Dr. Payne began his discussion of whether there are new deterrence fundamentals by quickly reviewing what the old ones from the Cold War were. He noted that the Cold War deterrence theory was developed by a group of people with various backgrounds, most prominently Nobel-Prize-winning economist Thomas C. Schelling and physicist Herman Kahn. Eventually, their theories were translated into a national security policy that did not change throughout the Cold War. The theory of a Balance of Terror is still a driving concept.

A new US Administration will once again be considering these concepts

- Do the old theories still relate to threats from North Korea or Iran?
  - How should options for handling these threats be prioritized?
- The US at one time knew how to prioritize options against the Soviets
- Now the US must either generate new options or continue to use old options
  - Are those options still good?

The Balance of Terror tenet is still good as discussed in a Washington Post article on the NIE about Iran

- Originally, there had been fears about the “Mad Mullahs” getting their hands on nuclear weapons
- The new NIE says that even the leaders of Iran use cost/benefit analysis to decide what to risk
- If they do use such thinking, then even if they do acquire nuclear weapons they will be deterrable
- The concept that Iran’s leaders are rational is a good place to start
- May even be applied to North Korea, at least as a place to start to figure out how to handle them
- Getting from rational to deterrable is the basis of Cold War deterrence theory

Basic Deterrence Tenets

1.) The deterrence of a rational foe is certain – existential deterrence
   - A rational foe can be / must be a deterrable foe
     - A comforting thought
   - Only a mad man could not be deterred

2.) Foes will be rational
   - By the time leaders get to the head of their governments, the irrational ones would have been weeded out as too unpredictable for their own cohorts
   - Also a comforting thought – all foes are likely to be rational and so they can be deterred

3.) It is possible to identify a formula to make deterrence work
   - Since the foe is rational, we only need to determine what elements of his power/society that we must threaten to deter him
   - In the Cold War US had to determine what level of nuclear force was needed to hold at risk what the Soviets cared enough about to be deterred
The defense establishment needed to identify the right target set and what percentage of it needed to be put at risk. By the time of SECDEF Harold Brown, there was no longer a need to hold whole cities at risk. The US leadership eventually convinced itself it knew exactly what the Soviets held most dear.

- Concepts changed over time – cities or military targets or the leadership
- Formula was: The number of targets equals “X” and we would need “Y” number of weapons to put at risk a given target
  - Multiplying X times Y will provide the number of weapons needed for a retaliation capability
- In a draft paper SECDEF McNamara proposed the requirement was 400 megaton-equivalents
  - Once that number was established, SECDEF could tell the Air Force that they did not need 10,000 ICBMs, etc.

The formula changed over time:
- Sometimes requirements expanded to cover the target set
- At one point it was urban targets which were soft and do not move around
- When the target set became military or leadership targets there was a need for a great number of nuclear weapons since those targets are hardened and more mobile
- While the number was not fixed, it was understandable

4.) Deterrence is expected to cover many types of threats
- US nuclear weapons were never designed for taking out other nuclear weapons
  - There never was a policy to that effect
- The more flexible options always permitted a chance to escalate the war even further if needed
- The “uncertainty deters” concept held that the Soviets would be fearful enough so that they would not attack even though they had larger conventional forces
  - Would always worry that the situation would escalate to a nuclear one
- Really it is ambiguity that is good for deterrence

5.) Damage limitations involved decisions about passive versus active defenses
- Much now available from declassified documents about how the policies developed
  - About the thinking related to defending the US population
- It was determined that damage limitation could never be complete and would be very expensive
- However, the Balance of Terror was complete and it was cheaper
- Therefore, deterrence was really enough so little was done about defenses

6.) Society defense would never be enough and building them would upset the Balance of Terror
- If the US had robust society defenses, the Soviets might have believed that we were actually in a position to strike first which might cause them to consider striking first
- Acquisition policy was actually based on this concept
- Society defense was determined to be unnecessary and destabilizing
  - Led to a set of priorities and force decisions
  - US chose not to deploy these type of defenses

