

10/08

(10)

# The Nuclear Weapons Policy of the Russian Federation

Presentation to the Defense Science  
Board

Dr. Mark B. Schneider

# Nuclear Weapons and the Russian Federation

- Discussion of nuclear weapons issues in the Russian Federation is fundamentally different from the West
  - General acceptance of nuclear deterrence; little nuclear pacifism
  - The most senior Russian officials talk about new strategic weapons and nuclear weapons with great frequency
  - Resembles the Western debate of the late 1950s -- the height of the Cold War -- with same hostility to U.S and NATO and excessive faith in nuclear escalation
- Russia is developing and deploying many advanced nuclear weapons and delivery vehicles
  - Highest national priority
  - Russian R&D programs somewhere between Carter and Reagan Administration level in scope
  - Funding for deployment is limited but building as much as they can afford

---

# Putin on the Soviet Union and Nuclear Forces

- Fate of the Soviet Union:
  - “The collapse of the Soviet Union was the greatest geopolitical catastrophe of the century.” April 25, 2005
- Soviet strategic nuclear power:
  - During Soviet times, the very factor of the Soviet Union, primarily that of its nuclear forces, was a stabilizing factor, the one balancing power in the world. The situation today has radically changed. But the balance is still being maintained to some extent in the military-technical field. It is being kept thanks to the Russian Federation’s sufficiently-developed, powerful forces of deterrence.” February 12, 2004
  - “We are not only carrying our research and missile tests of state-of-the-art nuclear missile systems. I am confident that in the next few years they will be adopted. Moreover, these will be projects that other nuclear countries will not have in the next few years.” November 17, 2004.



---

## Ivanov Asked Why Doesn't Russia Have Preemptive Nuclear Strike Options?

- “What we say is one thing. That sounds cynical, but everything that we plan does not necessarily have to be made public. We believe that from the foreign policy viewpoint it is better to say that. But what we actually do is an entirely different matter. If we are talking about nuclear weapons, they are the chief components of our security. And there can be no doubt that attention toward them cannot be relaxed.” – DM Ivanov, October 2003
- To be respectable in Russia he undercut his Colorado Springs statement that: “Russia is not considering in any scenarios of options a first strike using strategic nuclear weapons.”

# Russian Threat Perception

- Despite the official “no enemy” doctrine, senior Russian officials portray the U.S. and NATO as the enemy
- Predictions of war and U.S. attack quite common
- Russian press reports that the General Staff believes Russia is being encircled and the U.S. will attack
  - “Stronger states are striving to reinforce their positions around the entire perimeter of Russian borders. Taking advantage of the pretext of the need to fight the new phenomenon of world politics, ‘international terrorism,’ a number of leading world powers have obtained military bases in Central Asia...***The total dismantling of RF national sovereignty will be impossible as long as our nation has strategic nuclear forces. With political will we will have something with which to respond at the critical moment in history.***” -- MoD newspaper editorial, April 2005 (Emphasis added)

---

# Russian Nuclear Doctrine

- Low nuclear threshold in Russian Nuclear Doctrine (1999-2000)
  - "The Russian Federation shall reserve for itself the right to use nuclear weapons in response to the use of nuclear or other weapons of mass destruction against it and (or) its allies, as well as in *response to large scale aggression involving the use of conventional weapons in situations critical for the national security of the Russian Federation.*" (Emphasis added)
- 'De-escalation of military actions' is the Russian term for employing nuclear forces in local or regional war."
  - "[D]e-escalation includes a nuclear escalation ladder from single nuclear strike, group nuclear strike, concentrated nuclear strike, to mass nuclear strike."
    - Jacob W. Kipp, Senior Analyst with the Foreign Military Studies Center, Fort Leavenworth



---

# Nuclear Forces of the Russian Federation

- Great emphasis on life extension programs
  - Aggressive nuclear weapons modernization
  - Aggressive force modernization but limited funds available for production
    - Will buy as much as they can afford
  - Decline in strategic force numbers inevitable – probably to under 1,500 by 2015-2020 despite life extension programs
-

