

June 4, 2015

TO: Rose Gottemoeller
Under Secretary for Arms Control and International Security
U.S. Department of State

Greg Weaver
Principal Director for Nuclear and Missile Defense Policy
Office of the Under Secretary of Defense for Policy
U.S. Department of Defense

FR: Stephen Young, Washington Representative and Senior Analyst, Global Security Program
David Wright, Co-Director and Senior Scientist, Global Security Program

RE: U.S. Statements about Alert Levels of Nuclear Forces

Dear Under Secretary Gottemoeller and Principal Director Weaver,

Thank you for agreeing to brief the NGO community on issues related to nuclear weapons. We would like to highlight some issues we hope you will address at that briefing.

In particular, over the past two months administration officials have made multiple public statements related to the alert level of U.S. nuclear weapons. We believe that some of those statements are incorrect or misleading, and ask that you clarify them.

Our two overarching questions are these:

- What steps has the Obama administration taken that have “reduced the alert level of our nuclear arsenal,” as Sec. Kerry stated on April 27 at the NPT Review Conference?
- What steps has the Obama administration taken “to reduce further the possibility of nuclear weapons launches resulting from accidents, unauthorized actions, or misperceptions and to maximize the time available to the President to consider whether to authorize the use of nuclear weapons,” as required by the 2010 Nuclear Posture Review (p. 44)?

Administration Statements about Reducing Alert Levels

Obama administration officials have stated on multiple occasions in the last two months that the United States has taken steps to reduce the alert level of its nuclear weapons. Many of these statements imply these steps are accomplishments of the Obama administration, since these officials talk about steps “we” have taken, or say that the United States is “actively working” on these steps.

However, essentially all the measures the United States has taken to reduce the alert levels of its nuclear forces happened prior to the Obama administration—in some cases nearly a quarter century ago. The Obama administration does not appear to have reduced the alert status of any missiles. It did complete a measure begun in the Bush administration to reduce the number of warheads on its ICBMs from three to one, resulting in a 5% reduction of warheads on alert missiles.¹

Here are four examples of recent official statements:

(1) “The United States is also actively working to reduce the numbers and role of nuclear weapons in our national security strategy. These steps include taking all of our non-strategic nuclear bombers and nuclear-capable heavy bombers off day-to-day alert, engaging in the practice of open-ocean targeting for ICBMs and SLBMs, and reducing the number of warheads each ICBM carries to a single warhead.”

Myths and Facts Regarding the Nuclear Non-Proliferation Treaty and Regime
Fact Sheet, Bureau of International Security and Nonproliferation, April 14,
2015 <http://www.state.gov/t/isn/rls/fs/2015/240650.htm>

(2) “We have reduced the alert status of our nuclear arsenal, and we have taken every reasonable step to ensure its safety, security, and strict control.”

Sec. of State John Kerry’s remarks at the 2015 Nuclear Nonproliferation Treaty Review Conference,
April 27, 2015 <http://www.state.gov/secretary/remarks/2015/04/241175.htm>

(3) “Major steps have been taken to reduce the operational readiness of our nuclear forces:

- We converted all U.S. ICBMs to carry a single warhead, making these systems less attractive targets and lowering incentives for others to launch a nuclear first strike.
- All U.S. ICBMs and SLBMs are targeted on open oceans.
- All nuclear-capable bombers and dual-capable aircraft are no longer on day-to-day alert.
- We reduced the number of nuclear submarines at sea and the number of warheads carried on each remaining deployed submarine.”

2015 U.S. National Report to the Nuclear NonProliferation Treaty Review Conference,
May 2015 <http://www.state.gov/documents/organization/242083.pdf>

(4) “We’ve already done a significant amount unilaterally to reduce the alert status. As you remember, during the Cold War, our nuclear-capable aircraft were on day-to-day nuclear alert, meaning that we had 24/7 continuous flights of our command-and-control aircraft for the nuclear forces. Our nuclear-capable heavy bombers were on [air]strip alert, as well as nonstrategic nuclear aircraft, were also on day-to-day strip alert with nuclear weapons loaded on board them. So we made a decision long ago to take all of those aircraft off alert, and so the bombers are not on day-to-day alert at this point.

“We've also taken steps, as you know, over time, which have been verifiable under the START Treaty and now New START, to so-called ‘de-MIRV,’ that is, to ensure that there is only one warhead on each intercontinental ballistic missile. And this reduces incentives for a first strike because it makes the target so much less attractive.

