

Chapter 12

Iran-Russia Missile Cooperation

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Background

By Dr. Richard Speier

The international policy on missile non-proliferation is called the Missile Technology Control Regime or MTCR. That policy was secretly negotiated by the seven Western economic summit nations during the 1980s and then publicly announced in 1987. In the years since, the membership in the regime has more than quadrupled from 7 to 32.

The regime has one central tenet, and that is to create a strong presumption to deny the export of ballistic or cruise missiles whose capabilities represent a threat to deliver nuclear, chemical or biological weapons. The regime also has a strong presumption to deny exports of major components, production equipment, technology in the form of floppy disks or blueprints, or technology in the form of people traveling and giving engineering assistance for such programs. The regime has not only a strong presumption of denial, but also a flat prohibition against the export of complete production facilities for these systems or their complete production technology, including engineers helping people build complete production facilities. The regime also has a strong presumption of export denial for missiles of any range or payload or for any of a long list of items, if they are intended for chemical, biological or nuclear delivery.

On the very same day the regime was announced in April 1987, the United States had three special meetings - with Russia, China and Israel - because these countries were key potential suppliers of missile technology whose support would be very important to the success of the regime. In the intervening years all three of those nations stated their support for the regime. Indeed, in the early 1990s, Israel and Russia actually put into their regulations the export controls of the MTCR. It was not until 1995, however, that Russia became a full member of the MTCR. (Full membership entitles a nation to participation in the decision-making of the regime, and to the exchanges of information within the regime.) Within a few months of Russian MTCR membership, troublesome reports started appearing of Russian missile guidance equipment discovered in Jordan, eventually headed for Iraq. Other stories focussed on Russian exports to India for a submarine-launched missile. Most troubling, about a year after Russia joined the regime, reports surfaced in Israel that Russian entities were helping Iran to develop ballistic missiles.

In 1998, Iran tested a Shahab-3 ballistic missile with a range of 1,200km. There are reports that Iran is developing a longer-range Shahab-4. In August, Iran displayed a mock-up of a space launch vehicle, which is usable as an intercontinental ballistic missile (some called it the Shahab-5). It is clear that Iran has a very broad missile program.

The issue has involved intense high-level diplomacy on a triangular basis among the United States, Israel and Russia. Below, three officials intimately involved in this dialogue explore the positions of each nation in depth.

The United States View

By the Honorable Robert Gallucci

In 1997, the issue of Russian entities' assistance to Iran in the area of ballistic missiles found itself prominently featured on the agenda of the Gore-Chernomyrdin Commission. After collecting information about this assistance to Iran for more than a year, the United States gave it a prominent place in the Gore-Chernomyrdin context.

These entities are in some cases institutes, in some cases universities, in some cases for-profit organizations that have roots in the Soviet Union. Some of these names are well known: The Moscow Aviation Institute, the Baltic State Technical University, the Scientific Research and Design Institute of Power Technology (NIKIET). They have been mentioned many times in the open literature. The assistance in question is sometimes material shipped from a Russian entity to Iran that may be used for parts of a ballistic missile, maybe for the warhead, maybe for the fuselage. Sometimes components are shipped that may have to do with guidance. These entities have also been training Iranians in Russia in the development, design and manufacture of ballistic missiles. Russian missile experts have also traveled to Iran to help with development of long-range ballistic missiles.

In August of 1997, about eight months after the Gore-Chernomyrdin Commission first discussed this issue, a direct channel was established on this issue. Ambassador Frank Wisner was named for the US side and Mr. Yuri Koptev, head of the Russian Space Agency, was appointed on the Russian side. The channel was designed to deal specifically with this issue, put particular emphasis upon it, and then report the results of the meetings to the Gore-Chernomyrdin Commission.

Through this process, the United States made demarches to Russia about activities that the U.S. officials observed, and shared information and intelligence about interactions between Russian entities and the Iranian ballistic missile program. For one full year, from the summer of 1997 through the summer of 1998, the process achieved steady progress, whether measured by input indicators- improved Russian export control- or output indicators- less evidence of assistance.

In terms of "input indicators," the United States succeeded in

persuading the Russian government of the wisdom of putting certain provisions in place, such as the Decree of January 22, 1998 (the so-called "Catch-All Decree") which allowed the Russians to not only control those items that are listed under the Missile Technology Control Regime Annex, but also to look at the end user and end use - in other words, to give Russia a tool to control more of the activities that were of concern.