# New Strategic Nuclear Weapons as Announced by Russia

- Deployment of SS-27 silo based ICBM
  - SS-27 production rate 7 in 2005; 3-9 in the future
- Deployment of mobile SS-27 in 2005
- Launch of a new SSBN in 2005
  - Awaits availability of Bulava
- Development and first test of Bulava SLBM in 2005
  - Testing in 2005 or 2006
- Deployment of new long-range cruise missiles in 2005



---

# New Strategic Nuclear Weapons as Announced by Russia (Cont.)

- Development of the Sineva SLBM
- Common missile based on Bulava
- Hypersonic vehicle testing on strategic missile
- Two new Blackjack bombers
  - Russian press reports 1 new, 1 refurbished
- Modernization of Blackjack and the Backfire
- Increased funding on life extension programs

---

# Russian Press Reports of Newer Strategic Weapons

- Intent to MIRV SS-27 (START violation)
- New large liquid fuel strategic missile with 10 warheads
  - Presumably a version of the SS-19
  - Given credence by recent statement by Col-Gen. Solovtsov, Commander of the Strategic Missile Forces
  - Projected by National Air Intelligence Center

---

# Nuclear Weapons Programs

- Russian press reported Yeltsin authorized development of new strategic and tactical nuclear weapons in 1999
- Large increase in funding under Putin -- 50% funding increase in 2005
- "New types of nuclear weapons are already emerging in Russia." Ivanov 12 January 2005
- Retention of tactical nuclear weapons in contravention of Presidential Nuclear Initiative
  - Recent Russian press reports that 3,300-5,700 retained including nuclear artillery, missile warheads, bombs and cruise missile warheads and suitcase bombs



# Russian MoD Papers on Military Forces

- March 9, 2005 Defense Ministry press releases records multiple PNI violations:
  - “The main strike force of the Navy consist of nuclear-powered submarines, armed with ballistic and ***cruise missiles with nuclear warheads***. Those ships are constantly patrolling various regions of the oceans of the world ***and ready for the immediate use of their strategic weapons***.” (Emphasis added)
    - PNI commitment against routine deployments of nuclear SLCMs
    - START reporting obligation
  - “The *Missile Troops and artillery* are a combat arm of the Ground Troops. They are the main means for fire and ***nuclear strikes against an enemy***.”
    - PNI commitment to eliminate and nuclear ground force weapons – artillery and missile warheads

# New Precision Low Yield Nuclear Weapons

- In 1999 Felgengauer reported:
  - Russian development of “precision low-yield” nuclear weapons for strikes “anywhere in the world.”
    - In 1999 he reported yields “from several tens of tons to 100 tons of TNT equivalent”
    - “What is more, existing strategic nuclear warheads are to be upgraded so that they can deliver strikes with a yield of hundreds tons of TNT, which is thousand of times weaker than their current megaton-range potential.”
    - Will take many years to develop
- In March 2002 Felgengauer wrote:
  - Russia was developing “superlow-yield weapons” and “penetrators”
  - Russia was developing “‘clean’ nuclear weapons”
  - Decision to resume “nuclear testing on Novaya Yemlya has already been made in principle.”
  - Mikhaylov has confirmed the development of a penetrator weapon

# Russia and “Clean” Nuclear Weapons

- From Russian MoD publication “Urgent Tasks”:
  - “We have noted attempts to restore nuclear weapons to the category of permissible military instruments through the realization of ‘breakthrough’ scientific-technical developments that transform nuclear weapons into *relatively ‘clean’ weapons* from the point of view of the aftermath of their employment....The reduction of the threshold for nuclear weapons employment will require restructuring of the troops command and control system and the approaches to the deterrence of threats of various levels.” (Emphasis added)
- Baluyevskiy has blamed Russian nuclear exercises on the supposed U.S. development of advanced nuclear weapons



# Russia and “Clean” Nuclear Weapons (Cont.)

- Russia’s nuclear weapons development center at Chelyabinsk highlights its development of “designs for purely peaceful purposes, such as dike and canal construction and geological prospecting. Most of these systems have no analogues in the world.”
- Clean nuclear weapons are basically weaponized versions of the same thing

