

Russia and the Prompt Global Strike Plan

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Prompt Global Strike is a concept the U.S. military has been developing since the start of the decade. Its goal is to give the U.S. military the capability to attack targets anywhere in the world at very short notice. The weapons most able to support a mission like this are intercontinental ballistic missiles (ICBMs) and sea-launched ballistic missiles (SLBMs), capable of reaching almost any target in thirty minutes or less.

As the first step toward achieving prompt global-strike capability, the U.S. Strategic Command (STRATCOM), which has responsibility for the project, plans to deploy two conventionally-armed SLBMs, alongside 22 nuclear-armed missiles, on each of twelve currently operational strategic submarines. The Bush administration requested \$127 million in the 2007 fiscal year to begin the project, with the goal of having “near-term capability” by 2011. Congress, however, rejected most of the request, allocating only \$5 million to study the concept further. The option of fitting land-based Minuteman ICBMs with conventional warheads has also been considered, but no practical steps have been taken in this direction.

Serious questions exist about the feasibility of Prompt Global Strike. These include questions about the ability of intelligence-gathering networks to provide adequate support for the global-strike plan, as well as the capacity of existing intercontinental delivery systems to provide the combination of accuracy and power required to attack a broad enough range of targets.

Most troubling, perhaps, is the possibility that the implementation of Prompt Global Strike would increase the probability of an accident involving strategic nuclear forces. Early warning satellites and radars cannot distinguish between the launch of a

conventional missile and that of a nuclear one. This could lead to misinterpretations or misunderstandings with potentially extremely serious consequences. Furthermore, the short flight time of ballistic missiles, which makes them attractive for prompt global-strike missions in the first place, leaves very little time for an assessment of the situation, putting an enormous strain on national decisionmaking mechanisms and increasing the probability of an accident.

Today, Russia is the only country other than the United States that has an early warning system capable of detecting ballistic missile launches. This makes it the natural focus of concerns associated with the global-strike plan. Russian officials have themselves aired these concerns publicly: in an address to the Russian parliament in May 2006, President Vladimir Putin warned of the danger, saying that a missile launch “could spark an inadequate reaction by nuclear powers, including full-scale retaliation strikes.” This view was later repeated by the chief of the Russian General Staff and by Russia’s minister of defense.

These warnings, however, have been largely dismissed by the U.S. military. STRATCOM commander-in-chief General James Cartwright suggested that Russian officials were not talking about Russia’s own possible reaction. It is, indeed, virtually impossible to imagine a situation in which Russia would deliberately make a decision to launch a full-scale retaliation strike in response to a missile launch that was detected by its early warning system. This, however, is not the only scenario that carries the risk of “inadequate reaction.” Equally dangerous is the possibility of an accident, in which a ballistic missile launch triggers a series of inadvertent actions in the strategic forces command-and-control system, leading to a decision to launch missiles in response. Although the probability of an accident of this kind is very low, its consequences would be extremely serious and so it should not be dismissed lightly. The deployment of conventionally-armed ballistic missiles would not itself create the risk, which is already an inherent part of strategic nuclear forces operations. It could, however, increase the risk, and probably quite substantially, by opening up the unprecedented possibility for ICBMs or SLBMs to be used in an actual combat situation.

Supporters of the Prompt Global Strike plan point out several ways to minimize the risks that are posed by conventional ballistic missile launches. First, Russia’s early warning system might simply not detect the launch of the U.S. missile. Second, the United States could notify Russia of the launches. Third, Russia might recognize that the launch is not part of an attack against it. None of these approaches, however, can be considered satisfactory.

First, it is true that Russia’s early warning system, unlike that of the United States, does not provide global coverage. Russian early warning satellites have traditionally monitored only U.S. territory. In addition, the system has been operating at a fraction of its nominal capacity for the last several years. Thus, some ballistic missile launches may very well escape detection.

At the same time, an analysis of the current configuration of Russia’s early warning system suggests that its capabilities may not be as limited as is usually believed. One of the early warning satellites, Cosmos-2379, is deployed in geosynchronous orbit and can detect SLBM launches from most of the Northern Atlantic. Satellites of this type have

been developed for Russia's second-generation early warning system, which will potentially extend the coverage provided by Russian early warning satellites to the oceans. Although only one satellite of this class is currently in orbit, Russia has already completed the ground infrastructure development necessary for deploying additional satellites.