“So we have done quite a bit in terms of enhancing strategic stability and lowering the alert status of our forces.”

Rose Gottemoeller, Interview in *Bulletin of the Atomic Scientists*, May 14, 2015
<http://thebulletin.org/rose-gottemoeller-npt-review-conference-russian-saber-rattling-and-more8317>

UCS Analysis of these Claims:

- Nuclear-capable bombers and dual-capable aircraft are no longer on day-to-day alert.

This was accomplished by executive order by President George H.W. Bush in 1991.

- U.S. ICBMs are converted to carry a single warhead (i.e., de-MIRVed)

De-MIRVing does not reduce the alert level of the ICBMs. By reducing the number of deployed warheads per missile it can reduce the damage caused by an accidental, mistaken, or unauthorized launch, but does not reduce the probability of such launches.

In any case, the goal of de-MIRVing U.S. ICBMs was established in President Clinton's 1994 Nuclear Posture Review, but the Air Force was not ordered to implement this goal until President Bush's 2006 Quadrennial Defense Review.
(<http://bos.sagepub.com/content/65/2/59.full.pdf+html>)

The process of de-MIRVing ICBMs was largely completed during the George W. Bush administration. When President Obama took office in 2009, only about 25 missiles (those carrying W78 warheads) out of 450 ICBMs still carried multiple warheads. The Bush administration also reduced the number of ICBMs to the current level of 450.
(<http://www.unidir.org/files/publications/pdfs/reducing-alert-rates-of-nuclear-weapons-400.pdf>, p. 14)

President Obama's 2010 Nuclear Posture Review called for de-MIRVing the remaining two-dozen ICBMs, which was completed in June 2014. While the administration statement says the missiles were “converted to carry a single warhead,” the warheads were removed but the missiles retain the capability to re-MIRV.
(<http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>, p. ix)

- The United States has reduced the number of nuclear submarines at sea and the number of warheads carried on each submarine.

The George W. Bush administration retired four submarines in 2001-2003, and since then the fleet has remained at 14 submarines. (<http://fas.org/blogs/security/2013/04/ssbnpatrols/>)

The Bush administration decided during the 2001 Nuclear Posture Review to reduce the number of warheads on SLBMs, as part of meeting the requirements of the Moscow Treaty (<https://fas.org/sgp/crs/nuke/RL33640.pdf>, p. 21). The U.S. downloaded SLBMs in the Pacific from an average of six to eight warheads per missile in 2001 to an average of four warheads by 2009. (<http://bos.sagepub.com/content/65/2/59.full.pdf+html>)

These numbers have not changed under the Obama administration.

- All U.S. ICBMs and SLBMs are targeted on open oceans.

Open-ocean targeting does not reduce alert rates or operational readiness of nuclear forces. Targets are loaded into missiles as part of the launch procedure, so for an intentional launch—including a mistaken launch—the missiles would have their targets loaded by the time their engines ignited. It is conceivable that an accidental or unauthorized launch could occur without loading targets into the missile, but the risk of such launches could be significantly reduced by taking the missiles off alert.

Open-ocean targeting resulted from an agreement between Presidents Clinton and Yeltsin in 1994.

Administration Statements about the Status of U.S. Nuclear Weapons

Some administration statements have also misrepresented—perhaps unintentionally—U.S. nuclear policy and the status of U.S. weapons. Here are several examples of such statements:

(1) “U.S. nuclear forces are not on ‘hair-trigger’ alert and the U.S. employs multiple, rigorous and redundant technical and procedural safeguards to protect against accidental or unauthorized launch. Only the President can authorize the employment of U.S. nuclear weapons and we are taking further steps to maximize decision time for the President in a crisis. These steps enhance stability before and during a crisis and avoid the instability and compressed decision times that are inherent to changes in alert status.”

Myths and Facts Regarding the Nuclear Non-Proliferation Treaty and Regime
Fact Sheet, Bureau of International Security and Nonproliferation, April 14,
2015 <http://www.state.gov/t/isn/rls/fs/2015/240650.htm>

(2) “U.S. nuclear forces are not on ‘hair-trigger’ alert and we do not have a launch on warning policy. Strict, rigorous, and redundant procedures and technical safeguards are in place to guard against an accidental or unauthorized launch of a nuclear weapon.