Many consultations took place at the expert level on export controls, where U.S. experts went to Russia and Russian experts came to the United States to improve their ability to execute the control of this technology. In the summer of 1998, the Russian government announced the investigation of nine of their entities for possible proliferation activities, particularly with respect to Iran.

In terms of "output indicators," when the dialogue with the Russians began in the summer of 1997, there were a dozen or so cases under discussion that the United States wanted Russia to act upon. That number was slowly whittled away, and there were actually cases of goods being stopped. In some cases, U.S. observers no longer saw any activity, at least activity that was of concern. Over time, the number of problem cases that were under discussion diminished.

Later in 1998, however, this progress came to a halt, as measured by both input and output. In terms of input, the export groups and technology groups that were supposed to meet following the Moscow summit in September 1998, really have not met effectively. The investigation of those nine entities that was launched with such optimism in July 1998 has not produced any real results, such as a conclusion that anyone acted inappropriately or illegally; there has been no prosecution.

On the output side, in the summer of 1998, Iran tested its so-called Shahab-3, an MRBM. Many of the problem cases that the United States had identified as much as a year ago continued, while some new cases of assistance were identified. The United States continues to raise this issue at the highest levels of the Russian government. The two presidents have spoken about it and the dialogue has also continued with the Foreign Minister and with Director Koptev. This issue is front and center on the diplomatic agenda between the United States and Russia.

Despite the process of gradual improvement through the summer of 1998, the U.S. Congress passed a sanctions resolution aimed at Russian entities cooperating with Iran on missiles. The resolution was vetoed by the President, and the Senate chose not to override it, no doubt because of the actions the U.S. and Russian governments took. Indeed, the day after the nine entities were identified for investigation by the Russians, the United States named seven of them against which trade action would be taken. In January 1999, three more entities were subject to trade action.

What is the significance of Russian-entity assistance in the Iranian case? Iran's ballistic missile program did not receive assistance exclusively from Russia. Iran received very material assistance from North Korea providing a substantial boost to allow them to develop the Shahab-3.

But Russian assistance was extremely important in shortening the amount of time in which the Iranians would be able to develop, manufacture and deploy their own MRBMs, and also presumably with some improvement in quality. Continued Russian assistance will allow not only for the rapid deployment of the Shahab-3, but also for the Iranians to move on to IRBMs and ICBMs.

Of course, MRBMs - whether Nodongs, Shahab-3s, or extended range SCUDs like the Iraqis were developing - are not of much use in a military sense for the delivery of conventional munitions. They become interesting and very dangerous, provocative, and destabilizing, though, when they are mated with weapons of mass destruction- chemical, biological, or nuclear.

Russia is also assisting Iran with its nuclear development efforts and is currently the only nation providing assistance to Iran in the nuclear area. Notwithstanding Iran's status as a member of the Non-Proliferation Treaty, no other country besides Russia believes that it is prudent or wise to engage in nuclear cooperation with Iran. Russia is helping Iran complete the Bushehr reactor, and there is concern that the assistance will go beyond that reactor and contribute to Iran's ability to develop a nuclear weapons capability. So, it is the combination of Russian assistance to Iran with ballistic missiles and in the nuclear area that creates a most troubling and new development in the region.

The international regime created to control ballistic missile proliferation, the MTCR, has been broadly successful, much like the Non-Proliferation Treaty Regime has been broadly successful: there are relatively few states that act contrary to the regimes. This success only highlights those cases where a treaty regime like the NPT, or an informal agreement, like the MTCR, is unsuccessful. India and Pakistan come to mind in the nuclear area. And in the missile area, there are three cases of transfers that particularly stand out: those occurring from China, North Korea, and Russia. Each of these cases involved transfers to both the Middle East and South Asia and have had destabilizing results.

Like the nuclear issue, the ballistic missile issue has thresholds. In the nuclear area, the acquisition of a nuclear weapon is the principle threshold, notwithstanding the observation that students of nuclear proliferation usually make - that proliferation is a process, that there is a real difference between a simple fission device, a boosted device, and a thermonuclear weapon. Several orders of magnitude of destruction do indeed separate these types of weapons. Still, the sharpest firebreak is between no nuclear capability and the acquisition of a first nuclear

device.

