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21st Century Deterrence Challenges –
Exploring Key Issues, Rethinking Traditional Approaches

Note: Below are informal notes taken by a JHU/APL staff member at the Seminar.

Dr. Dunn began by noting that he would be talking about upcoming deterrence challenges, some of which are nuclear and some not. He also remarked that since he had at one time worked for Herman Kahn he would also be considering the unthinkable in his discussions.

Identifying himself as a consultant, Dr. Dunn went on to define the term with a story. Mice living in the walls of an old farm house had problems with a cat that would occasionally catch one of them. In their interagency meeting the mice discussed what was to be done. Finally, one mouse in the corner suggested belling the cat and all the others readily agreed. Then they discussed how to do it. It was suggested that the mouse who made the suggestion should do it since he had thought up the idea. However, that mouse replied that he was only a consultant and did not handle operational matters.

Nuclear Deterrence in the Cold War

- By the late 1950s-early 1960s, deterrence was central to US Cold War strategy
- Objective of deterrence:
  - Deter a Soviet nuclear attack on US
  - Avoid nuclear blackmail or attack on European allies
  - Deter any conventional attack in Europe that could escalate to nuclear war
- By the 1960s-80s the US posture was refined to provide more options and flexibility which would lead to greater credibility
- Nuclear umbrella was extended over Europe and Asia
  - Allowed allies in Europe options so that they did not have to build their own nuclear weapons
  - Large numbers of US forces stationed in Europe provided the declaratory policy of US intent
  - Goodman called this the development of the “Habits of Cooperation”
    - Provided glue for the credibility
- Arms control dimension
  - Some efforts were successful and some were not
  - Limited Test Ban Treaty was signed 6 months after the Cuban Missile Crisis
    - Both sides determined that the crisis had been too dangerous
The Treaty helped them say to each other “Let’s not do that again!”
- 1972 Incidents at Sea Agreement signed to make sure that dangerous activities at sea carried out by relatively junior officers would not occur anymore and escalate to nuclear war

US – Soviet Relationship beyond Deterrence

Deterrence logic is the default logic in the relations between the US and Russia
- Everything starts with “us against them” mentality
  - Primary view of the Russians in general and the Russian military in particular
- Soviets believed that the US wanted strategic superiority over them
  - Russians still think that way
- US military today sees many other threats
  - But still sees Russia as the only other nation that really needs to be deterred
  - No other country is seen as capable of destroying the US
- This default view is reinforced with uncertainties about each other’s motives

Deterrence thinking makes it more difficult for the US and Russia to move forward with cooperative programs
- Need to overcome this
- US needs Russia involved in various other areas of concern
- Makes dealing with the Russians on all other fronts more difficult

To go beyond nuclear deterrence as the central point of the relationship now the US should:
- Use a “shift away” mode – make sure neither side plans or budgets for nuclear war against the other
- Use a “shift toward” mode – make joint choices relating to early warning and missile defenses
  - Use more cooperative arrangements for defenses
- Get the Russians to help more on non-proliferation efforts beyond what they have already been doing
- Do not just say “we are no longer enemies” while continuing to do the same things

Must get back to first principles
- The two sides must first decide what kind of relationship they have with each other
- Then must start working on agreements
  - Rework START (Strategic Arms Reduction Talks) and various other offensive/defensive arrangements
  - Recognize Russian uneasiness about missile defenses in Europe
- Must employ all the tools in the toolbox of strategic deterrence
  - Need windows into each other’s thinking
    - A system to do this can be institutionalized
  - US certainly has questions for them about specifics and vice versa
  - US could brief Russians – similar to what was done right after 9/11 about US concerns
• Whatever US thinking is, the Russians should hear it from the US government and not from CNN
• US does appear to be more willing to move ahead than do the Russians
  o Could do a joint studies effort looking out to 2025
  o How would nuclear weapons forces look then?
  o If the Russians won’t join in, US could do such a study unilaterally
• Russians seem to be trapped in the old deterrence mode
  o US should give Russian leadership a choice – engage with the US or be recognized as obstructionist
  o Last three US presidents have tried to make this happen so far with little success
  o Need to build those habits of cooperation

Providing Reassurance in Northeast Asia

US nuclear umbrella provided what Japan and South Korea needed to avoid building their own nuclear weapons
• Relationship continues to be important but is changing
• Even before N. Korea’s recent nuclear test Japan was asking to strengthen the link between it and the US on nuclear matters

