Dr. Goure opened his talk by saying that he appreciated the opportunity to go back to his Cold War study roots and look anew at various relationships involving China, Russia and the US. He did so by looking at past Chinese and current Russian and American writings on nuclear weapons. This review gave him new insights after having been away from the topic for 10 or 15 years. He determined 2 things:

- The writing has not improved in quality over time
- There is less of it

He expects that the quantity will increase in the near future what with upcoming discussions on various arms control agreements and he hopes that the quality will finally improve.

A basic concept: China, Russia, and the US have developed their nuclear policies largely independently of each other but that will no longer happen; can’t develop policies in a void

**Topics to Be Covered**

1. **Political/Military Role of Nuclear Weapons**
   - There is a good deal of recent literature to look at including the QDR, the NPR, etc.
   - Russia has recently published its national defense strategy
   - China produced a rare white paper on the subject in 2008

2. **Overviews of the conditions of the various nuclear and conventional forces**
   - Russia’s forces are largely sinking into decrepitude
   - China’s forces are growing in depth and breadth
   - US is going through a “rebalancing” phase
   - All have some issues involving budget limitations
   - There are new threats in the world but these threats may be perceived differently
   - One such new threat is cyberwarfare – how does it fit in?

3. **The future of nuclear arms control efforts**
   - Should there be bi-lateral, tri-lateral, or multi-lateral discussions?
   - If goal of 1,000 warheads is approached there are several other countries that need to be included in the talks

**US Nuclear Forces and Policies**

- Now know that there are about 5,000 US weapons
  - About 2,200 mounted on delivery vehicles
  - 800 other strategic warheads
  - Most of the rest are tactical with some considered retired
• Number are already declining – retirements have been announced
• Reductions in force by agreement will allow the US to avoid making difficult choices
  o Should there be a Di-ad rather than a Tri-ad?
  o If so, what should it look like?
• Historically, the US has been inclined to keep some sort of force level
  o But that thinking may be changing
• Having very low numbers of nuclear weapons may force rethinking of First Strike policies
  o May no longer be logical
  o But much will have to do with political rather than military concepts

Some were very worried about how far the new Obama Administration would go in cutting nuclear weapons
• Administration so far has been cautious – laudably so
• Changes have been occurring but not radical changes
• Still want to keep the basic premises of maintaining military superiority / support allies
• Basics of US strategy have not changed
  o New NPR did make some changes
  o Narrowed when nuclear weapons can be used
• General deterrence theories are as accepted as before so policies have changed little
  o Concepts of limited nuclear options remain much as in previous administrations
  o Limited nuclear options also remain about the same
  o Narrow use of nuclear weapons even in the face of WMD attacks – little change
• Views generally remain the same even if structures are beginning to change
• Lack of change reflects the basic American belief that the US is capable of doing unacceptable amounts of damage to enemies just by using conventional means
  o This is the US advantage
  o What if the US loses this advantage?
  o What if the credibility of its capabilities to do so come into question?

As shown in the QDR/NPR/etc. – nuclear weapons have political value
• Nuclear weapons provide stability and reducing their number would provide stability
• But some theories say the opposite

Ballistic missile defense (BMD) adds another layer of complexity
• Missile defense does have a central role in US security strategy
  o Especially for theater level threats

Reducing the number of nuclear warheads down to a much lower number is not a leap into the abyss but there are big unanswered questions
• What does minimum deterrence mean?
• What does it mean when there are three parties involved?
• Can we really get to zero nuclear weapons?
All of this now needs to be discussed in great detail
Russian Nuclear Forces and Policies

Force numbers and capabilities
- Strategic weapons are about the same in number as those of the US
- Non-strategic nuclear weapons ratio is about 5:1 when compared to US forces
  - Biggest difference between US and Russian forces
- Differences reflect the problems that the Russians have had with modernizing their nuclear forces
  - Bombers are ancient
  - Sub force is only about 30 and lacks the large boats of the past
- Russia has few options to do much more with their forces

There is a somewhat altered perception of the greatest threat in US thinking but not in Russian thinking
- Russia is making changes out of fears of its own weakness
- They can read the tea leaves showing them that they will be growing weaker in the future
- So they have only a limited time to take advantage of what they have to get the best possible stable co-equal position for themselves
- Russian writings see both internal and external threats

External threats remain the US and NATO
- So NATO’s enlargement is seen as unacceptable even though it is happening
- Beginning to feel alone
- Concerned that NATO taking on more worldwide responsibilities even though it has no legal basis to do so
  - NATO making changes to revitalize the alliance – not in response to Russia
  - Russia does not see it that way
  - Probably did not even consider Russia when developing its future plans
- In response we see a more aggressive posture for Russian forces
  - Bombers flying long-range missions again
  - Subs going to the Caribbean for the first time in 15 years, but to Venezuela, not Cuba, this time

