

The Strategic Impact of Russian Arms Sales and Technology Transfers

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Mr. Chairman and Members of the Committee,

Since 1990, the break-up of the Soviet Union, the collapse of the Warsaw, the U.S. victory in the Gulf, sanctions, and the economic difficulties in many radical states have combined to make dramatic changes in the flow of arms and in virtually every aspect the military balance. These changes involve massive declines in the role that states like Russia, China, and North Korea play in world arms transfers. This is true regardless of whether such transfers of arms and technology are measured in terms of a percent of total world transfers, the dollar value of deliveries and new orders, or in the rate of actual weapons transfers.

Declassified U.S. intelligence data indicate that Russian deliveries dropped from levels of well over \$20 billion a year in constant U.S. dollars during the late 1980s to a historic low of some \$1.5 billion in 1994. Russian and indeed all arms sales to Iraq have ended since 1990. Sales to Syria, Libya, and North Korea have plummeted, and sales to Iran have dropped sharply since the early 1990s.

At the same time, these trends offer no guarantees for the future. Russian new agreements dropped from well over \$14 billion in constant U.S. Dollars in 1990 to well under \$1.7 billion in 1993, but have since climbed back to annual levels of \$3.3 to \$5.9 billion. The process of technology transfer is changing from one relying on the purchase of major weapons to the purchase of technology for indigenous production and dual use items. Equally important, the developing nations that most threaten the U.S. and its allies are shifting their investment in arms away from a conventional arms race, and toward asymmetric warfare and weapons of mass destruction.

The trends involved are highly complex, and it is all too easy to either exaggerate the impact of any given transfer of arms or technology or to declare that it is unimportant relative to the overall flow of arms and modernization in given nations. There are also severe limits to the unclassified data made available by reliable sources like the U.S. Intelligence community, and there are masses of poorly structured estimates from various private groups that do more to plead a given cause than explain what is really happening.

This is why I have prepared a more detailed study of these transfers for the Committee's use. It is also why I believe that it may be more useful to address the individual questions of members than provide a lengthy statement. I do, however, wish to make four major points by way of introduction.

The U.S. Now Enjoys a Uniquely Favorable Military "Time Window"

First, there is no question that the U.S. is now the world's preeminent superpower. This advantage, however, comes largely from the collapse of its major potential opponents and from its advantages in deployed technology. The U.S. has benefited from the power vacuum created by the collapse of the Soviet Union and Warsaw Pact. It has benefited from the shattering defeat of Iran in the Iran-Iraq War, the defeat of Iraq in the Gulf War, the self-inflicting economic collapse of North Korea, and the military impact of UN sanctions on Iraq and Libya.

These trends have played a major role in compensating for something approaching 40% cuts in the number of major conventional weapons deployed in U.S. forces, and the readiness problems the service chiefs have warned the Congress about in detail. The U.S. is only spending an average of \$40 billion a year on military procurement when the Joint Chiefs have set the requirement as at least \$60-65 billion. The U.S. has also been able to draw on the legacy left by creating the best trained and highest quality military personnel in its history, in spite of the fact the U.S. military are underpaid and grossly over-deployed. It has been able to reduce its national defense spending to the lowest percentages of the GNP and federal budget since the height of American isolationism and the Great Depression.

The U.S. has also emerged out of the Cold War and its victory in the Gulf War with a unique "edge" in terms of tactics, technology, and training. Whether or not this deserves to be called a military revolution is moot. The following developments give the U.S. a new set of advantages over every major current opponent:

- Professional military forces - Unity of command,
- Combined operations, combined arms, and the "AirLand Battle,"
- Emphasis on maneuver,
- Emphasis on strategic/tactical innovation,
- Realistic combat training and use of technology and simulation,
- Emphasis on forward leadership and delegation,
- Heavy reliance on well trained NCOs and enlisted personnel,
- High degree of overall readiness,
- Technological superiority in many critical areas of weaponry; superior access to resupply,
- "24 hour war" - Superior night, all-weather, and beyond visual range warfare,
- Near real-time integration of C4I/BM/T/BDA,
- Integration of space warfare,
- New tempo of operations,
- New levels of sustainability,
- Exploitation of beyond visual range air combat, air defense suppression, air base attacks, and airborne C4I/BM,
- Focused and effective interdiction bombing.
- Expansion of the battle field: "Deep Strike," and
- Integration of precision-guided weapons into tactics and force structures.