Similarly, in the missile world, there are firebreaks. There are two in particular. First is the acquisition of an MRBM, particularly if the range of that MRBM is sufficient to allow the state to reach its principal adversary for the first time or to launch from more secure locations. In the case of India and Pakistan, and perhaps in the case of Iran, it seems as though this might be true. The second firebreak is the mating of that MRBM with a weapon of mass destruction, particularly a nuclear weapon. In the South Asian context, it seems that the threshold has been breached: both India and Pakistan have deployable nuclear weapons and both are working on deployable MRBMs. In the Middle East, that threshold is widely thought to have been breached by Israel. Iran has demonstrated an MRBM capability, but not a nuclear capability. It is not at all clear how long this will remain true.

The Israeli View

By the Honorable Robbie Sabel

Iran is an important regional state and should be treated as such. The policies of the Iranian government may be objectionable to Israel, but the Iranian norms are clearly a world apart from the aberrant behavior of Saddam Hussein, the Iraqi dictator. Nevertheless, and notwithstanding such a caveat, the combination of three nefarious elements in present day Iranian policy should set alarm bells jangling loud not only in Israel, but also throughout the world.

The three elements of Iranian policy that fuse together to form this nefarious danger are: the development of weapons of mass destruction; the development of missiles capable of delivering such weapons of mass destruction; and finally, the hate inspired policies of the Iranian government towards Israel. Taken as a whole, there is indeed cause for concern.

Israel recognizes the Islamic Republic of Iran and the right of the Iranian people to choose their own form of government. Israel seeks no dispute with the Iranian people or with its government. Needless to say Israel has no territorial dispute with Iran, and there are no bilateral issues that deeply divide the two nations. In the past Israel has had close relations with Iran.

Israel encounters from Iran, however, a total negation of Israel that transcends any difference there might well be over their respective foreign policies. Israel is officially branded the "Small Satan." Iran opposes all attempts by Israel at reaching peace with its neighbors. Iran supports terrorism against Israeli and Jewish targets worldwide. The Iranian involvement in the bombing of the Israel Embassy in Buenos Aires and the Jewish Community Center there is now a matter of record. It certainly causes anxiety when the Shahab-3 missile was paraded in Tehran on September 25, 1998, with the inscription on the missile carrier declaring that "Israel should be wiped off the map." The

Iranian Minister of Defense Ali Shakhmani declared during the parade that Iran would not use its military capability against anyone with the exception of the "Zionist regime." Extremist slogans by themselves may be dismissed as harmless verbal fireworks, but when combined with extensive development of missiles and weapons of mass destruction, it is time to pay attention. In assessing Iran, Israel looks principally at capabilities and not at rhetoric. But inevitably one must attempt to assess intentions as well, and the combination of expressed hostile intent and capability gives Israel cause for grave concern.

The massive Iranian investment in missiles and weapons of mass destruction is particularly striking when it is appreciated that, because of the slump in oil prices, Iran is in dire financial straits. A country that diverts its scarce financial resources from economic development to long range ballistic missiles is worthy of very careful attention from the international community.

Iran is developing weapons of mass destruction. From the recent declaration made to the Organization for Prohibition of Chemical Weapons the international community received confirmation of what has long been suspected, namely that Iran has developed a chemical weapon capability, presumably including poison gas. Iran has yet to make a full declaration in accordance with the Chemical Weapons Convention, and of course no inspections have taken place. There is reason to believe Iran has developed a biological warfare capability and is attempting to obtain more technology and know-how from Russian sources in this area.

In the long term, the developments in the nuclear field are perhaps the most alarming. Iran, desperately short of cash, yet awash with oil, is spending some \$800 million on the nuclear reactor facility in Bushehr. This is clearly not tied to Iran's energy needs. Furthermore, Iran has attempted to purchase from Russia a heavy water research reactor and other equipment. It has unsuccessfully attempted to obtain technology for uranium enrichment and conversion from China. Since low-enriched uranium is freely available at low prices it is difficult to find a non-military justification for such efforts. Iran also failed at clandestine attempts to purchase nuclear technology from Britain and specialized metals from Russia. The recent visit to Tehran by Yevgeny Adamov, the Russian Minister of Atomic Energy, appears to portend more intensive and open Iranian purchases from Russia in the nuclear field. There is no economic justification whatsoever for such purchases. The only purpose is to build a nuclear infrastructure that in the future can be diverted to weapon construction. The international community has seen from the bitter Iraqi experience that adherence to the Nuclear Non-Proliferation Treaty (NPT) by itself is not sufficient to prevent such diversion. Iraq in fact used the NPT as a cover for its clandestine activities.

