

A “RING STRATEGY” FOR RUSSIAN “LOOSE NUKES”

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Presented to a CGSR Workshop on
The Future of Nonproliferation and Changing Security Environment
11 July 2016

Issue

Do recent changes in the international security environment suggest adding to DoD’s counter nuclear threats (CNT) focus on “prevention” (securing warheads, fissile materials) a vigorous effort toward dealing with “loss of control”?

Introduction

In the last decade the broad concept of a layered defense has become largely focused on prevention (securing and eliminating materials), secondarily on building a global nuclear detection architecture to operate at transportation nodes to detect nuclear materials in day-to-day commerce, and finally on a combination of intelligence and police operations, supported by special military forces, to detect plots and secure materials once found. Much less attention has been paid to locating and interdicting, on an urgent basis, a nuclear weapon or equivalent materials that has been discovered to be “loose”.

In this regard, the impetus for considering a revised CNT approach derives from a traditional concern—the lack of transparency into the security status of warheads and associated weapon grade materials, in both storage and transit, in certain countries. As a result of the recent end of threat reduction cooperation with Russia—our knowledge about the security status of the world’s largest source of warheads and materials-of-concern has entered a black hole. We no longer have access inside Russia, or the useful information exchange that occurred in the past among U.S. and Russian partners jointly implementing security enhancements. It is prudent, therefore, to respond to these changed circumstances by adjusting our current strategy that is focused mainly on “prevention”. This entails increased focus on actions to be taken if terrorists or criminals acquire a Russian nuke. Our idea is to compensate for the loss of this component of our layered defenses, by bolstering efforts on Russia’s periphery (“ring”). This could involve providing assistance to an ally or partner bordering Russia in planning on how to deal with a loose nuke known to be entering or transiting its territory.

Addressing Risks Once Terrorists or Criminals Acquire Nukes

For decades, DoD and NNSA have worked to prevent loss through active efforts to secure nuclear weapons and weapons-usable materials globally. If a nuclear weapon does get loose and is reasonably well localized, DoD special forces teams are well-versed to interdict, recover, secure and render it safe from detonation. If efforts fail to prevent a detonation, the U.S. has good operational capabilities (more so domestically than internationally) for emergency response to save lives. Finally, DOD, working with DOE, has invested in tools for bomb debris collection

and analysis to identify the source of an attack and thereby provide opportunities to prevent follow-on attacks.

Where DoD falls short is in doctrine, planning and operations, strengthening of capabilities, and engagement of partners to address a “loose nuke” and before it can be localized sufficiently to call in special forces. This mission space can be referred to as “right of loss” and “left of interdiction.” This problem becomes increasingly difficult as the time after loss increases. It is a problem in which appropriately re-conceptualized and adapted threat reduction programs could play an important role.

Productive engagement with allied and partner countries bordering Russia before a “loss of control” event will facilitate productive joint operations when needed. DoD’s threat reduction activities could support EUCOM by instituting or expanding programs to train, jointly exercise, build capabilities, and foster working relationships with military partners in a number of the following areas:

- Joint planning, training, exercising and equipping partner militaries to augment local authorities dealing with a “loose nuke,” as needed.
- Build partner capabilities for:
 - Perimeter and border search and control operations,
 - Integrated approach to broad area search and recovery, and
 - Consequence management.
- Pre-position equipment for rapid deployment to areas of concern (assist perimeter/border control, surveillance, broad area search, recovery, etc.).

The overwhelming problem involving is that, depending on the situation; the search area could expand to hundreds or thousands of square kilometers if the “loose nuke” is not found within a few hours. No technological “silver bullet” exists today that will allow the nuclear “needle” to be easily separated from such a large “haystack.” Detection of radiation from a nuclear weapon may help to pin down precise location, but only after the nuke has been localized to within say a city block. That is why so much of the attention to the “loose nuke” problem has focused on prevention of loss (versus an approach to broad area search).

Even if securing at the source is the best solution, it makes sense to plan for circumstances that do involve broad area search and develop techniques to facilitate it. Very importantly, the conceptual frame for search must evolve from “find the nuke” (using remote detection technologies) to “find the bad guys who stole it.” Law enforcement has to address an analogous problem every day in bringing criminals to justice, but this is not generally a DoD core competence. Establishing a “test bed” to absorb, and expand on, lessons learned from law enforcement JIEDDO, etc. and to carry out experiments to advance the state-of-the art in searching broad and varied areas, would be of great value.

A recent study carried out by the Institute of Defense Analysis (IDA) (led by Bovey with Harvey participation) scoped and costed a modest program for joint planning, exercises, capability building, and experimentation with partner militaries on the “loose nuke” problem. Because of its longstanding role in supporting domestic emergency response and consequence management,

and its ongoing partnership program with a number of countries in regions of “loose nuke” concern, IDA identified the National Guard State Partnership Program as a potentially useful tool for the responsible CoCOMs to employ. Strategic partnership of such an effort with WMD experts within DTRA is worth consideration. A rough program cost estimate—a ramp up from a few million dollars per year to about \$40M/year in 5-7 years—has been developed, with the costs being equally shared among (1) State Partnership Program activities under EUCOM (for the NATO countries), (2) Pre-positioned equipment caches and associated maintenance and sustainment, and (3) the test bed.

Many components of an effort to strengthen the first layered defense “ring” outside Russia involve broad international engagement. As a result, an important piece of the strategy, initially, involves expanded dialog (initially, perhaps, of the Track 1.5/2.0 variety) expressly designed to socialize some of these ideas more broadly among NATO countries.

Benefits of the “Ring Strategy”

The “Ring Strategy has a number of advantages. It is:

- Responsive to the President’s number #1 national security concern—a nuclear weapon in the hands of terrorists;
- Emphasizes skills and capabilities that are unique to DoD, or are clearly in DoD’s bailiwick;
- Fully aligned with the Department’s June 2014 CWMD Strategy;
- Advances DoD CWMD capabilities in areas where there are current shortfalls;
- Is fully consistent with activities that could be carried out under the contingencies in the Theater Campaign Plans of several CoCOMS;
- Provides a new vehicle for mil-mil engagement of NATO allies bordering Russia which helps to strengthen assurance; and
- Is not cost-prohibitive, even in the current DOD budget environment.