainian missiles as well as US pledges of future U.S. direct econonuc assistance and sponsorship on requests for loans from international lending agencies. Additionally, Ukrainian prestige and national pride can only have been enhanced by the visit of a U.S. president to Kiev and the presence of Kravchuk as an equal of Yeltsin and Clinton in signing the January trilateral agreement in

Moscow. Since this time, Ukraine has begun shipping warheads to Russia. Yet, despite these steps and the Rada's ratification of START I and the Lisbon Protocol, the strongly nationalist Rada continues to resist acceding to the NPT and possibly still regards nuclear weapons as the ultimate font of Ukrainian prestige and power.

Conventional Proliferation in the NIS: Chaos, Excess and Corruption

Much less evident in the media, but potentially a much greater source of instability and conflict, is the impact of the disintegration of authority and order within many of the Newly Independent States (NIS) of the former Soviet Union. This breakdown in authority coincides with dire economic straits and attempts at reform which require these emerging states to search for almost any way to employ their citizens while generating the hard currency necessary to rebuild and transform their economies. The two concerns create an unfortunate synergy which may lead to a number of proliferation problems.

That fifteen republics are emerging from the former Soviet Union as independent states has resulted in a panoply of inter- and intrastate conflicts which provide great incentives to both produce and acquire arms. While the demand for weapons resulting from conflicts such as the one between Armenia and Azerbaijan could be a manifestation of the security dilema, the internal conflicts and insurgencies present in many fomer republics also are sources of proliferation. In the cases of Moldova and Georgia, their governments are fighting breakaway groups on their borders who have at least tacit, if not explicit, support from groups within Russia.[12] The Russians see the need to protect Russian ethnic minorities in Russia within these new states as part of their "Near Abroad" policy. Both sides need weapons to accomplish their goals. In Tadzhikistan, pro-Islamic forces continue to battle Tadzhik and Russian forces, using Afghanistan as a staging area and possibly receiving Afghan assistance.[13] The Tadzhik, predicament may lead them to organize an independent defense force requiring greater

conventional arms capability both to combat insurgents and to reduce and deter Russian interventionism.[14]

Combined with the legacy of inter- and intra- republic conflict is the presence of large conventional forces and excess weapons production capacity left over from the Cold War. The defense sector was the most advanced and efficient sector of the Soviet economy. Mikhail Maley, Yeltsin's presidential advisor for defense conversion, has noted the importance of selling weapons as a means to finance rebuilding the Russian oil industry.[15] Arms production continues, in part to provide continued employment and also for export to overseas markets. The sale of arms can help provide capital for investment and conversion of defense industry. The introduction of capitalism in the NIS has reaffirmed a commitment by many republics to sell arms on the world market.

The result has been that many republics, especially Russia, have put their nu'litary arsenals up for sale. Russia's vigorous marketing strategies, designed to recoup its share of the international arms market have led trade joumals to print articles with headlines such as "Russia Opens The Store."[16] Arms sales have included advanced weapons to some of the countries which provoke the greatest concern over proliferation. Such sales include SU-27 fighters and surface-to-air missiles to China, submarines to Iran, and T-72 tanks to Syria.[17] To facilitate sales of the Yak-141, Yeltsin has issued decrees allowing "tri- or quadripartite agreements with a number of interested organizations in Latin America and Asia."[18] Other potential Russian arms markets could include Algeria, India, Eastem and Central European countries. And Russia is not the only former republic going down this path. The Ukraine has competed with Russia in attempts to sell tanks to Iran. Kazakhstan is attempting to sell the Su-24MK attack aircraft, with Syria being the most likely customer.[19] Such sales raise the size and level of technological sophistication among military forces around the world, often in countries perceived by the U.S. as the greatest potential proliferators.

