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### United States Department of State



Washington, D.C. 20520

Case Control No. 200100529

Mr. John Greenwald, Jr.

Dear Mr Greenwald:

I refer to your letter of October 4,2000 to the Central Intelligence Agency, requesting the release of certain material under the Freedom of Information Act (Title 5 USC Section 552). Two of the relevant documents retrieved in response to your request originated with the Department of State and were therefore referred to us for appropriate action.

We have determined that one may be released, and one may not be released.

The material in the document withheld in full is currently and properly classified under Executive Order 12958 in the interest of national defense or foreign relations. As such, it is exempt from release under subsection (b)(1) of the Freedom of Information Act.

With respect to material we have withheld under the Freedom of Information Act, you have the right to appeal our determination within 60 days. Appeals should be addressed to the Chairman, Appeals Review Panel, c/o Appeals Officer, A/RPS/IPS/PP/IA, SA-2, Room 6001, Department of State, Washington, D.C. 20522-6001. The letter of appeal should refer to the case control number shown above. A copy of the appeals procedures is enclosed.

Sincerely,

Margaret P. Grafeld

Director

Office of IRM Programs and Services

Enclosures: as stated

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TEXT

SUBJECT: USIS ROME MEDIA REACTION REPORT

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ROME MEDIA REACTION REPORT -- JANUARY 27, 1995

THIS REPORT WILL FOCUS ON THE FOLLOWING ITEMS:

- 1. RUSSIA
- 2. AUSCHWITZ ANNIVERSARY

#### TREATMENT

#### 1. RUSSIA

RUSSIAN PRESIDENT YELTSIN'S REVELATIONS THURSDAY THAT THE LAUNCH OF A NORWEGIAN SCIENTIFIC MISSILE SET OFF A MAJOR SECURITY ALERT IN RUSSIA IS THE LEAD INTERNATIONAL.STORY IN TODAY'S MEDIA.

#### **HEADLINES:**

"YELTSIN: 'GIVE ME THE APOCALYPSE SUITCASE'" (CORRIERE DELLA SERA)
"YELTSIN, NUCLEAR ALERT" (FRONT PAGE, LA REPUBBLICA)
"YELTSIN: 'WE WERE NEAR NUCLEAR WAR'" (FRONT PAGE, IL MESSAGGERO)

#### COMMENTS:

REPORT FROM MOSCOW IN CENTRIST, TOP-CIRCULATION
CORRIERE DELLA SERA: "WE THOUGHT IT WAS GONE AND
BURIED UNDER THE RUINS OF COMMUNISM. BUT THE
NIGHTMARE OF NUCLEAR HOLOCAUST WAS RESURRECTED
YESTERDAY AMID STORMS AT THE KREMLIN...YELTSIN'S
REVELATIONS BROUGHT EVERYBODY BACK TO A REALITY WHICH
SEEMED FORGOTTEN: THE NUCLEAR POWER OF THE FORMER
SOVIET UNION IS STILL THERE, INTACT, A POTENTIAL
THREAT TO THE SECURITY OF ALL. AND THE POLITICAL
STORMS WHICH OCCUR SO FREQUENTLY IN MOSCOW MAKE THIS

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PROSPECT EVEN MORE ALARMING FOR THE ENTIRE WORLD....YELTSIN'S MESSAGE TO THE WEST WAS CLEAR. RUSSIA IS STILL A NUCLEAR POWER. THE ARMY MAY HAVE FAILED IN CHECKNYA, BUT RADARS AND MISSILES ARE ALWAYS AIMED AT THE WEST. AND THERE IS NOTHING TO JOKE ABOUT ON THIS POINT."