7.) The US strategic goal was to maintain mutually assured destruction
- Evolved from threats only to cities at first then to military/leadership and counter force targets
- Formula for determining deterrence remained the same
- Goal – keep enough forces to deter Soviet leadership without having to build societal defenses

8.) Action / Reaction theory
- Expanded the arms race
- If the US deployed defenses that threatened Soviet defenses, then that caused the Soviets to react and build exactly what would be most dangerous to the US
- It was determined that to stop the arms race, the US must stop doing the actions that caused the reactions
  - Result: two sides would reach an equilibrium in the Balance of Terror
- It did not quite work
  - US mistakenly believed that the Soviets would stop when we stopped
Theories drove policy as can be seen in the now declassified historical record
- Drove decisions on what to deploy and what not to deploy
- Balance of Terror theory/policy did not change throughout the Cold War and not through the end of 20th century
- Basic concepts still drive policy
- Should we still think about it in the same way?

US avoided most forms of damage limitation – a conscious, well thought-out decision
- Civil defense expenditures spiked during the Kennedy administration but the idea of a major civil defense effort was not maintained
  - There were many Nike-Zeus anti-missile sites all around Washington and elsewhere
  - Air defense forces in the 1960s were very robust
  - Charts from the presentations show these trends; other related ones are available in the Presentation
- These acquisition decisions and those about the size of the strategic forces were based on policy guidelines
History shows that there consequences to these concepts of deterrence and decisions made On
- September 11, 2001, there were only 7 air defense alert sites active in the US
  - In the Northeast region there were only 2 sites available
  - Each site (one on Cape Cod, one in Norfolk, VA) had 2 planes on alert
  - Some number of those planes were unarmed
- Having more available air defense aircraft might not have stopped the attacks
  - Air defenses were at a level decided on based on government policy
  - NORAD was not really postured to defend the US – a decision based on deterrence theories and policies
  - Bottomline: policy decisions have consequences

Basic fundamental ideas about deterrence are still at play

The action/reaction concept
- Still drives nuclear proliferation
  - If the US built any new nuclear weapons - an action, we could expect that proliferation would be more likely - a reaction
  - Today the concerns are not the well-studied Soviets but rogue states
  - If the US shows interest in new nuclear weapons, that will increase the interest level for many other countries
- US calls for anti-proliferation could then be seen as a drunk calling for temperance

There are still discussions about how many nuclear weapons are required to achieve deterrence
- The idea is that once you have a given number of weapons, you have achieved deterrence
- First identify the number of target sets you need to hold at risk, then determine how many nuclear weapons are needed to destroy those targets
- Is this still applicable?

Alternative concept: Newer, high intensity non-nuclear weapons are enough for deterrence
- The idea is that newer weapons are so lethal that they can do the deterrence job just as well as nuclear weapons
- The logic of the idea may be there, but is it still applicable

Must first decide what we need to deter in the future, but old theories still drive policies, so must consider several questions
- Whom are we trying to deter? A Hitler or a Chamberlain or a Saddam?
  - A Japanese leader at end of World War II said that they should fight on to honor the dead even if it meant the whole society would be destroyed like a beautiful flower
  - Hitler in his bunker made decisions that destroyed what was left of the German economy, because he believed all the best people were dead; the others did not matter
- How could we deter today’s threats?
  - Alternative 1: Use a large punitive threat because even the enemy will be doing a cost/benefit analysis of their actions compared to ours
    - The enemy is rational so he will surely respond to this
  - Alternative 2: Use denial by making it very hard for the enemy to reach his goals
    - Make things so risky that they chose to do something else
  - Alternative 3: Use some combination of the two – punitive and denial deterrence
• Who is in the target audiences?
• Must the approach be direct or indirect?
• Need to look at their goals
• Example: want to deter nuclear transfers
  ▪ Must figure out who is involved – not just the Soviets to worry about any more
  ▪ There are links of chains that go from the manufacturer to those who let proliferation
    happen to rogue states to non-state actors
  ▪ Must decided where to put the most effort
    • At what point would efforts do the most good?
• May be very different that Cold War thinking and must figure out how it is different
  ▪ Need to know values / fears / goals / practices / lots of details about enemies
  ▪ If you used old-think ways, you could miss something
    • Must figure out the unique views of many groups of people
    • Only then will you have what you need to know to develop deterrence
  ▪ Deterrence policy originally worked out by physicists and other technical specialists
    • They used “arm-chair” theorizing to figure out how enemies were be thinking
    • Can’t be done any more; no way for us to understand about these others
      simply by thinking out the consequences of actions as we would do them
    • Can’t use “arm-chair” efforts to identify what would deter Hezbollah
  ▪ Now need anthropologists, psychologists, historians to get a good picture of the threat
  ▪ Could work out deterrence theories without them, but if you got deterrence it would
    only be by accident