Additionally, the breakdown of governmental authority and control has made tracking weapons transfers from the NIS increasingly difficult. Corruption is pervasive in the NIS. It

involves government and military officials as well as private citizens. Customs officials accept bribes for allowing illegal arms transfers across borders. Military members steal weapons and sell them to groups involved in ethnic conflict. Govemment officials form quasi-official corporations involvcd in arms sales, and Mafia-like groups transfer stolen weapons or resell them in black market operations.[20]

Thefts in the military have increased dramatically and include all types of equipment. According to the Russian Ministry of Defense (MOD), in the first half of 1992 a total of 25,000 firearms were stolen from the Army, with most of the thefts occuring in the Transcaucsus.[21] Weapons from the NIS have reportedly ended up in the possession of Palestinian militias, Croat guards and Sikh terrorists. A MOD spokesman stated soldiers and officers "are also among the thieves since they often act in collusion with thugs and nationalists."[22] In February 1993, Russian Defense Minister Grachev announced 459 personnel had been dismissed and 3700 disciplined for violating the ban on commerce. The same report highlighted high-ranking officials such as the Commander-in-Chief of the Western Group of Forces, a fleet conunander and a major general of aviation in the Far East Military District.[23] The press frequently reports that military aircraft are used illegally to transport arms overseas, with Syria often mentioned as the recipient. In the Moscow Military District, a captain and junior sergeant reportedly removed 650 microcircuit cards from rockets for the purpose of removing gold and platinum for resale.[24] Other NIS states, such as the Ukraine and Belarus, are also reportedly experiencing similar problems.[25]

Anecdotal evidence indicates unauthorized transfer of major weapons systems, whether due to military corruption or other reasons, is also increasing. Estonia halted a shipment of 21 Soviet-built armored personnel carraiars when officials leamed they had been sold to an "undisclosed party in Europe."[26] In the Pskov Oblast bordering Estonia and Latvia, agents seized an AN-24 aircraft and a M-17 helicopter. The AN-24 was being used to transport large sums of money across borders while the M-17 was to be sold illegally.[27]

These problems have resulted in a situation where numerous uncontrolled transfers of arms are taking place to unidentified groups and countnes. Often the recipients are engaged in conflicts such as the one in the former Yugoslavia, raising the level of violence and instability. In other instances, countries viewed by most states in the international system as aggressive or problem proliferators may be receiving arms they could not purchase on the world market. In general, the domestic problems generated by intemal conflicts, left-over arms from the Cold War, excess defense industry capacity, economic difficulties and the breakdown of central authority resulting in loss of border control and corruption have made the NIS an extremely fertile ground for the development of conventional arms proliferation concems.

Latin America: Regime Change and Reversing Proliferation

The recent experience of Brazil and Argentina in dealing with nuclear and ballistic missile proliferation provides a more hopeful outcome. Most interestingly, the case illustrates how different viewpoints regarding advanced weapons held by military regimes in the 1980's compared to those ofthe emerging democratic regimes of the 1990's has resulted in a "rollback" of these programs.

Many observers believe Argentina and Brazil tried to acquire nuclear weapons and ballistic missiles. The Peron regime initiated Argentina's nuclear research and development program as early as 1949.[28] While ostensibly focusing on peaceful purposes, the program sought to enhance Argentina's ability to develop nuclear weapons. Argentina has pursued nuclear-fuel cycle independence, including selecting a more expensive heavy-water reactor as possibly facilitating the production of weapons-grade maten'al.[29] Brazil has undertaken similar programs. Its former Navy Minister stated in a July 1993 interview that "there was indeed an atomic bomb project" and that a 300-meter-deep hole at Cachimbo Air Base was intended for nuclear tests.[30] Significantly, Brazil also operates a uranium enrichment facility capable of producing weapons-grade matenial.

Historically, both nations have avoided international restraints on their nuclear programs. Neither nation has signed the NPT. Argentina signed the Treaty of Tlateloloco which committed Latin American countries to use nuclear material for exclusively peaceful purposes but did not ratify it until 1993, while Brazil signed and ratified the treaty but waived entry-into-force provisions by placing reservations on its ratification.[31] In the past, Argentina has also issued policy statements reserving the right to conduct nuclear explosions.