Other signs that Russia has begun the process of improving the capabilities of its space-based early warning system also exist. In 2006, Russia began to upgrade its network of early warning radars and launched a satellite to augment its first-generation system. A new radar is being constructed near St. Petersburg; at least one more is scheduled to be deployed in southern Russia. Based on this activity, one cannot reliably assume that the coverage provided by the Russian early warning network is or will remain limited.

Second, while notification about upcoming missile launches can be an important mechanism for providing transparency and facilitating confidence building, at this time no comprehensive notification arrangement, whether bilateral or multilateral, exists. The notification mechanisms in place are incompatible with the prompt global-strike plans. The relevant U.S.-Russian agreement stems from the 1988 Ballistic Missile Launch Notification Agreement. In 1991, provisions of this agreement were included in the Strategic Arms Reduction Treaty (START), and responsibility for handling the notifications was transferred to the Nuclear Threat Reduction Centers. This is the only existing formal arrangement requiring the United States and Russia to provide advance notification of launches of sea- or land-based strategic ballistic missiles. The mechanism, however, requires notification at least 24 hours in advance and, therefore, does not allow for attacks on targets within an hour's notice – the goal of Prompt Global Strike. This means that should the United States proceed with its plan, it would have to abandon or significantly weaken the existing launch notification mechanism.

A potential substitute to the 1988 agreement is the Joint Data Exchange Center (JDEC) arrangement, which calls for establishing a jointly operated center that would allow U.S. and Russian military operators to exchange information provided by their early warning systems almost in real time. The JDEC project, however, has serious limitations. First of all, it is not even clear if the center will become operational. In the more than eight years since the agreement was signed in 1998, neither side has expressed sufficient interest in pursuing the idea. No legal issues associated with JDEC have been resolved and the construction of the facilities required has not yet begun. Second, the arrangement is far from comprehensive, allowing, for example, the withholding of information about certain space launches. The most serious problem with a center like JDEC, however, is that it was designed to rely on real-time communication and that it provides no way to corroborate data provided during the exchange. This means that in a crisis situation a center like JDEC is more likely to add to risks than to mitigate them.

Third, for Russia to recognize that a global-strike missile launch is not directed against it requires the capability to accurately determine the trajectory of the missile and to predict its target. At this time, Russia's early warning system may or may not have this capability. Even if it does, however, some of the global strike scenarios could still

trigger an alarm. The early warning and command-and-control systems were designed to react to a wide range of events in predetermined ways, and it is virtually impossible to know how these systems might react to certain developments. It is also impossible to know the exact circumstances that would surround a global strike launch and the extent to which these could contribute to misunderstandings and miscommunications.

The probability of coincidences which could lead to such mistakes is very small, but it should not be underestimated. For example, on the day of the terrorist attacks of September 11, 2001, Russian strategic aviation was conducting an exercise that involved flights of strategic bombers in the direction of the United States. On the same day, the U.S. air defense command, NORAD, was planning to conduct an exercise, known as Vigilant Guardian, which "postulated a bomber attack from the former Soviet Union." We should also not underestimate the degree to which the Russian or U.S. military would be ready to consider the possibility of an attack from the other side. The pilot of one U.S. fighter that was scrambled on September 11, 2001, for example, admitted that he "reverted to the Russian threat," believing that "the bastards snuck [a cruise missile] by us."

Ultimately, changes in the relationship between Russia and the United States have not led to equally substantial changes in the operations of these countries' strategic forces. Both justify their strategic arsenals by the existence of those on the other side. The United States and Russia continue to regularly conduct exercises that involve emulating nuclear strikes, often limited ones, against each other. As long as this practice continues, there will always be an opportunity for misunderstandings and misinterpretations.

An even deeper problem is that the United States and Russia have been scaling back efforts to develop and sustain a network of mutual cooperation and transparency. Many positive changes in the U.S.-Russian relationship have been a result of mechanisms of dialogue, cooperation, and information exchange that were established in the late 1980s and early 1990s. These mechanisms include arms reduction negotiations, dialogues on missile defense, the START treaty process, and joint peacekeeping missions. If these mechanisms were developed, improved, and further strengthened, they could conceivably bring the U.S.-Russian relationship to a level of true partnership, from which they would not have to worry about problems that could result from operating their strategic forces or from implementing programs like Prompt Global Strike.

This, however, has not happened. Most mechanisms for promoting transparency and cooperation have been neglected or phased out. Some of their key elements, like START verification and information exchange mechanisms, are unlikely to be around much longer. This creates an environment in which the probability of misunderstanding and misinterpretation is too large to ignore. If the United States goes ahead and implements the Prompt Global Strike plan, this probability will only increase.