Strategic Communications
• In the Cold War only needed to communicate with the Soviet leadership
  ▪ Could be done by words or by moving forces around or at summits and treaty
    negotiations
  ▪ World War II alliances taught us a lot about the Russians
  ▪ The West did have the basics about right, but some luck was involved
• How to communicate with the new threat is a big problem
  ▪ Can we communicate will all these new threat personalities?
  ▪ How do we communicate our threat to these new threatening entities?
• Strategic communications is now part of deterrence
  ▪ Can’t use 18th and 19th century means to do so
• May not even know who it is that is threatening us or where they are
• How do you develop measures of merit to know that your messages were successful?
  ▪ The fact that there has been no attack is not enough – maybe they were not planning
    one
• The amount of intelligence we need to understand this new enemy is staggering
  ▪ It is also hard to acquire
  ▪ Much comes from HUMINT
  ▪ Larger challenge for the intelligence community than in the Cold War
• Can look at case studies done on non-state actors in the past
  ▪ There have been all kinds of crazy and violent terror groups
  ▪ How was it done when deterrence was successful or how did it fail?
  ▪ Can go back to when Jefferson had to deal with the very violent Barbary Pirates
He was given advice about handling them from outside sources. He did figure out how to handle them. Many more case studies show that even the most violent groups can be deterred.

Terrorist organizations can be deterred — sometimes

- Can you tell which ones can be deterred and which ones can’t?
  - Are they committed to ways that can be stopped by their own decision makers?
- Options may be limited involving using denial
  - Must make their goal very hard to achieve
  - In some cases they might be quite happy to be attacked
    - Al Qaeda members have said they want to be attacked or killed
    - It would show how righteous they were
- In such cases can’t use the old standard deterrence methods
- We must understand that what they believe in is rational to them
  - This upsets the old ideas of rational decision makers who can be deterred.

John Grisco spent time in Iraq as an advisor to the new Iraqi government on education
- He identified the fundamental problem as a misunderstanding about what religion is in Iraq and the Middle East in general
- US / West has tamed religion so we can’t understand the centrality of religion there
  - We don’t understand the idea of killing or dying for God
  - But they do
- Their intangible values do not make good targets
  - Hard to do punitive threats
  - If you use a denial type threat, what should it look like?
- Studies have shown that it is hard to deter determined groups, but it might be possible to deter those who are needed to support the main group

**Conclusion**

There is a need to think differently about deterrence in the 21st century compared to the thinking that was used in the Cold War
- Need to develop better understanding of opponents to increase the chances of deterring them
- Need to look at past best practices of deterrence of violent groups in US/UK/Russian history
- Need to look to see if some societal defense might be useful / necessary for deterrence
  - Could be the opposite of Cold War thinking
  - Might involve defenses against biological or nuclear terrorism
- Cold War thinking determined that the answer was deterrence
  - There might be a different answer now
- Should not come up with a different answer just to be different
  - Situations are totally different
  - Even the acquisition strategy will be different
- What we knew in the past might be misleading today
- The old paradigms were comforting and self-serving and convenient
  - Will make it that much harder to break away from the old ways of thinking
  - We need entirely new ways to apply the theories about deterrence
QUESTION & ANSWER SESSION