A useful step to assuage the anxiety over such possible diversion would

be for Iran to adhere to the IAEA enhanced inspection protocol - the so-called 93+2 agreement. There has been talk of such adherence, and even reports that Iran has tried to obtain further nuclear technology in exchange for such adherence. But so far Iran has continued to abstain from actually adhering to the protocol, which if applied, would seriously curtail Iran's ability to develop nuclear weapons.

The third element is the development of missiles by Iran. Iran has tested a prototype of the 1,300-km range Shahab-3. There is no reason to believe that it was not a successful test. Iran may claim that it requires missiles to counter a possible Iraqi missile threat. The Shahab-3, however, could travel far beyond Iraq. It is a strategic weapon, and the inscriptions attached to it in the Tehran parade leave no doubt as to the envisaged target. An even longer-range missile, the Shahab-4, is planned, and would place large parts of Europe within range.

Such missiles make no military sense if armed with conventional high-explosive warheads. Their inherent inaccuracy from 1,300 km makes them of marginal importance if all they can do is deliver a high-explosive warhead. Were they to be armed, however, with chemical or biological warheads they would become immensely effective terror weapons against civilian targets. Were they to be armed with nuclear warheads they would irrevocably change the face of the Middle East. Can the development of missiles be halted? The answer is a qualified yes. The Shahab-3 is still an unreliable prototype. A state can accept less than absolute reliability for a missile carrying conventional warheads. If a conventional warhead explodes off target the damage is manageable. But a missile carrying a non-conventional warhead must be absolutely reliable. It is safe to assume that Iran would be extremely reluctant to use a missile with a non-conventional warhead unless it was sure of the reliability of such a missile. The danger of a non-conventional missile exploding over one's own territory, or over that of a friendly state, is not a danger that Iran is likely to ignore.

For the Shahab-3 to enter Iran's arsenal, the missile has to be produced in usable quantities. Iran is not yet in a position to do so. The missile has to be completely reliable. Iran has not yet developed it to this stage. The missile will, presumably, be adapted to carry non-conventional warheads. This has not yet been done and requires sophisticated technology. All these additional refinements require, in the foreseeable future, outside help. That help can only come from Russian companies and entities.

Iran plans to produce the 2,000-km range Shahab-4; it could be armed with a 1,000-kg warhead with a shorter range. Such a large warhead would expand the possibilities of using different types of nuclear warheads. A longer range, possibly using Russian engine technology, would require even more advanced technology. Again, outside help is required and Russia is the likely source. There has been talk from Iranian sources of developing the Shahab-5, an intercontinental ballistic

missile. Such missiles, of course, are for ranges far beyond Israel. At present, Russian companies and entities continue to provide assistance to the Iranian missile development project and to the development of an Iranian nuclear infrastructure. The US government has devoted considerable efforts to trying to persuade the Russian government to prevent such proliferation. Russian colleagues acknowledge their awareness that it is not in Russia's interest to see Iran with long-range missiles equipped with non-conventional warheads. Yet, is Russia doing everything in its power to prevent such leakage of technology, know-how and material?

The Russian government is not making such an all-out effort. There may in fact be elements in Russia that believe there is economic and even strategic gain in such deadly trade. Despite the acknowledged internal problems of the Russian Government, proliferation could be prevented if the will existed. If the Russian government reached the conclusion that such proliferation is a dire threat to Russia, the leakage would be prevented. Instead there is an opposite trend, and the much-publicized trip of Russian Minister Adamov to Tehran appears to be flaunting nuclear ties rather than limiting them.

It is still not too late to prevent Iran from developing long range missiles with non-conventional warheads. The Missile Technology Control Regime (MTCR) is not a complete answer, but it certainly plays a useful role in limiting proliferation. It is clear that there have been violations of the MTCR by Russian entities in regards to Iran. How does one bring about cessation of violations? Iran and Russia have to believe that western and other states see such proliferation as a very real threat to world security and are willing to take the necessary steps to prevent such proliferation. Such steps need to involve elements of both impedance and inducements. If Iran and Russia face firm, united opposition to such proliferation, these two states will conclude that such proliferation is not in their interest. It is not yet too late.

The Russian View

By Dr. Viktor Mizin

Iran is probably the most demonized country in American political culture. To Russia, Iran is just a country that is a major regional power, and, as described by Mr. Zbigniew Brzezinski, a door to Eurasia.

Unlike Iraq, Iran is not under international sanctions, rather unilateral sanctions by the United States government.