Given that we will never talk North Korea out of its nuclear weapons, how should we proceed?
• Must reassure Japan more – mostly about N. Korea but China is in the background, too
• Cannot just recycle methods used in Europe for reassurance
• Requires more discussion between the US and Japan
• Japan unlikely to want US nuclear deployments on their homeland
  o Could have some US assets dedicated to Japan’s defense
  o Something similar was done with US forces dedicated to NATO missions
• Need more nuclear planning dialogs answering questions like: what happens when nuclear deterrence comes into play?
  o What would be the US nuclear processes?
• Planning does not have to involve specific scenarios
  o Would not want anything like NATO’s Nuclear Planning Group
  o Could have a light version in Japan
• Need to give Japan a window into US thinking on these issues
  o Japan will be carefully watching the upcoming US Nuclear Posture Review and any changes in the test ban treaty

Nuclear weapons are too dear to North Korea’s “Dear Leader” for him to give them up
• The sixth apparently “successful” attempt to stop N. Korea’s nuclear plans has now failed
• As an alternative arrangement, look at agreements like the MBFR (Mutual & Balanced Force Reduction) agreement in Europe
  o Started out to cover nuclear weapons
  o Moved on to cover conventional forces successfully
• Should shift attention to trying to stop North Korea from selling its nuclear capabilities or materials
  o Must get China into the effort more – mostly they have avoided it
• Must learn to live with N. Korea having nuclear weapons until regime collapses
  o Must be prepared for that collapse, but not cause it to happen
  o Must be prepared to take strong action immediately

China, Nuclear Deterrence and Relations with the US

Relations seem to be improving generally on this front
• Much more is going on in the background than nuclear deterrence relations with the Russians
• There is still a fear that a China-Taiwan-US crisis could escalate to a nuclear exchange
• Each side must learn where the other side is planning to go on nuclear weapons
  o Economic interdependence makes nuclear weapons use hard to imagine
  o China still seems to be relatively restrained in building its nuclear force
• US does not really need to be concerned about nuclear deterrence with China
  o That could possibly change in the future
  o More a matter of muting deterrence – not letting it become a big issue in relations between the US and China
• US should try to avoid any offensive/defensive response relationship
• Do need a more cooperative relation
• US needs to get China more involved in the management of deterrence elsewhere

There are benefits to cooperation on both sides
• US and China are likely to be the two most powerful countries in this century
• Big problem of how to get to a stable relationship
  o Could start with meetings between the presidents
  o Need to come to a peaceful conclusion over Taiwan
  o Must also continue to stress the need for good economic relations
• Look for ways to build even closer relations by seeking more opportunities to talk
  o Institutionalize existing dialog efforts
  o Could have working groups or even Joint Study & Analysis efforts
    ▪ Similar to what the US has with Russia
    ▪ Look out to 2025 – far enough out that it is not too scary, but near enough to be serious
• Need soft transparency – would permit seeing each other’s nuclear roles and missions
  o What are Chinese views on US Nuclear Posture Review
  o Windows into Chinese thinking would help US NPR
  o Windows into US thinking would be better coming from a government source than from the academic community

US may need to learn to accept some things but this does not mean a mutual vulnerability
• Can the US learn to live with the Chinese having a small capability with which to threaten the US?
• Maybe the US can at least escape an offensive/defensive competition
• Perhaps China will be more willing to talk when the US stockpile gets down to a very small size
• Would the US getting out of START (Strategic Arms Reduction Talks) without talking about defenses be enough to satisfy China?
  o Do we care if we satisfy China on this?
• Maybe could have local agreements
  o US – China – Russia?
  o US – China and US – Russia?
• Perhaps could reach agreements about limits on modernization of nuclear weapons
• Should at least continue and expand the dialogue among the P-5 – the main nuclear powers – to include more strategic issues

**Extending Deterrence, Providing Reassurance in the Middle East**

Three challenges
1. Deter Iran’s acquisition of nuclear weapons
   a. Some in Iran’s leadership do fear that having nuclear weapons would make matters worse
   b. It’s great to be the only one on the block with nuclear weapons, but others might want their own which would escalate regional tensions
2. What should the US do to hedge against the likelihood that Iran would get a nuclear weapon?
   a. US must reassure Iran’s neighbors so that they do not feel the need for their own nuclear weapons
   b. It helps that the solution to both challenges 1 & 2 require the same sort of response
3. What should the US do if Iran tap dances about not having the bomb until it does so, the way that Pakistan did?
   a. Preemptive attack is one possibility
   b. The Obama Administration is giving Iran the right choice: You can be part of the responsible international scene or you can suffer the consequences of proliferation
   c. The US needs to talk about hard power possibilities – convince Iran that they will not gain anything by having their own nuclear weapons