Put differently, the U.S. is able to exploit major weaknesses in the military capabilities and conventional warfighting potential of virtually every major opponent - including Iraq, Iraq, and North Korea -- and in virtually every developing state that is not dependent on U.S. arms. These weaknesses are the virtually mirror image of U.S. strengths and they include:

The U.S. And Its Allies Are Vulnerable

Second, the U.S. And its allies are vulnerable. The transfer of the technologies most critical to restructuring the forces of potential threat countries can often have an impact on their ability to challenge the U.S. or a U.S.-led coalition in ways that have little to do with the dollar cost of a given item or their impact on total weapons numbers. Furthermore, potential opponents are not obligated to fight on U.S. terms or to fight the kind of conventional war between organized military forces the U.S. won during the Gulf War.

It is important to note that the U.S. was fought to a draw in Korea, won its battles and decisively lost in Vietnam, and has to withdraw from Lebanon and Somalia. The U.S. Has weaknesses of its own that opponents can exploit:

- Over-extended active force structure, problems in calling up and deploying many reserves,
- Limited recent military modernization,
- Growing manpower problems in terms of both numbers and quality,
- Limits in sustainability and basic numbers of many high technology systems and smart munitions; declining force-wide readiness,
- Long-standing problems in coping with the political and tactical problem of guerrilla and low intensity warfare,
- Uncertain political support for operations involving U.S. casualties,
- Political backlash from inflicting casualties,
- Policy problems in combat involving civilian losses and collateral damage,
- Lack of tactical and technological advantage in urban and built-up area warfare,
- Limited tactical and technological advantage in warfare in mountains, forested, or jungle areas,
- Hostage taking and terrorism,
- Sudden or surprise attack before U.S. power projection can deploy,
- Political difficulties in obtaining support for extended deterrence and in sustained battles of intimidation,
- Problems in dealing with ecological and environmental warfare,
- Limits of UN/cooperative/Coalition warfare,
- Problems in sustaining extended conflict and in occupying an opponent's territory,
- Vulnerability to missiles and weapons of mass destruction, and
- Uncertain willingness to sustain large military effort, maintain forces and presence

We must never confuse being luck with being strong. The fact we live in a more favorable military time window than any other in our military history is no guarantee that this time window will stay open beyond the near-term. Even today, we are acutely vulnerable to any successful use of weapons of mass destruction from terrorism to a theater-wide conflict, to many other forms of terrorism, to over-extension beyond a single major regional contingency. We are vulnerable to any strategic miscalculation that commits U.S. Forces to a contingency where we cannot sustain domestic political support or which produces hostile world opinion.

We Need to Look at Future Russian Capabilities, Not Immediate Trends

Third, there is no way to quantify Russian arms sales and technology transfer with any precision, and they can take many different forms ranging from legal transfers of arms to illegal sales of technology by private individuals. In many cases, it may be impossible to determine what role the Russian government is or is not playing, particularly since it is unclear that there is a central government in the normal sense of the term. Russia is in a state of bureaucratic chaos, and filled with competing factions serving under a president incapable of effective government. It is also in

the process of near-economic collapse, and conversion from an economy where military expenditures consumed nearly 50% of a central government budget of well over \$80 billion in constant 1997 U.S. Dollars to well under 40% of a state budget of no more than \$25 billion.

It is important to note that Russia currently does not seem able to execute any kind of coherent strategy or military reform. It has produced a great deal of literature calling for reform of the Russian army, and many reforms tailored to produce a more professional force similar to the U.S.. In practice, all it has accomplished is a steady loss of readiness and decay. Financial pressures are forcing the Russian military to devolve in virtually every area. There is no coherent area of force improvement in any Russian military service, in any mission area, or in any front. There is no question that the Russian military has great technical and strategic capabilities, but Russia as a unified Russia currently does not exist. The question is always who, with what power and resources, and for how long? It is a question that no one in Russia can answer in any important area.

This compounds the problem of ever determining Russia's official intentions in a given transfer of technology. Worse, in many cases, buyers also go to other countries and have extensive purchasing and intelligence networks in the West. China, Iran, Iraq, Libya, North Korea, and Syria all buy Western technology. China buys from Russia, and North Korea from China. Iran, Iraq, Libya, and Syria all buy from Russia, China, and North Korea. Even if a Russian is caught transferring a given technology, this may or may not affect the overall development of a buyer country capability. It may never be possible to know whether the key to a given weapons development in the Third World came from Russia, China, France, the U.S., Or some indigenous scientist. Unfortunately, this is most true where it is most important - in the development of weapons of mass destruction.

