STRATEGIC WARNING AND THE HYBRID COMPLEX SYSTEMS ENVIRONMENT

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What is Surprize?

- Akin to Pearl Harbor or 9-11 attacks
- Unexpected, unplanned, unanticipated
- Unexpected foes, technologies, alliances
- Threats beyond the scope of imagination
- Ends of the bell curve//curtailed continuum
- Ignorance and risk avoidance of the unknown
- *What we don't know might be endgame lethal….*

What is a Complex System?

- Nanotech and neurotech enabled systems
- Cyber and AI augmented systems
- Autonomous platforms and systems
- Fractal and hyperspectral imagery systems
- Man-machine interface//BCI [DARPA]

Can we detect, deter and defend against systems we fail to anticipate, understand or expect?

Elements of Strategic Warning

- Anticipating the surprize spectrum [DOTMILPF-P]
- Engineering deliberate warning assessments
- Avoiding the trap of mirror-imaging
- Resisting temptation of next war = last war
- Designing robust S&T dual use analytics
- Affirming the unknown and less well known
- Mapping the non-kinetic threat spectrum
- Gaming future warning scenarios

Hybrid Complex Environment

- Russian and Chinese threats
- Iranian and North Korean threats
- Middle East threats
- EU-NATO disruptions
- Hemispheric threats
- Non-kinetic neuro cognitive threats
- Terrorist and criminal threats
- Cyber threats
- Six domains of strategic space

Gauging Threats and Opportunities

- ▣ Every threat offers an opportunity
- ▣ Sizing and scoping threats based on our capabilities
- ▣ Grasping the spectrum of non kinetic threats
- ▣ Counter PsyOps/media/disinfo/deception
- ▣ Big data cautions [predictions-estimates-analysis]

- ▣ *What opportunities exist now and in the future to nullify, offset and dilute non kinetic weaponry?*

Detection and Deterrence

- Detecting threats amidst complex future systems
- Identification of threat manifestations/iterations
- Upgrading reliability in warning estimates
- Discerning what technologies have deterrent power
- What technologies thwart non-kinetic attacks?
- Redefine counterforce and countervalue
- What are strategic and operational elements needed
- Focusing on offensive capability build-up

Building Defense

- Defending what against what?
- Passive vs layered defense of friendly systems
- Pre-emptive and counterstrike technologies
- Prepare for mixed kinetic/non-kinetic war
- Building in preparedness for stalemate
- Crafting operational definitions of 'victory'

Legal, Ethical, Law of War Issues

- Article 36 of Additional Protocol I of the modified Geneva Convention of 1977 requires each State Party to determine whether the employment of any new weapon, means or method of warfare that it studies, develops, acquires or adopts would, in some or all circumstances, be prohibited by international law. All States have an interest in assessing the legality of new weapons, regardless of whether they are party to Additional Protocol I. Assessing the legality of new weapons contributes to ensuring that a State's armed forces are capable of conducting hostilities in accordance with its international obligations. Carrying out legal reviews of proposed new weapons is of particular importance today in light of the rapid development of new technologies

Legal and Ethical Issues

- Is an enhanced battalion of warriors actually considered a 'weapon' under the BWC?

- Are enhanced soldiers entitled to same level of Geneva protections as the non-enhanced?

- Article 51 of UN Treaty reinforces the right of member states to self defense against armed attack

- Article 45 affirms UN right to deploy armed forces to restore 'peace and security'

Need for Strategic Doctrine

- Strategic doctrine for non-kinetic conflict is key
- Complex hybrid warfare exceeds our doctrine
- Doctrine which specifies defense/offense is key
- Doctrine notes adversarial non-kinetic threat
- Doctrine based on reality vs theory
- Doctrine suitable for the 2020—2030 decade
- Doctrine which deals with strategic warning
- Doctrine which undergirds training/operations
- Doctrine which is flexible and interactive

Avoiding Strategic Surprize

- In a future hybrid conflict environment where a mix of kinetic and non-kinetic weaponry exists what aspects and principles of national defense policy and ongoing operations are essential to offset, reduce or prevent strategic surprize?

2020 onward

- **What measures and options are available and valid given the risks of strategic surprize which takes place to our net disadvantage**?

What do we do now?

- **Your call….not mine…**

- **Thanks//R. McCreight**
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