While the US could act alone against Iran, it really needs other countries to get involved
• US could handle the issue with just UK and France
  o Together tell Iran that if it acquires nuclear weapons, they would provide Iran’s neighbors with a nuclear umbrella in response to any Iranian attack
• Really need to get Russia involved in this effort
  o Tell the Russians that we will go along with their concerns about missile defenses in Europe, but they must help out with the Iranian nuclear problem
  o A joint US/Russian missile defense system against today’s Iranian threat would be a possibility
    ▪ Leave open the question of where to put the defenses
  o Shows Russia we are ready to deal with them
  o Shows Iran that they cannot gain by acquiring nuclear weapons
Despite all efforts, the Iranians could still acquire nuclear weapons
- If it is impossible to stop them, then must consider how to deter them using nuclear weapons
- Recommendation: Push the idea that Iran cannot gain from the use of nuclear weapons by taking visible steps
  - Hold exercises to show long it takes to get forces into the region
  - Dedicate a specific ICBM unit in Montana to target Iranian assets
  - Dedicate specific submarines to proliferators’ targets
- Should also encourage nuclear deterrence burden sharing with UK and France
  - Talks should be started now
- Must decide whether to make public (or leak) these discussions on command and control arrangements, etc.
- For Iran’s neighbor must identify contingency plans and methods to provide reassurance
  - Might need to re-establish good relations with Turkey given recent problems
  - Give the rest of the Arab region assurances about the umbrella but note it will not be like the NATO model
    - Arabs would not accept thousands of missiles or troops
  - Encourage nuclear deterrence burden sharing here, too, to enhance credibility
- If it turns out to be impossible to keep the Iranians out of the nuclear club, must at least discourage others from joining
- Must start building habits of cooperation now backed up with visible signs that the allies could and would respond if necessary

**Deterring Terrorist WMD Use (and Aiders and Abettors)**

Prevention is the main line of defense against nuclear weapon use by terrorists
- Terrorist use of WMD could involve nuclear weapons but more likely biological or chemical
- Must influence calculations about risks both to the terrorists themselves and to their aiders or abettors

Greatest threat is likely from al-Qaeda-Jihadist movement but there are others as well
- There is always a sweet spot for influence within their support systems and enablers
  - Supporters can be influenced even if main terrorists cannot
- Terrorist groups largely fail at WMD efforts because they lacked technical arts needed
  - Aum Shinrikyo thought they would kill 800-900,000 with their attack
    - Did not properly weaponize what they had
  - Another attack put ricin in handcream that was smeared on doorknobs
    - Did not work
  - An attack that was to be set off in a subway by another group was called off when operational leaders determined that it would not work
  - Technical efforts may be too great even for most devoted terrorists
Recommended responses

- Disaggregate – involves paying attention to a lot of people both inside and outside the basic terror group
- Look for leverage points
  - Terrorists believe that their use of WMD is justified by their values
    - But is it *smart* to use WMD?
  - Terrorist know bombs and bullets well and have shown they know how to use them
    - Prove to them that it may be smarter to stick to what they know
    - If they try to smuggle WMD into a port, a detection device might actually detect it and destroy the operation
    - US is good at locking down nuclear materials so terrorist would do well plan to stay with bullets and bombs
- Terrorists would want to avoid undermining their goals just to follow their beliefs

To combat terrorist use of WMD we must undermine their perceptions about WMD effectiveness and feasibility

- Will WMD use further their goals of a universal caliphate?
- Need to get Muslim leaders to speak out against using WMD
- Jihadists are already vulnerable on the subject since bin Laden and others have already spent a lot of effort defending themselves about WMD use

Other groups such as Hamas and Hezbollah could also consider using WMD

- Must convince them that it is not smart to use WMD
- Look for leverage points
- Basic question for them to ask themselves: Can I get what I want using WMD?
  - Might expect Hezbollah to escalate if nothing else works soon
- Their aiders and abettors are even more susceptible to the perception of risk
  - Terrorists could get aid from criminal organizations, nation-states, or individuals
  - All have different risk perceptions than the main terrorist groups
- Recommendations:
  - Reaffirm the Bush policy to hold accountable any enablers of terrorist actions
  - Prepare contingency plans for having to come up with options for holding enablers accountable
  - Let these plans be well publicized
  - Develop international support for these efforts
    - Let it be known that these countries will work together to hold enabler states accountable
    - There have already been good and bad examples of this already (Serbia / A.Q. Kahn)

**Nuclear Abolition**

Recently there has been a wave of support for efforts to get rid of nuclear weapons even if the goal is not reachable

- If we move more toward disarmament, the US would have a better chance to bring Europe along
• US must surf this nuclear abolition wave to strengthen non-proliferation without hitting a deterrence wipe-out
  o Need to figure out a way to do this by shaping the debate
• Cannot disarm completely without stopping proliferation first
• It is unlikely we will ever get rid of all nuclear weapons
• Can use the upcoming nuclear reviews to make trades
  o Don’t give up / give into anything before then
  o Agree to make changes at that time to get what we want
  o Get others to agree to support effort to control proliferation
• Use upcoming NPR to publicize US views
  o Where do we want to go with nuclear abolition?
  o An around world review of opinions in 2005 and 2006 showed Dr. Dunn that the world had a different idea about where the US was going with its nuclear weapons
    ▪ Others thought that we were increasing our stockpile while we were congratulating ourselves for reducing the size of our stockpile

