

Steps Towards A Safer World

Written by John Hallam

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Lowering the operational readiness of nuclear weapons systems

Convened by John Hallam, Nuclear Flashpoints

Verified reductions; fissile materials treaty

Convened by John Burroughs and Marcy Fowler, Lawyers Committee on Nuclear Policy

To create a world safer from the use of nuclear weapons, accidental or otherwise, and to lay the foundation for elimination of nuclear arsenals, three important steps must be taken: reducing the likelihood that nuclear weapons are used; reducing the number of weapons available for use; and capping and reducing the fissile materials available for weapons.

1) The first step, reducing the likelihood that nuclear weapons are used, can be realized in part by removing them from quick-launch status.

In October and December 2008, the General Assembly adopted a resolution on the Operational Readiness of nuclear weapon systems, GA63/41 (L5), sponsored by Chile, Malaysia, New Zealand, Nigeria, Sweden and Switzerland, by 141 votes to 3. A similar resolution had been adopted in 2007. Other resolutions also contained good language on Operational Readiness/Operating Status of nuclear weapon systems.

A call to lower operational readiness was a critical element in the '13 points' of the final declaration of the Year 2000 review Conference. It has been a consistent theme of NPT working papers and factual summaries since, notably the chair's factual report of the 2008 prepcom.

Abolition NGOs welcome statements that refer to operational readiness in the CD by the representatives of Algeria on behalf of the Group of 21, Malaysia, and Turkey.

We welcome the commitments made to lowering operational readiness by Barack Obama in electoral campaigning.

It is vital, with the momentum for disarmament since Prague, that these commitments do not slip.

What is it that makes the topic of operational readiness of strategic nuclear weapon - systems one of literally apocalyptic significance?

Why did an article in the September 2008 edition of the Bulletin of the Atomic Scientists, entitled 'avoiding human extinction' give a list of measures needed to avoid that, with lowering the operating status of nuclear weapon systems (along with their elimination) topping the rather consequential 'to - do' list, even before climate - change measures and incoming large asteroids?

Why over the years has this issue been thought so important at such a high level?

The US and Russia undeniably keep a large number (estimated by Blair at 2,654 by Kristensen more recently 2,300) of nuclear warheads (both land - based ICBMs and SLBMs) in

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a status in which they can be launched at roughly 2 minutes or less notice. This fact is never seriously disputed.

The core of the issue is that standard operating procedures envisage extremely short decision making timeframes, and these are imposed by the simple fact of having some missiles on quick - launch status.

Careful and measured decision-making in such a situation is simply not possible. Yet the consequences of such decisions are truly apocalyptic.

Recent research by US scientists (Toon and Robock 2008/9) on the effects of the use of US and Russian arsenals indicates that even at levels down to 1000 warheads, the use by malice, madness, miscalculation or malfunction of the 'on alert' portions of US and Russian strategic nuclear forces would be essentially terminal for civilization.

Maintaining arsenals in an unstable configuration was insanely risky during the Cold War, when there were even larger numbers of warheads on alert and when there were just too many occasions on which it would be fair to say that the world came just too close to ending. There is even less reason, now that the cold - war confrontation has supposedly ended, to maintain nuclear forces in these dangerous configurations. Yet in spite of denials and obfuscations from those who wish to maintain existing postures they are indeed so maintained.

President Obama, in his election manifesto, promised to negotiate with Russia to lower the operational status of nuclear weapon systems. It is vital that this promise is not forgotten.

The talks between the US and Russia on the successor to the START Treaty are an ideal opportunity to take action to implement Obama's promises to negotiate with Russia to achieve lower operational status of nuclear weapon systems.

Abolition NGOs welcome the unimplemented plans by the US and Russia, to increase stability by means of information exchange (JDEC), but this cannot substitute for a lowering in nuclear weapons operational status.

Abolition NGOs welcome claims by the UK and France that they have changed the 'notice to fire' on their submarine - launched missiles from minutes to days. We urge those countries to be transparent about exactly what steps they have taken in this direction. We are mystified as to their negative votes on the operational readiness resolution.

We urge them to press the United States and Russia to take similar steps, to take further steps themselves, and support the relevant resolutions in the General Assembly.

We call on India, Pakistan, and China, to refrain from placing their nuclear forces in a quick - reaction mode, and to refrain from operational plans that require rapid responses.

Abolition NGOs call on all states parties and in particular those who sponsor resolutions in the General Assembly calling for a lowering in operational readiness of nuclear forces, to take

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diplomatic action to bring those resolutions to the attention of the nuclear weapon and nuclear - capable states, and in particular to that of the US and Russia in the context of the START successor negotiation.

2) The second step towards a safer world is reducing the number of nuclear weapons.

Because the US and Russia maintain the overwhelming majority of nuclear arms in the world, the initial step is reduction of their arsenals. The current bilateral framework for reductions is in drastic need of revival. The 2002 Strategic Offensive Reductions Treaty (SORT) commitment for each side to deploy no more than 2200 strategic nuclear warheads expires upon its coming into effect at the end of 2012, and does not require verified dismantlement of delivery systems or withdrawn warheads. The Strategic Arms Reduction Treaty (START) expires at the end of 2009. It limits deployed strategic warheads to no more than 6,000 on 1,600 delivery vehicles for each side through verified dismantlement and inspection of delivery systems, and provides monitoring mechanisms that are also used for SORT reductions.