Additionally, both Argentina and Brazil tried to develop ballistic missiles during the last decade. Argentina developed with outside assistance the short-range Condor 1, with a range of 95km and a payload of 365 kg.[32] Throughout the 1980's, Argentina also attempted to develop a medium-range ballistic missile known as the Condor II, financed heavily by Iraq. However, due to changed perceptions regarding international prestige discussed below, this program ended in 1991. The world's fifth largest arrns exporter during periods of the Iran-Iraq war, Brazil's indigenous ballistic missile/space-launched vehicle programs were no doubt intended to boost the defense sector of the economy. Brazil had seven ballistic missiles in development or planning stages, including four with ranges over 300km and one with a projected 3000km range.[33] Additionally, Brazil has a space launch vehicle prograin (the VHS missile with a 10,000km range and 500kg payload) and an initiative to produce the SM-70 Barracuda cruise missile, capable of carrying a nuclear warhead.[34] Again, a combination of factors has caused Brazil to slow missile development programs and concentrate on their space program.

In very large measure, we must consider the decisions of the major Latin American countries to pursue these weapons capabilities in light of the regimes in power at the time. Brazilian and Argentinean armed forces have constituted a significant portion ofthe political elites during recent history -- often goveming for extended periods of time. As a result, the militaries perceptions of security and prestige have played an important role in their policy-making. These military establishments, therefore, viewed the incentives and disincentives to acquire nuclear weapons and ballistic missiles through their own intensely nationalistic eyes. One scholar has commented on the prestige value of these weapons: "[T]he armed force, equipped

with as many modern weapons as possible, came to be regarded by many governments in the Third World as a symbol of unity and independence and as tangible evidence that the government intended to defend its sovereignty. The actual utility of these weapons was often of secondary importance."[35]

In both countries, the armed forces were either controlling weak civilian governments from behind the scenes or openly goveming in the 1950s and 1960s when nuclear research programs were initiated. A nationalistic, rather than security, basis for Argentina's nuclear program seems to underlie Peron's haste to claim credit for a significant technological milestone, when in 1951 he prematurely announced Argentina had mastered control of nuclear fusion.[36] Subsequent Argentinean efforts to enhance its image as a nuclear power despite dubious economic and security benefits further support the thesis that national prestige remains a primary determinant of nuclear policy. According to the former president of the Argentine Atomic energy Commission, regarding his country's attendance at a Nuclear Suppliers Group meeting: "It is a distinction conferred upon Argentina, by inviting us to participate along with advanced countries such as France, England, Russia, the U.S. and Japan..... Argentina's advanced position in nuclear development was recognized."[37] The Argentine nuclear program also provided the specific option to develop nuclear weapons, which the military also believed to confer prestige. However, creating this option also led to a Brazilian response.

After Argentina's foray into nuclear research, Brazil followed suit. Brazil could not afford to allow its regional rival to be the sole purveyor of nuclear power on the continent. A former Navy Minister's statement illustrates the prestige value the military establisment placed on nuclear weapons:

> Brazil should explode an atomic bomb only to strengthen its independence -- to demonstrate that it was capable of producing the bomb and breaking the technological apartheid

imposed by the nations which have mastered nuclear technology and other strategic technologies and which want to impose colonialism on the nations that had not yet achieved that state of development.[38]

In a tum for the better, military influence in these countries declined dramatically in the 1980's. Argentina's military fell from power after its disgrace in the Malvinas/Falkland Islands War in 1983. In Brazil, the particularly nationalist vision of the military regime continued well into the 1980's, with the first elected civilian president taking office in 1989. Also, by late in the decade, both countries found themselves in extremely poor economic shape. Bringing their economies under control required the newly elected democratic governments to make huge cuts in spending and subsidies. These governments took a very different view of expenditures on nuclear weapons and ballistic missiles than their predecessors.