Nuclear policies
- Domestic weaknesses increase the problem
- How could they reduce the number of nuclear weapons given their growing conventional weaknesses?
- Only nuclear weapons get them into the world leaders club
- Bottomline: Russia needs nuclear weapons
  - It is their only way to play on the big stage
- Russia may become more dependent on nuclear weapons while the US declared strategy is to move toward zero nuclear weapons
- Retention of nuclear weapons is the mainstay of Russia’s status and power
  - Even though the chance of war with the US is very slight
  - Nuclear weapons provide them a certain level of comfort
Russia’s willingness to sign a new START was not a big change in thinking
- The Kremlin needed a big psychological and political lift
- Want any reduction in numbers to be on equivalent (or better) terms

Nuclear weapons have had an expanding role in Russian security planning as far back as their published doctrine from 2000
- Expands when nuclear weapons can be used
  - Adding to need for a more robust force
- Will make the next round of reduction talks that much more difficult
  - Especially since the next round will involve non-strategic weapons (Russia’s strong suit
- There needs to be a bright red line demarcating escalation levels
  - Non-strategic nuclear weapons could help in that role

Not that there is no hope for reductions
- But the idea of going to zero goes against the grain of Russian thinking

Negotiations complicated by Russia’s sense of injury, making negotiations dangerous and potentially futile

**Chinese Nuclear Forces and Policies**

China has the smallest of the 3 nuclear arsenals by far
- But it acts very confidently if only on the sidelines
- Basic concept: We don’t have to inflict much damage to have an enormous effect on our enemies, so we do not need as many nuclear weapons

China’s nuclear force is modernizing but may not be expanding significantly
- Moving toward liquid fuel missiles, other advances
- Sub-based missile forces growing but only a very small number – may 40-50 warheads
- Size of the stockpile is unknown
  - Points up the need for greater transparency

Nuclear policies match the force structure
- Includes no-first-use statements
- Recognizes that it can absorb a lot of hits given its size
- Basic strategy summary: “to be a deterrent but to present no threat”
- Must be a credible deterrent
- No clear answer to the number of nuclear weapons needed
- They are moving to make their force more survivable
  - Want to have enough to be able to create unacceptable damage on the other side
  - They recognize that the number of nuclear weapons they need to do this is much smaller than what the US or Russia needs
  - China wants a minimally retaliatory strike capability
    - Not clear what that number would be
• PLA structure, tactics, methods seem to go along with this strategy
  o They are not worried about reaching high numbers

The Chinese have other missions for their nuclear forces
• Having nuclear weapons gives them more latitude for actions

Chinese writings on nuclear issues have matured recently
• They understand how countervalue would have an effect on the leadership
• They want to prevent a low level nuclear exchange from escalating to something larger
• They recognize that they need options to permit controlled responses to do so
  o Much like the Russian view
  o It is no longer just the concept of trading Shanghai for L.A. or Taipei
    ▪ Need more rungs on the escalation ladder

Active countermeasures (to include ASATs) are planned against US forces
• They want to make it difficult to attack the mainland

China is using low cost, slow modernization approach
• But its role in the world has changed
• A lot depends on how it feels about itself
• It is reacting to changes in US forces
• China’s numbers may rise while those of US and Russia drop
  o Could all meet in the middle
• There are various views about what is a threat and how they perceive the other in the 3-part relationship

The Future of Nuclear Arms Control

The US NPR calls for moving away from nuclear weapons
• Wants to persuade to reduce reliance on nuclear weapons
• Must think about
  o Russia’s concern for its weaknesses
  o China’s growing strength

Russian Weakness
• It was a big step when the Russians recently agreed to buy a French ship
  o Acknowledge its limitations
• Its intervention in Georgia was not really an important step
• Any growth in the US or the NATO alliance is seen as a problem for its weakness

China
• Information issues and area-denial issues are finally being discussed
• Proposed changes in the QDR and suggestions in US think tank writings look to China as if China was being targeted
• See China (not by name) show up in wartime scenarios
Attacks on the homeland were a big hurdle to cross in the Cold War

Looking at the balance of all three:
- Keeping China’s nuclear force numbers low could add to pressures that Russia feels

Missile defense is seen as targeted at Russia by Russians
- Russia feels that it cannot hold NATO/the US at risk with missile defenses in place
- When the US calls for a layered missile defense, Russia thinks it is aimed at them
- China sees missile defense as destabilizing
  - Might not be willing to participate in related negotiations
  - Must decide how many nuclear weapons must get through before moving up the escalation ladder
- Is there a trade-off that could involve deploying some missile defenses?
  - Might it involve some increase in Chinese force numbers needed to respond?
- Discussions and thinking about missile defense and advanced conventional strikes need to be developed further

Issues have been raised about how low to go when reducing nuclear weapons
- The initial nature and size of each force is important
- At low numbers, scenarios would be different
  - Might need comprehensive missile defenses
- There is also a need to make negotiations multi-lateral

What about Cyber Warfare?
- Likely to be the future of strategic warfare
  - How do we talk about it?
  - Are we substituting one form of warfare for another
- Not near to being able to discuss it
  - Do not have the stable basis that we had with nuclear or even conventional weapons
- Then there is the issue of cyber attacks on nuclear command and control