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"A SOP FOR THE MILITARY DEMORALIZED IN CHECHNYA" --ALBERTO PASOLINI ZANELLI'S COMMENTARY IN LEADING CONSERVATIVE IL GIORNALE: "THE PERSON MOST SURPRISED BY THE CLAMOUR SURROUNDING THE LAUNCH OF THE NORWEGIAN SCIENTIFIC MISSILE WAS THE SPOKESMAN OF THE RUSSIAN EMBASSY IN NORWAY, WHO TERMED THE REACTION OF HIS GOVERNMENT 'INCOMPREHENSIBLE AND TOTALLY UNEXPECTED'....IN ADDITION TO THE OSLO GOVERNMENT AND THE RUSSIAN REPRESENTATIVE IN NORWAY, THE WHITE HOUSE ALSO INTERVENED TO PLAY DOWN THE EVENT, EXPLAINING THAT THESE SORTS OF EXPERIMENTS HAVE NOTHING TO DO WITH THE MILITARY EXPERIMENTS AGREED UPON BY THE SUPERPOWERS DURING THE COLD WAR AND, AFTER THAT, BETWEEN RUSSIA AND AMERICA....THE REAL QUESTION, THEREFORE, IS WHY THE RUSSIAN PRESIDENT FELT THE NEED TO TELL ABOUT THE INCIDENT WITH REVELATIOS AIMED AT AN UNKNOWN RECIPIENT....THE KEY TO HE MYSTERY CAN PERHAPS BE FOUND IN THE WORDS WHIC YELTSIN PRONOUNCED IMMEDIATELY AFTER, CONGRATULATING THE RUSSIAN MILITARY AND THANKING THEM FOR SHOWING 'A VERY HIGH LEVEL OF COMPETENCE AND ALERT.'"

PASOLINI ZANELLI CONCLUDES: "THE 'MESSAGE' IS THEREFORE THE FOLLOWING: NORWAY OR NUCLEAR ARSENALS HAVE NOTHING TO DO WITH IT. AND EVEN LESS THE AURORA

BOREALIS. THE RUSSIAN MILITARY NEEDED AN INJECTION OF CONFIDENCE, OF GOOD WORDS AFTER THEIR POOR PERFORMANCE IN CHECHNYA, AT A TIME WHEN YELTSIN IS GETTING READY TO REORGANIZE AND PURGE THE MILITARY LEADERSHIP. HE FEELS FORCED TO REDUCE HIERARCHIES, BUT DOES NOT WANT TO FURTHER DEMORALIZE THE ARMED FORCES. THUS HE INVENTED A 'CRISIS,' AN INNOCUOUS, IF NOT INNOCENT, PARODY OF THE INTERNATIONAL TENSIONS DURING THE DAYS OF THE SOVIET EMPIRE."

"OLD FEARS FROM THE NEW KREMLIN" -- MOSCOW
CORRESPONDENT GIULIETTO CHIESA IN CENTRIST LA STAMPA:
"ONE FEELS A SHUDDER. YELTSIN, A DEMOCRAT AND A
REFORMER UNTIL NOW, IS RAISING HIS VOICE AND WARNING
THE WEST NOT TO GET INVOLVED IN RUSSIAN MATTERS. THE
NUCLEAR SUITCASE IS IN THE HANDS OF A MAN WHO
PERIODICALLY DISAPPEARS FROM THE POLITICAL SCENE,
ABOUT WHOSE HEALTH WE KNOW NOTHING PRECISE, AND THE
LITTLE WE KNOW CANNOT REASSURE US. A MAN WHO HAS

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CREATED HIS OWN CONSTITUTION, WHICH GRANTS HIM ABSOLUTE POWERS, BUT IS SURROUNDED BY MEN WHOM NOBODY HAS ELECTED, DETERMINED TO SAVE THEIR POWER AT ALL COSTS, READY TO FILL A POSSIBLE INSTITUTIONAL VACUUM WITH THE USE OF FORCE, IGNORING THE WEAK PROTESTS OF THE WEST. WE SHOULD BE VERY CONCERNED, SINCE THERE IS NO ECONOMIC MIRACLE IN MOSCOW AND THE RUBLE IS SINKING. IT IS CLEAR THAT THE KREMLIN IS CHOOSING ANARCHY, SLIDING TOWARDS AN EVER MORE ARROGANT AND ANGRY ISOLATION, AND HAS NO MORE ILLUSIONS ABOUT SUPPORT FROM OUTSIDE, WHICH WOULD HAVE BEEN A LITTLE THING ANY WAY, BUT IS OUT OF THE QUESTION NOW."

CHIESA CONCLUDES: "FIRST YELTSIN TALKED ABOUT 'COLD PEACE' IN BUDAPEST, CREATING INITIAL ALARM IN THE WEST, STILL INCREDULOUS AND UNABLE TO REACT. THEN THE CHECHEN WAR CAME, AND THE WEST CONTINUES TO FAIL TO REALIZE THAT THAT SMALL COUNTRY IN THE CAUCASUS IS NOTHING BUT THE SYMPTOM OF A SERIOUS INFECTION, THAT GROZNY IS ALREADY AT THE DOORS OF MOSCOW."