Both countries came to view their pursuit of advanced weapons as counterproductive. These arms seemingly led to less security while fostering friction in their relations with the technologically advanced countries whose support was necessary for economic growth. As Argentina's Foreign Minister Guido Di Tella stated in August 1993, "The Condor-2 missile project had been ill-fated and catastrophic because it blocked technological development and placed Argentina among the group of obnoxious countries."[39] Testifying to the Argentine Chamber of Deputies the same month, he also stated that their country's delay in ratifying the Treaty of Tlateloloco was preventing it from importing high technology.[40] Similarly, Brazil's Secretary General of Economic Integration Affairs and Foreign Trade commented in a July 1993 interview:

> The deterioration of our credibility abroad is another element that has adversely affected our relations with the United States...the reportedly irresponsible trade of weapons and sensitive material and technology have, and continue to have, a very negative impact on Brazil's image. The Brazilian Govemment has made efforts in the financial, commercial and technological spheres to change this image.[41]

Both Argentina and Brazil have taken concrete steps to roll back their nuclear weapons and ballistic missile programs as the new democratic govermments have taken a different view of

their political and military utility. In the 1990 Declaration of Foz de Iguacu, both Argentina and Brazil called for improvement in the verification and compliance section of the Treaty of Tlateloloco with all parties vowing to take the necessary steps to bring the treaty into force if these changes were made. In July 1991, the two countnes created a joint nuclear organization, the Brazilian-Argentine Agency for the Control of Nuclear Material (ABACC) and signed a quadpartite agreement between the states, ABACC, and the IAEA allowing safeguard inspections of nuclear facilities.[42] The Treaty of Tlateloloco was amended to account for suggested changes in 1992. By the end of 1993, Argentina had ratified the treaty, while Brazil waived its reservations and allowed the treaty to enter into force in May 1994.

While these positive developments bode well for the future of nuclear proliferation in Latin America, we must be careful to avoid becoming complacent about the region. Even with democratically elected regimes in power, progress on implementing the inspection agreement with the IAEA has been slow. Argentina, Brazil and Chile also have yet to accede to the Non-Proliferation Treaty. And at least as significant as regarding the NPT is the future of democratic rule in the key Latin American states. Brazil saw President Femando Collor impeached in 1993. Elections for a new President are set for October 1994. Reinforcement of democracy in Latin America could prove crucial to the long-term prospects of countering proliferation. With regard to both its Latin American neighbors and the NIS, the U.S. needs to take a proactive role in thwarting proliferation.

U.S. Policy Recommendations

This section suggests a number of steps the U.S. should take in helping control proliferation of advanced weapons systems around the world. These recomendations are not meant to be comprehensive. They deal primarily with the issues of combating the incentives for proliferation in the emerging democracies described in the case studies above.

Some general principles should guide U.S. policy towards such potential proliferators. First, the U.S. should assist in strengthening the legitimacy and institutions of democratic leaders and

regimes. As discussed above, such regimes are much more likely to weigh the tradeoffs involved with acquiring advanced weapons and resolve them in a manner agreeable with U.S. interests. Unfortunately, the existence of democracy has proved fragile in many cases. In the NIS, democratic regimes and institutions are only slowly emerging. Even in the more advanced cases such as Russia, there is a very real threat of a reactionary backlash as evidenced by the attempted Parliamentary coup in October 1993 and the strong showing of Vladinu'r Zhirinovsky's ultranationalist party in the December elections. Similarly, democracy in the major Latin American states is not guaranteed. In these areas and worldwide, the U.S. can and must encourage the institutionalization of democracy.

Second, whether a state is a democracy or not, the U.S. must also link that state's proliferation record to other aspects of its relations with that country. Security guarantees, foreign assistance (military and economic), trade restrictions and regulations and relationships in international forums such as the United Nations, General Agreement on Trade and Tan'ffs, Conference on Security and Cooperation in Europe (CSCE), and the Organization of American States (OAS) can provide both positive and negative incentives which affect a country's perception of the prestige and economic tradeoffs involved in acquring certain weapons capabilities. For the nations of the former Warsaw Pact, the North Atlantic Treaty Organization's offer of a "Partnership For Peace" is specifically designed to help address security concerns. The negative economic effects of violating the international norms established in the NPT and Missile Control Technology Regime (MTCR) were clearly important in the decisions of Argentina and Brazil to change the directions of their nuclear and missile programs. The Ukrainian case points out the importance of rewarding good behavior as well as punishing bad. While concems of pride and prestige can create enough will within a country to resist threats of international sanction, sweetening the pot with promises of aid and assistance may provide an alternative approach to convincing states not to proliferate. Similarly, we should support efforts by other states, especially in the NIS, to convert defense industry to civilian production with advice, expertise and financial assistance, if available.

