

New Russian Second-Strike Systems

Dmitry Stefanovich

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Logic



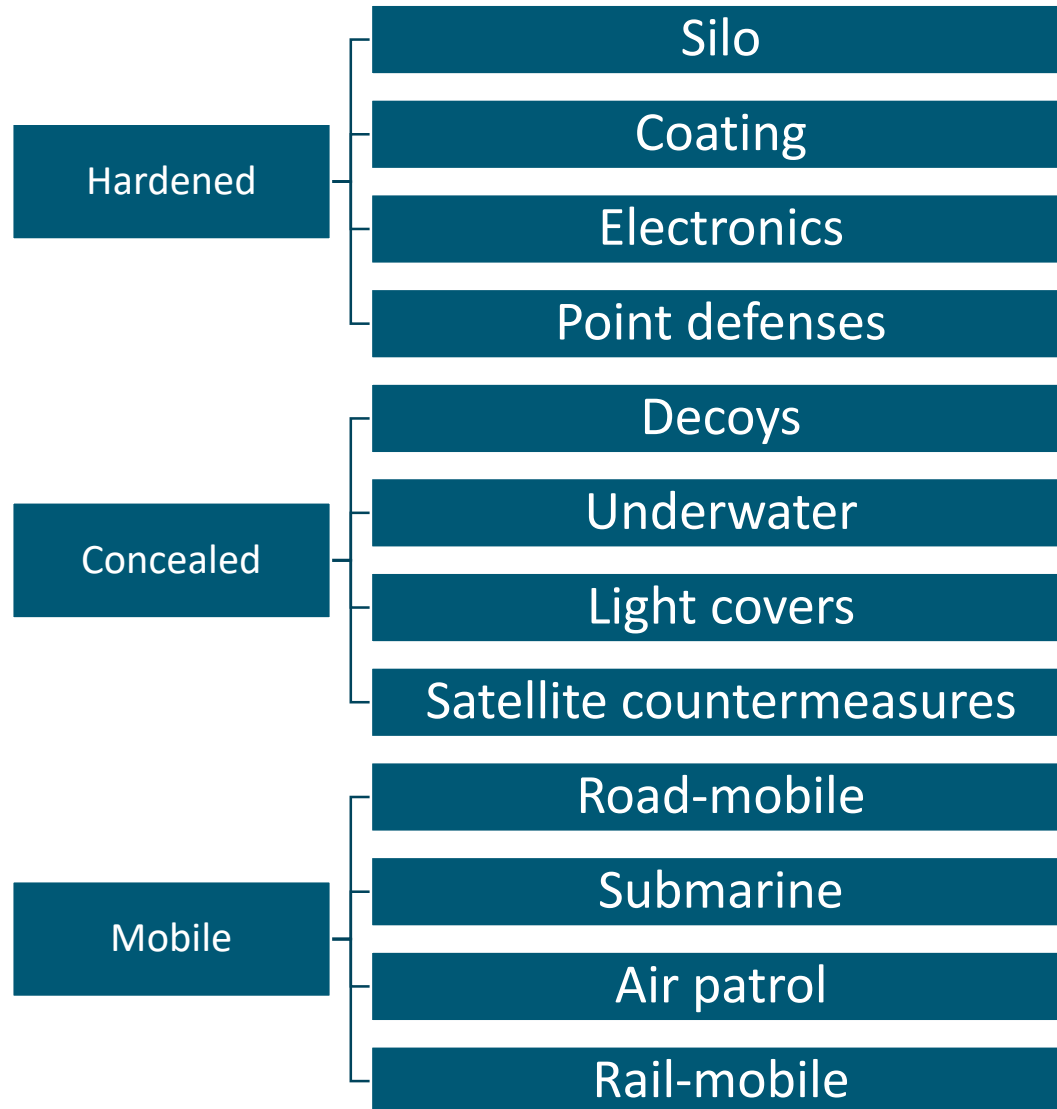
Survivability



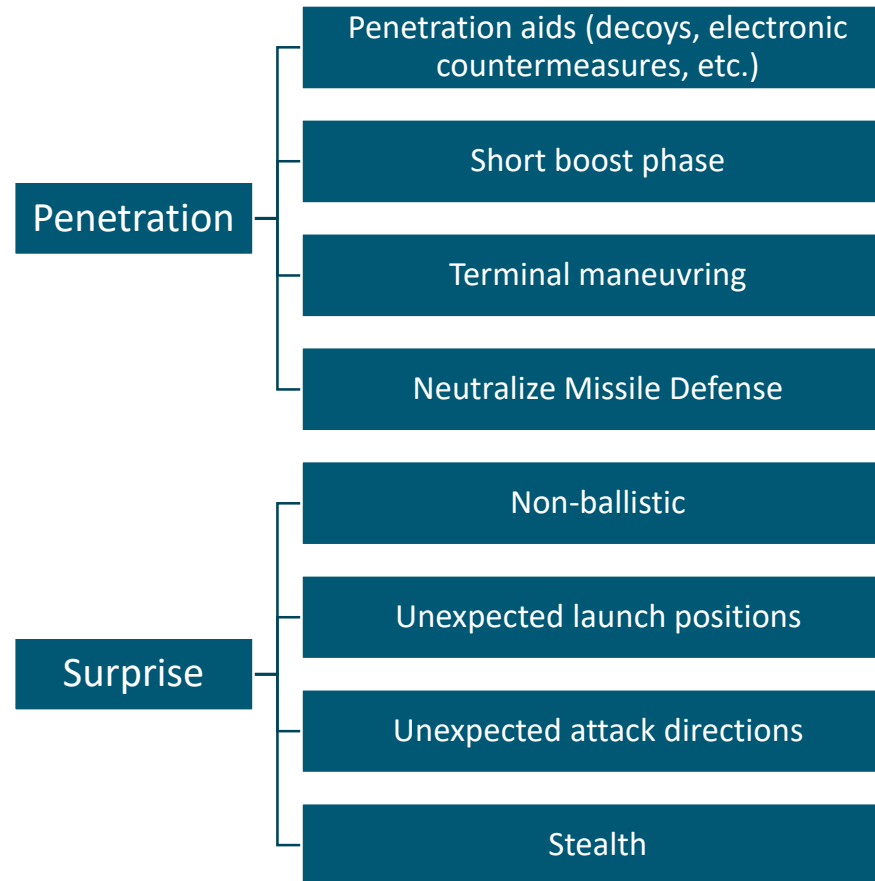
Delivery

LAUNCH UNDER ATTACK DOCTRINE
„Reciprocal Counter Strike“

“S”-Survivability



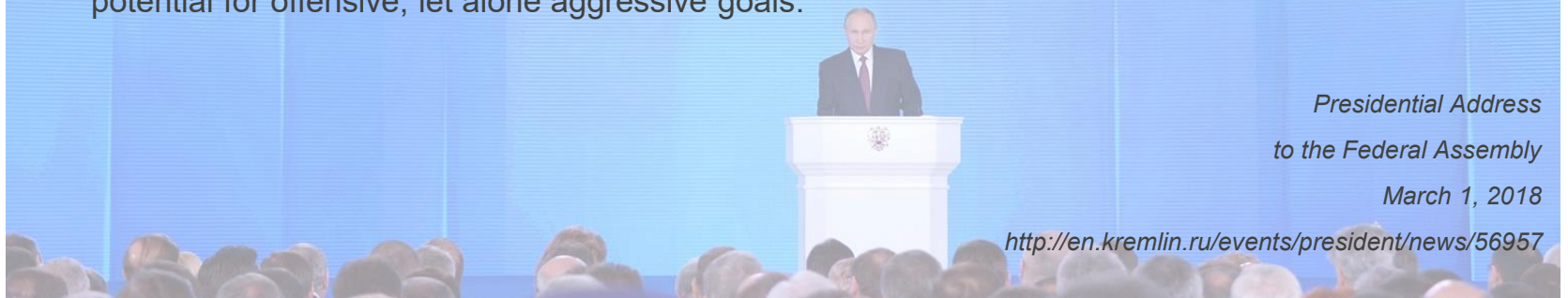
“D”-Delivery



‘March 1st’ Systems

Vladimir Putin, President of the Russian Federation:

- “The newest systems of Russian strategic weapons that we are creating in response to the unilateral withdrawal of the US from the ABM Treaty and the practical deployment of their missile defence systems both in the US and beyond their national borders.”
- “During all these years since the unilateral US withdrawal from the ABM Treaty, we have been working intensively on advanced equipment and arms, which allowed us to make a breakthrough in developing new models of strategic weapons.”
- “Nobody really wanted to talk to us about the core of the problem, and nobody wanted to listen to us. So listen now.”