QUESTIONS & ANSWERS

The US cannot stop Israel from using military force against nuclear facilities in the region, if they believe that they need to attack growing capabilities
• An Israeli attack could probably only slow down Iran’s development
• There is probably a 50-50 chance that Israel will attack Iranian nuclear facilities
• Israel signaled for a year what it would do before it struck Syrian facilities

Nuclear arms control and the Russians
• Some elements of the Russian leadership really do believe that the US is seeking a strategic superiority over them
• Updating START is not enough
• US could use this concern to get Russia on board about Iran

A nuclear taboo has developed over the last 60 years so no one has used any nuclear weapons
• There have not even been any exercises where a US “president” was willing to use nuclear weapons
• Deterrence posture also depends on the efforts of other countries, too
• It was eventually learned that there were 87 Russian nuclear weapons in Cuba
  o The authority to launch was delegated to a Russian Major there
  o At the same time in the US, General Curtis LeMay was talking directly to President Kennedy for permission to launch
  o Those who had been in the Russian missile forces in Cuba at the time worked the rest of their careers to get improvements made in Soviet C2 arrangements to prevent accidental launches
  o Basically, we were lucky that nothing went wrong during the Cuban Missile Crisis
Need to talk to foreign officials to give them a better understanding US nuclear capabilities

- The fact that the US has a stockpile of nuclear weapons is important to others – not so much the characteristics of these weapons
- Occasionally, foreign nations will show concern about the reliability of the stockpile
  - In the 1990s Japan asked about reliability
- Have to hope that the nuclear weapons that North Korea and Iran have are not reliable

Basically optimistic about nuclear issues in the long term

- Situation with North Korea is rather like Lucy, Charlie Brown, and the football
  - Lucy (N. Korea) appears to hold the ball (their nuclear capabilities)
  - Charlie Brown (the US and rest of world) once again tries to kick the ball (to eliminate those capabilities)
  - Then, as usual, Lucy (N. Korea) pulls the ball out of the way at the last second – and nothing changes again
- There is really very little to dissuade N. Korea from holding on to their nuclear weapons
- Must get China involved to at least help stop any sales from N. Korea
- Are we prepared to say that any weapon tracked back to N. Korea would cause us to attack them?
  - Needs to be thought through
  - Do we want an explicit declaratory policy?
  - Do we have the capabilities to do the tracking required?

What might a nuclear exchange between two other countries look like?

- How should one be handled?
- Potential scenario (according to Pakistan): For some reason India attacks Pakistan with conventional forces
  - Pakistan uses a “very small battlefield nuclear device”
  - India gives up
  - The world generally views nuclear weapons in a favorable light
- Brings up many questions
  - What if it appears that Pakistan is getting ready to use this weapon?
    - India could only stop them by doing a massive attack on the C2 killing several million Pakistanis
    - Then Pakistan in turn kills several million Indians with the forces that survive
  - Use of nuclear weapons in this case is not seen in a favorable light
  - This type of usage would be a big benefit for other nations who support nuclear abolition
- To handle this situation, US must engage China and Russia
  - Need to discuss with them methods to create a stand-down process
  - Some say that if India and Pakistan get into a nuclear conflict, China will feel obligated to get involved

The psychology of possession / prestige of nuclear weapons

- Some countries may want the prestige and power that comes with possessing nuclear weapons more so than having them to use
• If bin Laden gets a nuclear weapon or two, he might consider them too valuable to use
  o Would have the situation of a non-state deterrence against a state
  o There is not enough understanding about how al-Qaeda thinks about this

Do WMD inspections work?
• In Iraq before Desert Storm, inspections failed
• Culture within IAEA changed once it was learned that Saddam had indeed built a mini-Manhattan project
• Best possibility with Iran is that we will not be able to stop them from enriching uranium
  o However, could get more and better inspection capabilities to ensure that not building bombs
  o Much depends on how good the inspections are
  o Certainly could go beyond what there is now available

Ratifying CTBT (Comprehensive Test-Ban Treaty) would be difficult given the current make-up of Congress
• Could be used as a trading element in the 2010 review process
• Maybe include UN resolutions to enhance nuclear controls
• Explain to Congress that this is what we will get if we ratify CTBT
  o Some low level of testing will go on
  o Would be best to have some level of control through “effective verification”
    • Can you detect military signs of cheating in time to do anything about it?
• Needs to be debated
  o What are the opportunity costs?
  o What do we lose concerning the reliability of US nuclear weapons?
  o Compare what we would lose to what we would gain related to non-proliferation
• It would be possible but not easy
  o Verification – if it is effective
  o Stockpile stewardship – we know much more about how to handle this now
  o Show what is in it for the US beyond non-proliferation