Also as a final general principle, the U.S. must respect the sovereignty of all countries when addressing proliferation concerns. Part of Ukrainian resistance to giving up nuclear weapons resulted from the perceived preferential treatment received by Russia after the August 1991 revolution. Given the history of U.S. intervention m Latin America, we must also be careful of attempting to impose our will on less powerful countries in a discriminatory fashion. Non-proliferation policies or efforts seen as interfering in these countries sovereign affairs will likely cause a backlash with intemal groups calling for the government to stand up to domination by the US. We should work with multilateral forums such as the CSCE and the OAS to address proliferation concems.

On a more concrete level, the U.S. could accomplish much by directly working with states to strengthen institutions and programs to combat proliferation such as dismantlement program and export controls. Many of the NIS as well as others such as Argentina have nascent export control efforts which deserve our support.[43] The most straightforward approach would be to take steps such as hiring scientists, buying up fissile matenals or even weapons from states. For example, financial assistance and materials provided through the Nunn-Lugar program in the NIS provide a very cost-effective means of reducing a potential proliferation threat. At even less expense, the U.S. can help countries write export legislation, set up Inspector Generals to enforce regulations against corruption in military organizations, train customs officials and those responsible for safeguarding stockpiles of sensitive materials and weapons. The U.S. could also share export control and intelligence information to include organizations involved, conduits of illicit trade, end-users of technology and materials of concern among all countries comitted to non-proliferation. Such steps would also improve our confidence in allowing these states to become members of the technology control regimes in the future, including the Nuclear Suppliers Group, the Zanger Committee, MTCR, and the Australia Group.

Conclusion

In identifying the new threats after the Cold War, the September 1993 DOD "Bottom-Up Review" cited the "dangers posed by nuclear weapons and other weapons of mass destruction, including dangers associated with the proliferation of nuclear, biological and chemical weapons as well as those associated with the large stocks of those weapons that remain in the Soviet Union."[44] Commenting on the proliferation of conventional weapons, CIA Director James Woolsey has stated "although perhaps less potent and psychologically alarming than that weapons of mass destruction, they may have an even more pronounced impact on the military outcome of future regional conflicts".[45] Obviously, advanced weapons proliferation is of importance to the US, whether nuclear or conventional.

Crucial to understanding and combating this problem is the question of why nations decide to acquire such capabilities. Many explanations have concentrated too much on the systemic imperatives of the security dilema, to the detriment of the importance of other factors such as national pride and prestige, regime type and economic considerations. We must understand the "strategic personality" of each individual potential proliferator. In denying a policy to deal with this most pressing of national security concems, we must keep in mind the complexity of these motivations. In some cases, the U.S. will no doubt need to develop military forces to deter and even disarm potential proliferators. However, certain countries may respond to a more positive, less costly approach. Economic and technological assistance and cooperative efforts at institution-building hold great potential for combating proliferation in the many struggling, emerging democracies throughout the world.

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[6] The research team members and their areas of concern were: Capt Gregory J. Rattray - *Project Coordinator, Introduction, Methodology and Conclusion;* Capt Anne G. Campbell - *Latin America;* Maj Donald L. Jordan - *Sub-Saharan Africa;* Capt Brent Talbot and 2nd Lt Lance M. Orr - *Middle East;* Mr. Steven E. Montgomery - *South Asia,*- Maj' Thomas A. Drohan - *East Asia;* and Maj' Brenda J. Vallance - *Newly Independent States.* Cadet Mark O'Reilly also helped out with research assistance in the preparation of this paper.

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