- “Effective defence will serve as a guarantee of Russia’s long-term development.”
- “I should note that we have conducted the work to reinforce Russia's defence capability within the current arms control agreements; we are not violating anything. I should specifically say that Russia's growing military strength is not a threat to anyone; we have never had any plans to use this potential for offensive, let alone aggressive goals.”

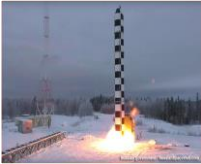


*Presidential Address
to the Federal Assembly*

March 1, 2018

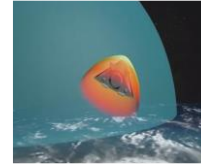
<http://en.kremlin.ru/events/president/news/56957>

'March 1st' Systems



Sarmat* heavy liquid-fuel ICBM
(SS-X-29, "Satan-II" (unofficial))

- **S:** Hardened
- **D:** Penetration aids, shortened boost phase



Avangard Missile system with gliding winged vehicle (SS-19 mod. 4, Hypersonic glide vehicle)

- **S:** Hardened
- **D:** Non-ballistic



Poseidon Unmanned underwater vehicle
(KANYON, STATUS-6, "Doomsday Torpedo")

- **S:** Underwater, launched by submarine
- **D:** Unexpected attack directions
- Patrol?
- Other missions?