#### AUSCHWITZ ANNIVERSARY

ALL MEDIA GIVE CONSIDERABLE ATTENTION TO THE 50TH ANNIVERSARY OF THE LIBERATION OF THE NAZI CAMP IN AUSCHWITZ, EMPHASIZING THE DISPUTE BETWEEN JEWISH GROUPS AND POLISH OFFICIALS OVER HOW TO PROPERLY HONOR THE DEAD. WAGNER

ADMIN END OF MESSAGE

UNCLASSIFIED

Central Intelligence Agency



FEB 22 2001

Mr. John Greenewald, Jr.

Reference: F-2000-02110

Dear Mr. Greenewald:

This letter concludes our processing of your 4 October 2000 Freedom of Information Act (FOIA) request for all records pertaining to the incident in the morning of 25 January 1995, in which a Russian radar crew spotted a fast moving object they identified as an incoming Trident missile, later identified as a Norwegian atmospheric observation missile. Your request was processed in accordance with the FOIA, 5 U.S.C. § 552, as amended, and the CIA Information Act, 50 U.S.C. § 431. Our processing was in keeping with our 1 November letter and consisted of a search of all Agency records subject to the FOIA and likely to contain material relevant to your request.

We located the enclosed document, bearing our processing number 514731, which we determined can be released in its entirety. We also located material not originated by the CIA which appears relevant to your request. We referred that material to its originating agency for review and direct response to you.

Thank you for your patience while we processed your request.

Sincerely,

Kathryn I. Dyer Information and Privacy Coordinator

Enclosure



Report of the

# COMMISSION TO ASSESS THE BALLISTIC MISSILE THREAT TO THE UNITED STATES

Appendix III:

Unclassified Working

Papers

Pursuant to Public Law 201 104th Congress

July 15, 1998

Copy □585 of 1,000

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# Bruce Blair<sup>1</sup>: "The Plight of the Russian Military and Nuclear Control"

Tight central control is a core value of Russian political and military culture, and the designers of command systems in Russia have gone to extraordinary lengths to ensure such strict central control over nuclear weapons. During the Cold War, they built an impressive command system whose safety features often exceeded U.S. standards.

Nevertheless, they failed to anticipate, understandably, a host of dangers that would develop after the Soviet empire dissolved—coups, secession, severe civil-military tensions, slashes in defense spending, dire working and living conditions even for elite nuclear units, operational atrophy and declining proficiency in the safe handling of weapons, widespread corruption and incompetence within the senior ranks, and pervasive demoralization among the rank and file officers and enlisted personnel. As if these burdens were not enough, the nuclear control system needs extensive repair and modernization.

All the trends pertinent to the functioning of the nuclear control system are negative. It is steadily deteriorating in physical, organizational, and human terms.

However effective the safeguards have been to date, I seriously doubt whether the system can endure the stress and strain indefinitely. The susceptibility of Russian nuclear forces to accidental, unauthorized or mistaken launch has been growing since the end of the Cold War.

In February 1997, the institute responsible for designing the sophisticated command, control, and communications systems for Russia's Strategic Rocket Forces (SRF) staged a one-day strike to protest pay arrears and the lack of resources to upgrade their equipment. Three days later, Defense Minister Igor Rodionov asserted that "if the shortage of funds persists ... Russia may soon

<sup>&</sup>lt;sup>1</sup> Dr. Bruce Blair is a Senior Fellow, Foreign Policy Studies Program, Brookings Institution. Expertise in U.S. nuclear security policy, U.S. and foreign nuclear forces, command and control, and safeguards; Russian proliferation; ballistic missile defense.

approach a threshold beyond which its missiles and nuclear systems become uncontrollable."

Rodionov's warning may have been in part a maneuver to muster support for greater defense spending, but he emphatically repeated it after his resignation and recent reports by the U.S. Central Intelligence Agency confirm the thrust of the prognosis. The SRF and other elite nuclear unites have indeed fallen on hard times. These reports cite frequent malfunctions of command and control equipment and intermittent spontaneous switching to a combat mode for no apparent reason. Power to key nuclear weapons installations has been cut off numerous times for nonpayment of bills and, on seven occasions during the fall of 1996, operations at some nuclear facilities were disrupted because thieves were "mining" communications cables for valuable metals. Technical safeguards against unauthorized use of nuclear weapons have weakened or become inoperable due to inadequate maintenance. And although launch crews normally need special unlock codes held by the General Staff, the highest echelon of military command, in order to fire their missiles, the CIA report warned that these codes may be distributed fairly widely to alternative command centers and that some submarine crews may possess autonomous launch capability for the ballistic missiles on board.