It is clear, however, that Russian technology transfers to nations like China, Syria, and Iran are already important and that Russia can provide a wide variety of far more advanced weapons that could strikingly increase its war fighting capabilities against the U.S. Or its allies. These transfers include:

- Fully modern battle tanks like the T-80 through T-90, and conversions of older tanks to use new guns, fire control systems, and sensors.
- Modern armored infantry fighting vehicles like the BMP-3 and BTR-80.
- Advanced third and fourth generation anti-tank weapons that are far easier to operate and which have demonstrated that they can kill modern tanks like the Israeli Merkava.
- Modern self-propelled artillery like the 2S23 Nova-SVK gun mortar system, multiple rocket launchers with highly lethal submunitions like the "Smersh", long-range target systems, advanced counterbattery radars, and modern fire control systems.
- Modern attack helicopters like the Mi-26, Mi-28, Mi-28N, Ka-50, and Ka-52 with modern avionics and target acquisition systems and a claimed capability to launch fire and forget missiles similar to the Apache Longbow.
- Advanced battle management, sensors, counterbattery radars, night vision devices, and UAVs to provide long-range targeting capability, night and poor weather warfare capability, and greatly improved battle management and tactical intelligence capabilities.
- Modern short-range radar and infrared guided land-based air defense weapons.
- Highly advanced air, cruise missile, and tactical ballistic missile defense systems like the S-300 and S-400.
- Modern air defense fighters with long-loiter capabilities like the MiG-29M, MiG-31, MiG-31M, Su-30 or Su-34, excellent dogfight capability, supersonic cruise capability, advanced avionics and sensors and long-range, beyond-visual-range air-to-air missiles like the R-77 (an AMRAAM equivalent) with multiple engagement capability.

- Modern airborne warning and air control aircraft, and electronic counter-measures and electronic support measures ranging from pods and on-board avionics to dedicated aircraft. High speed, long-range anti-radiation missiles like the Kh-25P and Kh-31.
- Modern long-range multi-role strike fighters (Su-27SM, Su-30, Su-35, MiG-29 SM, MiG-33 with range-payload superior to the light and medium bombers of the past, excellent low-altitude penetration and stand-off precision launch capability, advanced avionics and sensors, and long-range air-to-ground missiles and smart ordinance like the Kh-29T Kh-59, and KAB-500R.
- Modern airborne warning and air control aircraft like the Beriev A-50/Phalcon ("Mainstay") airborne early warning aircraft, and electronic counter-measures and electronic support measures ranging from pods and on-board avionics to dedicated aircraft.
- Modern amphibious ships and support systems.
- Advanced conventional and nuclear submarines - there are reports Russia(ns) is helping China go beyond its Han-class SSN.
- Supersonic long-range anti-ship missiles with countermeasures and remote target designation capability such as the "SS-N-22 Sunburn" missiles on the Sovremenny-class destroyers. Russia is also developing the Novator Alpha (110 NM, Mach 2), Yakhont Alpha (160 NM, Mach 2), and Mashinostroyeniya Alfa (150 NM, Mach 3).
- Smart long-range, high-speed, self-homing torpedoes.
- Smart mines capable of rising from the bottom and homing on given types of ships at preset intervals.
- Cruise and ballistic missiles roughly equivalent in technology and lethality to any deployed U.S. system.
- Advances in SLBM technology beyond the Juilang-2 or NX-4 - the Russian SS-NX-28 being a key example.
- Stealth technology of any kind.
- Advanced space-based intelligence sensors.

The Problem is Not Russian Strategy but the Combined Pressure to Sell and the Pressure to Buy

Having said this, my final point is that Russian transfers of arms and military technology do not currently pose a major direct threat to the U.S.. Equally important, I can find no direct evidence to date of any deliberate Russian effort to use the transfer of arms and military technology to increase the strategic threat to the U.S.. Indeed, it is important to reiterate that is far from clear that this Russian government is capable of any sustained coherent strategic approach to anything.

Many of the most serious threats to date may also be the product of the lack of any central control over arms and military technology transfers within Russia, and of the *sauf qu'il peut* character of Russian scientific institutions and military production centers. The desperate search for money is almost certainly a more serious current threat than any deliberate strategy.

Russia is also scarcely the only source of military technology and arms in the world. The U.S., Europe, China, North Korea, and Israel all interact with Russia in providing a complex mix of dual-use and military technology exports that any power can exploit against the U.S. and its allies. It also is only natural that our potential opponents will focus on buying those Russian weapons and technologies that they feel will offer them the best hope of deterring or defeating the U.S. and its allies. The fact that sellers often end up selling the most threatening arms and technologies is more likely to represent a conspiracy on the part of the buyer than one on the part of the seller.

At the same time, it is equally clear that there have been important Russian transfers of arms and technology to potentially hostile states. It is clear that Russia is almost certain to have strong incentives to maximize its sales of arms and technology for at least the next decade, and that Russian sales can be just as dangerous when they are not legal or the result of any hostile strategy. The U.S. has every possible incentive to seek arrangements with Russia to limit such transfers as much as possible. It also has every reason to monitor them in detail, to examine their impact on foreign force structures and war fighting capability, and to improve U.S. and allied capabilities in response when such transfers cannot be halted.