# Official Russian Military Doctrine ("Urgent Tasks", October 2003)

- Baluyevskiy reiterated Russian nuclear doctrine saying
  - "The Russian Federation shall reserve for itself the right to use nuclear weapons in response to the use of nuclear or other weapons of mass destruction against it and (or) its allies, as well as in response to large scale aggression involving the use of conventional weapons in situations critical for the national security of the Russian Federation."
  - "We considered it necessary to highlight this provision of the brochure. This decision was dictated by the fact that the... United States is seriously preparing for lowering the threshold for the use of nuclear weapons."
- Baluyevskiy later acknowledged that the U.S. and NATO were implicitly the enemy in the "Urgent Tasks"
  - Said in the context of the new relationship

---

# Russian Nuclear Exercises Against NATO

- Since 1999 many Russian press reports of Russian exercise use of tactical nuclear weapons against the U.S. and NATO
- Reports ZAPAD-99 employed nuclear weapons against NATO
- Consistent reports of nuclear weapons use in exercises against U.S. and NATO to the present day
- Putin and Ivanov personally participate in strategic exercises



# Conclusions

- Under the NPR Russia not considered an immediate threat
- Yet strong anti-American feeling in Russia combined with emphasis on nuclear capability could create a dangerous future situation if the Russian economy revives
- Russia is modernizing its missiles and nuclear weapons
- Low Russia nuclear use threshold combined with nuclear exercises and the “de-escalation” concept enhances the risk that a confrontation will go nuclear

# Conclusions (Cont.)

- NPR responsive force concept remains valid and should be protected in future defense decision making
- Need to maintain survivable deterrent at Moscow Treaty limits
- Need low yield and clean weapons to deter tactical use of nuclear weapons against us by many potential adversaries
  - Also need to deter CBW attack
- Need more diversity in delivery systems to maximize deterrence

Backup



# Ivanov on Strategic Nuclear Weapons

- Typical Ivanov statements:
  - “We are developing new missile systems earlier mentioned by President Vladimir Putin. We have every reason to believe that Russia will have missile systems no other country possess. (sic) We hope the new missiles will appear in the near future.” February 14, 2005.
  - “We actively update our entire nuclear triad, disregarding quantity, but pay main attention to quality.” February 13, 2005
  - “New types of nuclear weapons are already emerging in Russia.” January 12, 2005
  - “We have recent been paying a great deal of attention to the qualitative development of the strategic nuclear forces... Topol M [SS-27] is a weapon for the 21 Century, it is the most complete missile complex in the world.” December 22, 2003

# Presidential Statements on Nuclear Forces

- [T]he nuclear forces have been and remain the key element of the strategy of ensuring national security and military might of the Country.”

-- Boris Yeltsin, April 29, 1999

- Typical Putin statements:

- “We are not only carrying our research and missile tests of state-of-the art nuclear missile systems. I am confident that in the next few years they will be adopted. Moreover, these will be projects that other nuclear countries will not have in the next few years.” November 17, 2004.
- Russia will soon have weapons “capable of destroying targets at intercontinental range, with hypersonic speed and high accuracy, and with the capability of a deep maneuver both in altitude as well as heading.” November 2004

---

# Noncompliance With Presidential Nuclear Initiative (PNI)

- Evidence of retention of battlefield nuclear weapons
  - Russian press reports on the size and composition of Russian tactical nuclear arsenal
    - Arbatov report 4,000 weapons in 1999 including ADMs
    - Recent Russian press reports that 3,300-5,700 retained including nuclear artillery, missile warheads, bombs and cruise missile warheads and suitcase bombs
- Head of artillery forces talks about the continuing importance of nuclear artillery said:
  - “Given the fact that demonstrating nuclear weapons for delivery artillery and missile strikes on the enemy, as well as pinpoint nuclear strikes remain the major deterrent, I think that it is the missile forces and artillery that will play the major role on the modern battlefield.”  
Colonel General Vladimir Zaritsky, November 19, 2003



# Observations on “Urgent Tasks”

- It is clear that doctrine not moderating in response to increased budget funding and new relationship with U.S.
- Resembles U.S. doctrine in the late 1950s
- Russian nuclear doctrine aimed at U.S. and NATO
- Probably exaggerates what nuclear capability can deter in a condition of mutual nuclear deterrence
  - “De-escalation” concept turns crossing the nuclear threshold on its head
  - “De-escalation” probably the most dangerous aspect of Russian nuclear doctrine; lack of realism of the significance of nuclear weapons use