The Russian early warning network constructed by the former Soviet Union to detect a ballistic missile attack is perhaps the most neglected component of the strategic posture. Many ground radars no longer operate or routinely suffer power outages and other afflictions; only three of its nine modern radars (large phased-array radars) are working at all. Three have been deactivated or never completed, and three are inoperable or barely functional. Seven out of ten older, less capable Hen House radars sit outside Russia in former Soviet republics, and some of them may be shut down for political reasons. Two of the nine slots in Russia's constellation of early warning satellites monitoring U.S. and Chinese ICBM fields are empty, and Russia lacks satellite coverage of the oceans. So information provided by these sensors is becoming increasingly unreliable.

The aging command system and communications networks that support nuclear operations, including launch on warning, are also crumbling. These networks are typically five or more years past due for overhaul and modernization; some components are ten or more years past their design life. Their performance is degrading, raising the question whether they will fail safe or deadly. Even the famous

nuclear suitcases that receive early warning information and accompany the President, Defense Minister, and Chief of the General Staff, are falling into disrepair.

The stress on Russia's nuclear control system appears to run even deeper. Besides physical deterioration and technical difficulties, Russia's nuclear weapons establishment suffers from a host of human and organizational problems. Crews receive less training than they did formerly because of broken equipment and budgetcutting, which translates into less adherence to safety rules. Their motivation to follow the rules diligently can also be doubted in view of their poor working conditions. Despite President Yeltsin's promises to improve conditions, endemic housing and food shortages have led to demoralization and disaffection within the elite Strategic Rocket Forces, the strategic submarine fleet and the custodians of Russia's vast stockpiles of nuclear weapons. As a result, the incidence of desertion and suicide have increased, to a point that offices have been established at SRF bases to prevent suicides. Also, the likelihood increases that desperate low-level commanders would flaunt safety rules or, worse still, that they might take unauthorized control of nuclear weapons—something that a deteriorating central command system might be unable to detect or counter.

Even at the top, control over nuclear weapons could splinter along various political fault lines. Authority in Moscow depends far more on personal allegiances than on institutional bonds, and bitter relations between the politicians and military leaders cast a shadow over their loyalty. Cohesion at the apex may be difficult to maintain during periods of political turmoil, and physical control of the unlock and launch authorization codes resides with the military. The General Staff's direct access to these codes enable them to initiate a missile attack with or without the permission of political authorities. Thus, the authority to fire ballistic missiles could be usurped by military commanders during an internal crisis. In fact, during the August 1991 coup against President Mikhail S. Gorbachev, top-level allegiances suddenly shifted, and the normal chain of command for Russia's nuclear weapons was broken. For three days, the power to launch nuclear weapons rested in the hands of Defense Minister Dimitriy Yazov and the chief of the General Staff, Mikhail Moiseyev.

Nuclear command might splinter down other political fault lines. For instance, the CIA report considered the possibility that the Far East region of Russia, or the Military District or Pacific Fleet located

there, might secede along with the nuclear weapons stationed there. (Ukraine's secession and temptation to seize control over nuclear weapons on its territory represent an instructive precedent.)

The list of possible scenarios for a breakdown of nuclear control, leading to a mistaken or illicit launch, is long and growing. Although the risks cannot be precisely measured, and the timing and form of a command failure cannot be reliably predicted, it is not unreasonable to anticipate a serious, even catastrophic, failure of Russian nuclear control. All the trends are adverse. What remains uncertain is how close to the precipice Russia has come, and how much if any margin of safety exists today.

#### The Nuclear Hair Trigger

While Russian control erodes, both countries try to maintain the bulk of their strategic missile forces on hair-trigger alert. Two to three thousand warheads on each side are poised for immediate launch, and both the United States and Russia stand ready to launch on warning—launch a massive retaliatory missile salvo after detecting an enemy missile attack but before the incoming warheads arrive 15 to 30 minutes later.

Russia relies more heavily on this quick-draw option than does the United States. The General Staff evidently fears that if their strategic forces are not launched immediately, then only a small number, perhaps only tens of them, would be able to respond after absorbing a systematic attack. This estimate partially reflects the vulnerability of Russian command posts, and of silos housing most of their land-based missiles, to attack by U.S. missiles with pinpoint accuracy—the U.S. MX land-based missile as well as the Trident II submarine missile armed with high-yield W88 warheads.