The two countries now intend to immediately negotiate a treaty to replace START. Additional bilateral agreements probably will be needed to carry forward the needed reductions in both strategic and non-strategic stockpiles.

To build a more stable bilateral relationship, and to move toward global nuclear disarmament, the START replacement treaty and any additional agreements should achieve the following:

- maintain transparency and predictability;
- mandate steady reductions in all nuclear warheads, both strategic and non-strategic;
- mandate reductions in strategic delivery systems, whether for nuclear or non-nuclear weapons, and prohibit multiple warhead missiles;
 - require verified dismantlement of all excess warheads and delivery mechanisms;
 - provide for international monitoring in addition to bilateral verification, to establish accountability to the entire community of states; and,
 - reach levels of total warheads low enough to allow the next phase to encompass other states possessing nuclear arsenals. All warheads – deployed, spare, reserve, awaiting dismantlement, etc. – must be counted in the total. The total likely will need to be in the hundreds on each side to attract meaningful participation from other nuclear-armed states, which should be consulted on this key point.

We emphasize, however, that Russia and the United States each can and should reduce their arsenals on their own, optimally in a transparent and verified manner. There is a danger that bilateral negotiations will serve as a time-consuming detour, with unnecessary linkages to other issues, and with legislative approval becoming an occasion for forces opposing disarmament to extract a very high price in terms of maintaining design, production, and replacement capabilities for both warheads and delivery systems.

The bilateral reduction process should not be allowed to operate as a rationale for each country to maintain their current, extremely large, nuclear forces. Nor should it afford an excuse for refusing participation in deliberations or negotiations on global elimination of nuclear

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arsenals. And, waiting for progress between the United States and Russia is not an acceptable reason for other states to forgo reducing and eliminating their nuclear arsenals.

3) A third step toward a safer world is the negotiation of a treaty banning production of fissile materials for weapons and bringing under safeguards weapons-usable materials in states possessing nuclear arsenals. Such a treaty would ensure the irreversibility of present and future arms reductions, limit the potential expansion of nuclear arsenals to existing material dedicated to weapons use, and at least encourage the reduction of stocks of such material.

While Russia and the Western nuclear weapon states now support a verified fissile materials treaty, the support of other states possessing nuclear arsenals is uncertain at best. Production of materials continues in Pakistan, India and perhaps Israel. Both India and Pakistan are constructing weapons-related fissile material production facilities. Pakistan has expressed concern about a disparity in stocks between India and Pakistan and maintains that a fissile materials treaty should not freeze disparities. While there is logic to this position, it does not justify opposition to a cut-off in production, as continued production by both Pakistan and India likely would not improve Pakistan's relative position and might worsen it.

China appears concerned that prohibiting fissile material production could lead to strategic imbalances. If China considers its nuclear forces vulnerable due to improved US conventional counterforce capabilities combined with anti-missile and anti-satellite systems, a cap on its potential arsenal may be rejected.

Achieving a fissile materials treaty is claimed to be a priority in the NPT context, and it should be a priority. It follows that the United States and other key players must address the strategic concerns of states most affected by a fissile materials treaty, those that are producing or that might produce materials for weapons.

For a fissile materials treaty to make a meaningful contribution to disarmament, it needs to go beyond banning future production of materials for weapons. It must at least verifiably bar production of weapons from existing civilian stocks, from material declared excess to weapons, and from material for naval reactors. In other words, all fissile material stocks except those in or reserved for weapons would come under safeguards. This would be a major step toward treating nuclear and non-nuclear weapon states alike.

This approach would not require reduction of weapons-usable stocks, but it would at least bar their use for weapons. It would also link to disarmament in a practical way by providing a mechanism for bringing within a control regime material that becomes excess due to reductions in warheads and stocks dedicated for weapons use.

Of course, with a requirement of reduction and elimination of materials in warheads and dedicated stocks, the fissile materials treaty would directly entail disarmament, and indeed would be at the very center of an abolition regime. As other presentations convey, it is not too early to consider this approach.

An element of verification should be application of IAEA Additional Protocol type provisions to

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states possessing nuclear arsenals, to deter and detect clandestine fissile material production. In this connection, a fissile materials treaty should require non-nuclear weapons states that have not done so to enter into the Additional Protocol. In general, work by the International Panel on Fissile Materials shows that verification of a fissile materials treaty, while challenging in certain respects, is feasible. And the will to put an adequate verification system in place should be summoned, because it is essential to going to very low levels of nuclear weapons and abolishing them.

A verified fissile materials treaty that safeguarded existing stocks as well as banning future production would be very much worth having. Along with the CTBT, it would help accustom nuclear possessor states to universal regimes with intrusive verification. In addition to restraining arms racing in Asia, such a treaty would help build a stable framework for reduction and elimination of warheads and fissile material stocks; help prevent acquisition of fissile materials by terrorists; meet a key NPT commitment; and institutionalize one of the basic pillars of a nuclear weapons-free world.