Theory and policy about deterrence is not a blending of the two
- Look at what the theory said and what the policy guidelines were
- They overlap but are not the same thing
- Can see in the now unclassified paper trail that this is not a coincidence
  - Policy has been mostly shaped by theory
- Limited nuclear options were part of the overarching policy
  - Concepts did not come from the military
  - Theory indicated that we needed something besides massive threats
  - Graduated threats permitted the concept that even worse punishment was being withheld
- Punitive deterrence is about making the options more credible
  - Not about a particular military effect
  - Idea was that one nuclear weapon on one city was a disaster
    - 10 weapons on 10 cities would be that much worse
    - 100 weapons on 100 cities would be unthinkable

In 1974 SECDEF James Schlesinger said that he did not want the Soviets to think that they had they had only limited options
- He wanted the Soviets to understand that the US was going to protect itself with deterrence

How much risk you are willing to accept will determine how you go about deterrence
- Also will help in figuring out the trade-offs involved
- Example: The Joint Chiefs of Staff fought with SECDEF McNamara about what would happen if deterrence failed
  - Concept: The government owes it to the population to defend it
  - However, a substantial defense capability against a large scale Soviet attack would be expensive and hard to sustain
  - Therefore, the US must risk the trade-off as the best way to handle all complications
- There is risk for the other side, too
  - Need to understand their risk tolerance
  - A voice in a leader’s head told him to protect his people by punitive threats
    - That could be tough to deter if we don’t understand the mind set involved
  - Need to understand the risk calculus

Cyber-deterrence
- We cannot yet say that a cyber threat will be adequate foundation for building deterrence
- However, we can now talk to more than just enemy leaders as we did with the Soviets
  - Can talk to audiences who form part of those chains leading to violent acts
  - Those in the chains may be more available for deterrence

Nuclear deterrence case studies do exist
- Herman Kahn noted that speculative cases were preferable
  - We do not want to deal with real data that could only come from nuclear wars
- Look at Yom Kippur War from 1973
  - A non-nuclear country (Egypt) chose to assault a nuclear power (Israel)
The assault was done to escalate the overall situation in the region
Sadat wanted to get the world’s major powers involved and it worked
The certainty that Israel had nuclear weapons was not enough to deter Egypt’s attack

- Look at the 1963 Cuban Missile Crisis
  - Khrushchev reportedly said something like: Let’s go ahead and throw a hedgehog in Uncle Sam’s pants
  - He was willing to put missiles into Cuba even if it started a big war
- Look at the Stalin versus Mao conflict
  - Stalin supposedly said: If we are going to have a war, let’s have it now
- Must understand the notion of risk for the other side
  - What does the other side worry about most?
  - What is the target set that must be put at risk to create deterrence?
  - What do we believe that the other side wants to protect the most?
    - Soviet leaders worried most about physical / tangible objects
      - Spiritual things were actually made illegal
      - So the US was holding the right targets at risk
    - Today’s opponents seem to have put higher value on less tangible things
- In the 21st century the targets will be different than in the Cold War
  - Must work hard to understand what our opponents want the most
  - What tools of power do they need that we can put at risk?
    - Don’t really need to destroy them, just creditably threaten them

Punitive versus Denial Deterrence

- We currently see enemies as undeterable because they do not look like our old enemies
  - They have no addresses to threaten
  - The easy answer is that they are not deterable
    - But sometimes they are
- If an enemy is deterable, then we must find what the way is
  - Alternatively, we must make their goals so hard to reach that they won’t try
- Deterrence of violent groups has happened in the past – the Red Cells in Europe during the 1980s
  - Memoirs have been published by those now in jail who tell about their reactions to government activities
  - They tell what made them give up their violent ways
    - For one thing, aggressive policing made their lives unbearable
      - Forced them to fight among themselves
      - They reached a point where they did not want to go on
      - They were on the run all the time
- Although there is a different context now, the French/Italians/Germans did find a way to handle/deter threats from violent groups that were new to them at the time
  - Need to look at how they learned to handle/deter those groups