Russia's current inability to deploy many of its most survivable forces—submarines at sea and mobile land-based rockets in the field—amplifies this worry. A lack of resources and qualified personnel have forced the Russian Navy to cut back operations considerably. At present, it typically keeps only two of its 26 ballistic missile submarines at sea on combat patrol at sea at any time—typically, a Delta-IV submarine in the Northern Fleet, and a Delta-III in the Pacific. Similar constraints prevent Russia from hiding more than one or two regiments of its truck-mobile missiles by dispersing in the field. The remaining 40 or so regiments, each controlling nine single-warhead missiles, keep their trucks parked

in garages. These missiles are more exposed to attack than those housed in underground silos. Russia also has 36 10-warhead nuclear missiles carried on railway cars, which were designed to be hidden along Russia's vast rail network. But these railcars have been confined to fixed vulnerable garrisons in keeping with a pledge made then by President Gorbachev to President Bush in 1991.

In fact Russia today faces stronger pressures to "use or lose" its strategic arsenal than at any time since the early 1960s. Since it cannot ride out an attack, Russia keeps some of its submarines in port and mobile missiles in garages ready to launch on warning, along with the missiles in silos. The time available for deciding to launch these weapons is shortened by the presence of American, British, and French submarines cruising in the North Atlantic, only about 2,000 miles from Moscow. This proximity means that the nuclear-release procedures require a response time of less than 15 minutes from the time of enemy missile detection to the lift-off of friendly missile forces. The Russian command system is thoroughly geared to operate within this time frame, getting a release decision from the president within 10 minutes, and the procedures are regularly exercised with drills. The crews onboard docked submarines, for example, have demonstrated the ability to fire while surfaced at pier-side within 9 to 15 minutes after receiving the order.

The Russian General Staff, after receiving permission from the President, the Defense Minister, or the Chief of the General Staff, through one of their famous nuclear suitcase ("Cheget"), would attempt to exercise launch on warning in either of two ways. One is by sending unlock and launch authorization codes held by the General Staff at their war rooms, directly to individual weapons commanders, who then perform the launch procedures. (This is how the United States would exercise its launch-on-warning option.) Or, the General Staff can personally push the launch button from war rooms in the Moscow vicinity or alternative facilities at Chekhov, Penza, and elsewhere. This is a remote, robotic-like launch of land-based strategic missiles that would totally bypass the subordinate commanders and missile launch crews down the chain of command.

It is obvious that the rushed nature of this process, from warning to decision to action, risks causing a catastrophic mistake. The danger is compounded by the erosion of Russia's ability to distinguish reliably between natural phenomena or peaceful ventures into space and a true missile attack.

A quick launch decision today would thus draw on less reliable information than would have been available during the Cold War. This fact is not lost on Russian planners. They well recognize the increasing difficulty of launching on true warning as well as the danger of launching on false warning.

The most serious incident demonstrating the acute pressure on the command system under the short time constraints and the system's susceptibility to false warning occurred only three years ago. In January 1995, Russian radars detected and began tracking one or more apparent missiles fired from a spot near the coast of Norway. Interpreted as a possible attack by a Western missile submarine, the nuclear command system started the countdown to a launch decision for the first time in its history. The event activated President Yeltsin's nuclear suitcase and triggered an emergency teleconference between him and his nuclear advisors. About eight minutes elapsed, only a couple of minutes short of the procedural deadline for reaching a decision to launch on warning, before determining that the missile posed no threat to Russia. As it turned out, the missile was a U.S. scientific rocket launched from an island off the Norwegian coast to study the Northern Lights.

The end of the Cold War undoubtedly helped to moderate the Russian response to this false alarm in particular and generally alleviates the danger of mistaken launch caused by the decline in Russian technical capabilities. Given the milder political climate, decisionmakers on both sides should be more inclined to doubt the validity of any reports they receive of an impending missile strike. Nevertheless, the close coupling of two arsenals geared for rapid response carries the inherent danger of producing a mistaken launch and an escalating volley of missiles in return. The possibility of such an apocalyptic accident cannot be ruled out even under normal conditions. And if the Russian command system ever comes under any stress from an internal or international crisis, the danger could suddenly become much more acute. To underscore the point, Russian security policy continues to shift toward an exclusive emphasis on nuclear weapons to compensate for conventional inferiority following the collapse of its regular army. Russian planners rely more than ever on these weapons, on their widespread dispersal, and on their first use of launch on warning in a crisis.