To understand Russian attitudes toward Iran, it is important to distinguish three major groups in the Russian political elite. The first could be termed proliferation zealots or proponents. These are the people who exchange a flurry of memos with the U.S. government and who formulate official Russian positions on non-proliferation, including the Iran case, which basically do not differ much from the official

American approach as described by U.S. National Security Advisor Sandy Berger (see chapter 4 of this volume).

Then, there are the people who manufacture armaments, and they could be called neutrals. Finally, the last group opposes of any kind of export control or non-proliferation. They view such regimes as some sort of sly ruse devised by the U.S. government under the pressure of U.S. companies to squeeze out Russian armament makers from lucrative world markets.

While the first group, the zealots or proponents, is engaged in endless consultation with Americans and signs all kinds of papers, the third group is constantly undermining the regime Russia signed on to.

It is also important to understand the difference in U.S. and Russian approaches to proliferation concerns. While certain people in Russia pay lip service to the politically-correct notion that proliferation is dangerous, if one looks at the countries that are known as "rogue states," (in official Russian parlance, Moscow rejects the notion of rogue states), all of those countries are former clients of the Soviet Union: North Korea, Libya, Iraq and others. And unlike the situation faced by the United States, the deployment of any ballistic missiles does not threaten Russian troops stationed abroad. There is also no political community in Russia - like in the United States - strong enough to influence the voting in the Parliament.

That is why one always hears very politically correct words from Russian political scientists about the concerns that Iran is developing missile capabilities. No one in the Russian political elite is seriously considering the threat of this development. For example, it was the same case with Saudi Arabia developing an IRBM potential.

Iran remains a very important market for the remnants of the Russian military industry. The collapse of the economy in Russia literally prods the best of Russian industry (the most technologically saturated companies), which have now lost state government procurement orders, literally to search for clients abroad. Russia officially considers the Bushehr reactor deal, for example, legitimate because Iran is under IAEA safeguards.

Iran is also a very important market for Russian conventional armaments, and as it is well known, this issue slowed Russian adherence to the Wassenaar Arrangement. Many arms experts in Russia believe that Iran is another untapped market for Russian weapons, and therefore there is no rational basis for ending arms sales to this country, even after fulfillment of current contracts as was agreed in bilateral U.S.-Russian talks. These experts now consider Iran, since the death of Ayatollah Khomeini, just another country that actually has ceased supporting terrorist activity and is no less democratic than some U.S. allies in the Middle East. These feelings are quite widely shared by the Russian political elite.

It is interesting that the U.S. government actually opened the eyes of the

Russian government after an article appeared in *The Los Angeles Times* detailing Iranian efforts to procure Russian missile components, and with information provided by Israeli intelligence. It is also interesting that the Russian official reaction moved from official denial from the Ministry of Foreign Affairs and Mr. Chernomyrdin, to reluctant recognition, and then to reports of the successful apprehension of some Iranian spies that contacted Russian missile manufacturers.

This shows that this is not clandestine program supported and maintained by the Russian government, rather the adventurous activities of some cash-strapped Russian defense manufacturing facilities. Of course, in Russia, like in many other countries, there is no such thing as a private or independent defense manufacturing facility. They are independent, but still tightly controlled by the Ministry of Defense. The problem is, how does one stop this process? What could be done in the future? The logical answer is to improve existing export controls. Unfortunately, as the recent revelations show, export controls in Russia are not operational. The problem is enforcement, enforcement, and enforcement.

So, the emphasis should be placed on providing more competent personnel on export control services, equipping them with state-of-the-art technology, ensuring the real-time exchange of data and information from Moscow to custom checkpoints. Also, another problem is the bureaucratic wrangling. Russia needs a governing body to oversee export controls.

Finally, a significant part of the proliferation problem is the people. The major threat is that missile specialists will flee abroad because they are unemployed at home. One possible solution is the development of a joint U.S.-Russian project that could employ these Russian specialists. For example, many years ago President Yeltsin proposed that the United States and Russia jointly develop what was termed a "Global System of Protection," that is, an anti-ballistic missile or another sort of space tracking system. This would be a good idea in the context of future discussions of Russian export controls. Another project that was discussed was the employment of Russian missile scientists in joint commercial efforts, similar to efforts in the nuclear sphere. American companies could employ the best and brightest Russian missile engineers and foremen, thus preventing them from fleeing to proliferant countries.

These are very optimistic solutions. For the time being, however, the good example of cooperation between the Russian Ministry of Atomic Energy and U.S. Cooperative Threat Reduction program should be followed and applied in the missile non-proliferation sphere.