Things that get in the way of advancing nuclear disarmament
- Must the US and Russia go even lower before multi-lateral discussions can begin?
  - If so, how low? 200? 500? 1000?
- China says they won’t discuss the issue until Russian and US numbers drop significantly
  - “Come to the our shallow end of the pool first”
  - There are steps that must be taken first
    - Make no-first-use declarations
    - Drop any mention of targets
    - Do away with nuclear umbrellas for allies
    - Eliminate foreign deployments of nuclear weapons
  - It is not clear whether these are pre-conditions to negotiations or not
  - In any case, this will add to the problems of reducing the number of nuclear weapons
Non-strategic nuclear weapons question
- Russia is not likely to relinquish the only area where it has a clear advantage
- US must be willing to eliminate non-strategic nuclear weapons
  - Allies might go along
- One reason to have nuclear weapons deployed overseas is to make sure that the allies have a stake in the escalation game
  - Would the US be willing to be the only country that is threatened by nuclear war?
- Things might be OK once everyone got to the zero level but before then it could be tricky
- Before we only had to worry about having one other side involved – Russia
  - Once we get China involved we will need to bring in many others

Missile defense may cause problems in some small regions
- But they were deployed to reduce the threat
- Neither Russia nor China has as much invested in missile defense as does the US
- Might be stabilizing if the US reduces to something less than a Triad system
  - Or if defenses are introduced and then withdrawn
  - Still too hard to think about it

Theater defense
- Connected to space based efforts
- How does this change with changes in the number of offensive nuclear weapons?
- If forces change (in either number or type), there will be a blurring of the lines between nuclear and conventional weapons
  - Will need more reassuring of allies and deterring of potential enemies

Problems to get through before reducing the number of nuclear weapons
- Sometimes it is said these issues are resolved but…
- Problems of appropriate signaling get harder when one more side is added to the situation
- History has shown that three-sided partnerships are unstable
  - Two can always gang up on one
- Weapons are not the problems – policies are the problems
- Multi-sided treaties can cause even more problems
  - Look back at the Naval Treaties early the last century
- Sides must be willing to accept minimal deterrence to reach zero or very low numbers
  - Would definitely need to drop the nuclear umbrella as China wants
- If the US was the only problem, it might be possible to reach the zero target
  - But all 3 players are entangled with domestic issues, too
  - France and the UK are likely to get dragged along with whatever the US does
    - But reluctant to give up their small arsenals
    - But at least they might be willing to talk about it

Other problems
- Conveyor belt phenomenon – each country will gain a new view of other countries’ situations
  - China to India / India to Pakistan
  - Won’t be possible to juggle just 3 balls
- We don’t know what a stable lower number would be
Limited deterrence indicates we do not need to be exact about this. China may understand its own numbers for stability but if add in other countries it gets complex.

- Hard to figure in all the elements involved when more countries added
- Then add in conventional forces
- All gets too complex

What about the 1,000 nuclear weapons target?

- There is no analysis behind this number
- Sides need to do due diligence about the issue
- Even with the new START verification is a big issue along with considerations of:
  - Hair-trigger launches
  - Scare launches
- What happens if there is an effort to reach zero for the world – major worldwide verification problems

Issues within the US

- Some believe if we are moving toward zero, why should we modernize?
- But we might not get there so you would have a force that is not at zero and not modernized
  - Rather like what is happening in Russia now
- May not be able to be specific about the target number
  - But trying to reach that number might still be better than not doing so
- Own reductions to a certain level might be better than a failed attempt of a worldwide effort to reach zero
  - Best solution may just move numbers from one type of force to another
- Not possible to negotiate down conventional force numbers – tried and failed in the past
- Also, there is a danger if nuclear weapons get into hands of terrorists
  - This risk might outweigh the risk of not going down the road to try to get to zero
  - But one nuclear weapon in the hands of a terrorist may not be as bad as having a brittle system

QUESTION & ANSWER SESSION

Credibility of the nuclear force

- Another problem with trying to reduce the number of nuclear weapons would be an erosion of the talent pool to build and handle them
  - If we go to a rapid drop toward zero nuclear weapons, we will not be able to renew the force at all
  - It will just age-out
- There is a big distinction between building a force and modernizing a force
  - It is possible to build and test but not to deploy new nuclear weapons
- There is a moral imperative to reach a more specific level
- If we do not modernize and cannot reach the zero goal, then the problem will be a greater risk in the credibility of the force
But neither side would really know the condition of the force

Nuclear weapons reductions are less about rocket science and more about related facilities and capabilities

Iran and North Korea are a nuclear threat to the US
- Neither Russia nor China are all that worried about them
  - Russia still worries about the US and NATO mostly
- US sees a need for defenses against Iran and North Korea
  - Also see defensive deployments as visible signs of US commitments to allies
  - Even more interconnected with intel / comms / etc.
- US needs adaptive theater defense but must also go beyond it
- US needs a better defense system before it has to depend on it, but the technical risk is high