Burevestnik "unlimited range" nuclear-powered land-attack cruise missile (SSC-X-9, Skyfall)

- **S:** Mobile
- **D:** Non-ballistic, unexpected attack directions & launch positions
- Loitering?
- Technology demonstrator?



Kinzhalf Air-Launched Hypersonic/Ballistic Missile

- Attack against surface-based missile defenses
- Launched from MiG-31K "Foxhound"



Peresvet Battle Laser

- Mission unspecified
- OSINT: co-deployment with road-mobile ICBM units
- Point defenses?
- Satellite counter-measures?

*Names explained on slide 13

‘Traditional’ Systems



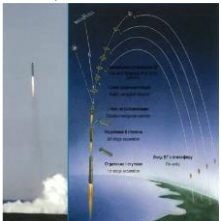
Silo-based ICBM (SS-18 Satan, SS-19 Stiletto, SS-27 Sickle B)

- **S:** Hardened, coating, point defenses
- **D:** Penetration aids



Road-mobile ICBM (SS-25 Sickle, SS-27 Sickle B)

- **S:** Mobile, decoys, covers
- **D:** Penetration aids, unexpected launch positions



SLBM (SSN-18, SSN-23, SSN-32)

- **S:** Underwater, concealed
- **D:** Penetration aids, unexpected attack directions and launch positions



Heavy Bombers (Tu-95MS Bear-H variants, Tu-160 Blackjack variants) + ALCM (AS-15 Kent, AS-23 Kodiak)

- **S:** Mobile
- **D:** Stealthy missiles, unexpected attack directions and launch positions

Takeaways

- Russian strategic nuclear posture is designed for **retaliation**
 - Weapons must survive any first strike by any adversary
 - Weapons must reach their targets under any circumstances
- ‘March 1st’ Systems follow the traditional tracks, but ‘on steroids’, fueled by the perceived global US offensive and defensive capabilities increase
- There will be no massive (exceeding several dozens) deployment of ‘March 1st’ Systems – soon or ever
 - Sophisticated and expensive
 - Can only be employed for highly specific purposes

Policy implications I: Why Did Russia Develop ‘March 1st’ Systems?

1) Response to the US Capabilities Development

- Offensive weapons perceived as capable of a disarming strike
 - Precision-guided conventional weapons: cruise missiles, hypersonic weapons, stealth launch platforms
 - “Tailored” nuclear weapons: higher precision, low-yield warheads
- Missile Defense perceived as shield against retaliation with remaining nuclear weapons
 - Space layer enhances defense against near-peer adversaries
 - “Left of launch” concept contributes to disarming strike

2) Insecurity compounded by the arms control crisis

- Anti-Ballistic Missile Treaty, Intermediate-Range Nuclear Forces Treaty – no longer in force
- New START, Comprehensive Nuclear-Test-Ban Treaty – future uncertain

Policy implications II: Dangers for Stability

The Illusion that the US could successfully launch a disarming strike against Russia

- Either, the Russian establishment believes the US can disarm them...
- ...or the US leadership believes they can disarm the Russians
- BOTH OF THESE SCENARIOS ARE DANGEROUS
- ...and led to the Russian development of new weapons

2019 US Missile Defense Review:

“Missile defenses provide U.S. leaders a position of strength from which to engage potential adversaries diplomatically in peacetime or crises.”

Policy Recommendations

- To Russia – demonstrate goodwill and responsible approach to strategic challenges:
 - Enhance transparency on intended missions, capabilities, testing and deployment plans for “March 1st” Systems and other new weapons under development
 - Re-evaluate which weapons indeed reinforce rather than undermine it deterrence
- To the US – counter the narrative that Pax Americana is achieved and supported by military means exclusively:
 - Specify options for tri- and multilateral arms control – so it wouldn’t look like an excuse for unilateral withdrawals from treaties in order to ensure superiority
- To both Russian and the US – avoid misperceptions, emphasize joint efforts to find solutions:
 - Clarify nuclear doctrines and postures in terms of actual objectives and ways to achieve those
 - Step up bilateral engagement – dialogue is important itself, but there must be deliverables
- To other concerned countries – contribute to international security through expertise and mediation:
 - Encourage and facilitate dialogue and transparency between US and Russia
 - Support the parties engage in dialogue in good faith through frank talks to both
 - Develop innovative arms control initiatives, including blueprints for unilateral measures, transparency and confidence-building measures and best practices

Addendum: translations

- * **"Sarmat"** – a *Sarmatian*, member of ancient nomadic tribe of Iranian stock that inhabited large parts of southern Russia and Black Sea region between 4th century BC and 4th century AD, and was later slavized.
- ** **"Burevestnik"** – a *Petrel* bird species, "*Stormbringer*"
- *** **"Kinzhal"** – "*Dagger*"
- **** **"Peresvet"** – the name of a legendary warrior monk who participated in the Kulikovo battle between the forces of the Russian Principalities and the Tatar-Mongolian Khanate (1380), literal translation: "*Over-Light*"