- Only the President can authorize employment of a U.S. nuclear weapon. An appropriate focus should be on maximizing decision time and information available to leaders in a crisis.
- The threat of a disarming surprise attack is now remote, and Cold War scenarios of ‘use them or lose them’ no longer apply.”

2015 U.S. National Report to the Nuclear NonProliferation Treaty Review Conference, May 2015 <http://www.state.gov/documents/organization/242083.pdf>

UCS Response:

- Today many hundreds of U.S. nuclear weapons, including essentially all 450 ICBMs, are kept on launch-ready alert, which means that they can be launched within minutes of a decision to do so. This situation is widely referred to as “hair-trigger alert,” which is a term commonly used by high-level political and military officials, including President Obama when he was a candidate and early in his presidency (<http://www.ucsusa.org/nuclear-weapons/hair-trigger-alert/leaders#.VW9Kys9VhBc>). The official statements above incorrectly suggest that the U.S. does not keep missiles on launch ready alert, while in fact the statements apparently simply reflect the fact “hair trigger” is not the preferred term for this status.

U.S. nuclear war plans continue to contain the option for the president to launch U.S. missiles on warning of an incoming attack, so that the U.S. missiles will have left their silos before the attacking missiles arrive. That option is typically called either launch-on-warning (LOW) or launch-under attack (LUA). The official statements incorrectly suggest that the U.S. does not maintain this option. This may simply reflect that in U.S. policy, LOW/LUA is a required option, not a required response.

- While the statements above discuss safeguards against “accidental or unauthorized launches,” a significant omission is any mention of mistaken launches in response to erroneous, ambiguous, or misinterpreted warnings of an attack. Because such a situation can lead to a mistaken decision by the president to launch U.S. missiles, these safeguards would be removed as part of the launch process and would therefore not prevent such launches. Historical incidents suggest mistaken launches may represent a higher risk than accidental or unauthorized launches. Taking missiles off alert and removing LOW/LUA options would eliminate the possibility of mistaken launches.

We note that the 2010 Nuclear Posture Review refers to reducing the risk of “nuclear weapons launches resulting from accidents, unauthorized actions, or misperceptions,” so the omission of any discussion of this third risk in recent official statements is an important oversight.

- The first statement above repeats a common argument that taking weapons off alert could lead to instability in a crisis as weapons were put back on alert. However, this argument ignores two key issues:
 - First, the United States does not keep all its forces on high alert on a day-to-day basis. If the U.S. began to generate its nuclear forces in response to a crisis, that would lead to a number of actions that would likely be more observable than re-alerting nuclear missiles. So singling out re-alerting missiles as a source of instability does not make sense.
 - Second, if the United States eliminated options for LOW/LUA from its war plan there would be no reason to return missiles to alert in a crisis. Deterrence would instead be maintained by post-attack response from submarines and surviving ICBMs. If missiles were not re-alerted, there would not be a destabilizing re-alerting race.

Final Comments

The official statements above and the 2010 NPR call for “Maximizing the time available to the President to consider whether to authorized the use of nuclear weapons” (NPR, p. 44). While that is sometimes understood to mean “while retaining LOW/LUA,” that is a very significant constraint since the decision time is limited by the by the flight time of the attacking missile. The most effective way to significantly increase decision time would be to remove the option of LOW/LUA and take missiles off alert so that there is no ability to launch within minutes of receiving warning of an attack. By removing options and incentives to launch quickly, any launch decision would be the result of a considerably longer process.

In addition, one statement above says that “The threat of a disarming surprise attack is now remote, and Cold War scenarios of ‘use them or lose them’ no longer apply.” If it is the Obama administration’s position that “scenarios of ‘use them or lose them’ no longer apply,” then maintaining the option of LOW/LUA, and keeping missiles on alert to allow that option, are no longer necessary. As a result, since the U.S. goal is to reduce the risk of accidental, unauthorized, and mistaken launches, it makes sense to end LOW/LUA and take missiles off alert. Moreover, it makes sense to take these steps even if it they are unverified and even if only the United States does so, although bilateral and verified steps would provide even more security.

¹ A UNIDIR paper says that about 25 MMIII missiles remained MIRVed at the start of the Obama administration, each with three W78 warheads. De-MIRVing these would reduce the number of deployed warheads by about 50. The UNIDIR paper estimates that currently 920 U.S. warheads are on alert, so 970 would have been on alert before these missiles were de-MIRVed. . (<http://www.unidir.org/files/publications/pdfs/reducing-alert-rates-of-nuclear-weapons-400.pdf>)