Beyond the danger of launching on false warning, keeping thousands of warheads poised for immediate launch increases the susceptibility of nuclear weapons to other types of accidents or unauthorized acts.

During the Cold War, such risks were subordinated to the overriding requirement to deter an enemy believed to be willing to mount a cold-blooded nuclear strike. This rationalization is no longer defensible, if ever it was. Today, when both countries seek normal economic relations and cooperative security arrangements, perpetuating the readiness to launch nuclear weapons on the mere warning of an attack constitutes reckless behavior. Yet this thinking and planning are so entrenched that they will yield only to steady pressure from the public on political leaders—especially presidents—to substitute a safer policy.

#### "De-Alerting" Strategic Forces

A range of remedies of varying effectiveness are available to improve the operational safety of the nuclear postures. In principle, both countries could spend more to upgrade their command and early warning networks and increase their resilience to attack. This would allow them to reduce their reliance on prompt launch and strengthen their capability to retaliate after riding out an attack. To this end, Russia in fact is investing scarce resources to excavate deep underground command posts and upgrade an unusual secondstrike command instrument formally called 'Perimeter' and colloquially known as the "dead hand." If top Russian leaders do not get a clear picture of an apparent missile attack, or if for any reason they fail to give timely authorization to retaliate, the General Staff can activate this system to ensure quasi-automatic retaliation in the event of their decapitation. Once activated, special radio nodes, underground radio antennae, and command rockets would form and disseminate launch signals to the strategic forces if the nodes register nuclear detonations on Russian territory and lose contact with the General Staff. The launch signals sent by command rockets can fire missiles out of silos and off mobile launchers without any participation on the part of launch crews in the field.

Russia of course cannot afford such remedies. A less expensive way to enhance the operational safety of the nuclear arsenals is through traditional arms control—namely, the START nuclear-reductions process. Under the START III framework endorsed at Helsinki this spring by Presidents Clinton and Yeltsin, the strategic arsenals would shrink to 2,000-2,500 on each side by the year 2007. These reductions promote safety, but the improvements will come only gradually. If current alert practices are not revised, ten years from now many hundreds of warheads on each side could still remain ready to launch on a few minutes' notice.

Although they are not remedies from an American perspective, Russia might consider two other responses. First, it could shift toward a policy of preemptive strike, a first-strike strategy for the strategic forces that would complement the ongoing gravitation of Russian military doctrine toward the first use of tactical nuclear forces. This preemptive option is a cheap way to avoid the difficulties of launch on warning, but it would only make matters worse in terms of operational safety.

Second, Russia might try to repair its early warning network and streamline the procedures for quick launch to improve its reliability and feasibility. However, this expensive alternative would scarcely reduce the risks associated with hair-trigger alert. It would be folly if, for example, Russia adopts the kinds of extraordinary measures considered during the early 1980s to cope with the perceived threat of decapitation posed by Pershing II missiles slated for deployment in Western Europe. At that time, the Soviets developed and tested a command link meant to give the top political leadership pushbutton launch control over a portion of their land-based rocket force, bypassing even the General Staff, in order to shave off a few minutes of launch reaction time. Such short-cuts are obviously dangerous in the extreme.

Vast improvements in operational safety could be made much more rapidly by "de-alerting" the missile forces—increasing the amount of time needed to prepare them for launch. The United States and Russia could move independently down this path, preferably taking quick strides in parallel.

President George Bush set a notable precedent for de-alerting nuclear weapons at the end of September 1991, when the Soviet Union began to split apart in the wake of the August coup attempt, and as the Soviet nuclear weapons establishment threatened to disintegrate with it. On the advice of General George L. Butler, then commander of the Strategic Air Command, Bush ordered an immediate stand-down of U.S. strategic bombers that for decades had stood ready for takeoff within 15 minutes. Nuclear weapons on them were unloaded and put in storage. In addition, Bush took off alert a large number of land- and sea-based strategic missiles slated for elimination under START I—450 Minuteman II missiles along with the missiles on ten Poseidon submarines. These measures were implemented in a matter of days, and they encouraged comparable actions by Russia.

President Gorbachev reciprocated a week later by ordering the deactivation of more than 500 land-based rockets and six strategic submarines, by promising to keep his strategic bombers at a low level of readiness and by putting the rail-based missiles in garrison. In subsequent months, both countries also withdrew many thousands of shorter-range tactical nuclear weapons deployed with their armies and surface navies and placed these weapons in central storage depots.

Presidents Clinton and Yeltsin took a further step together in 1994, when they pledged to stop aiming strategic missiles at each other's country. This change, though a welcome gesture, has little military significance. Missile commanders can reload target coordinates into guidance computers within seconds. Retargeting in this fashion is in fact a standard procedure for launching missiles in wartime and hence the accord did not extend the launch preparation time by even a single solitary second. In the case of Russia, the General Staff, from their wartime command bunkers at Moscow, Chekhov, Penza and elsewhere, can use a computer network called Signal-A to override the agreement and re-aim all their silo-based missiles at the United States in 10 seconds.

Moreover, the pact had no significant effect on the risk or consequences of an accidental or unauthorized Russian launch. To fulfill their obligations, the Russian military set their intercontinental missiles on what they call a "zero flight plan." This setting does not reduce the danger of illicit launch, and an unprogrammed missile launched illicitly or accidentally automatically would switch back to its primary wartime target, which might be a Minuteman silo in Montana or a command center in Washington, London, Paris, or Beijing.

Having taken these real and cosmetic steps during the past six years, the United States and Russia reached the present situation described earlier: 5,000 strategic warheads remain poised for launch at a moment's notice. The de-alerting process has stalled.

It is time to revive it with a large step toward standing down the strategic missiles in the U.S. and Russian arsenals. Possessing the most robust forces and cohesive command system, the United States should take the lead in a new round of voluntary actions by announcing that it will withdraw from active deployment the U.S weapons that most threaten Russia's nuclear deterrent (particularly those capable of hitting Russia's missile siles and underground command posts). The most menacing warheads are

those deployed on the 50 MX silo-based missiles, which are armed with ten warheads each, and the 400 high-yield W88 warheads fitted atop some of the missiles on Trident submarines. We also recommend immobilizing all 500 Minuteman III land-based missiles, which are armed with three warheads apiece, halving the number of submarines deployed at sea in peacetime and cutting the number of warheads on each submarine-borne missile from eight to four, the operations of ballistic missile submarines should also be altered so that crews would require about one day to ready missiles for launching.

#### Nuclear Weapon and Ballistic Missile Threat: Russia

#### A. Current Wartime Posture:

- Growing reliance on early first use
- 2-8 thousands alert strategic warheads
   (incl. pier-side SSBN and mobile ICBM/field-garrison)
   — Targeting/firing in minutes
- LOW main option; "use or lose" pressures
   But coverage gaps; single or zero sensor
- · LUA/Rideout: 'Perimetr'
- 3-4 thousand tactical nuclear weapons (non-alert)
   ~15 thousand in dismantling queue

#### **B. Future Wartime Posture:**

- Economic Depression
- Aging forces and modest new production (NIE)
- Deteriorating warning/command: LUA or Preemption
   Kosvinski and Yamantau
- Tactical weapons inventory: 0-hundreds by 2003

#### C. Accidental/Unauthorized/Mistaken Launch Risks

#### C1. Launch on False Warning

- Short timeline and Unreliable Warning
- 1995 Norwegian incident (how serious?)
- --- Kazbek activated; confusion; ICR alert
- SRF/Early Warning under same organization
- --- Threats: defcon dependent

#### C2. Unauthorized Launch

#### C2a. Risks at Apex

- -Authority (Pres.; Def.Min.; CGS)
- -Tradition/Architecture for Control
- --- Code Distribution (GS/Alternates; defcon)
- -Code Control (KGB?)
- -Threats: coup; weak institutions; military splits;

#### C2b. Risks at Intermediate/Low Levels

- ---PALs (Blocking devices; defcon dependent)
- -Continuous control: ICBMs in silos
- —Threats: disaffection; splits (Far East); by-pass safeguards (esp. SSBNs or tactical nuclear weapons); blackmail/use; loss of cohesive/timely restoration

#### C8. Accidental Launch

- 1994 De-targeting Agreement-No effect
- Threats; C3 physical deterioration; decline in handling proficiency; negligence; fail-safe or deadly?

#### D. Theft/Diversion Risks

- -Consolidation to 50 depots strengthens security
- -12th Gumo; 6th department; 8th MVD;3rd/2nd FSK
- -Threats: Insider corruption; defcon dependent; succession

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