



# Integrated Deterrence through Enterprise Integration

February 2022

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# Traditional Nuclear Deterrence

## DETERRENCE

- “Discouraging the enemy from taking military action by posing for him a prospect of cost and risk outweighing his prospective gain” - *Glenn Snyder*

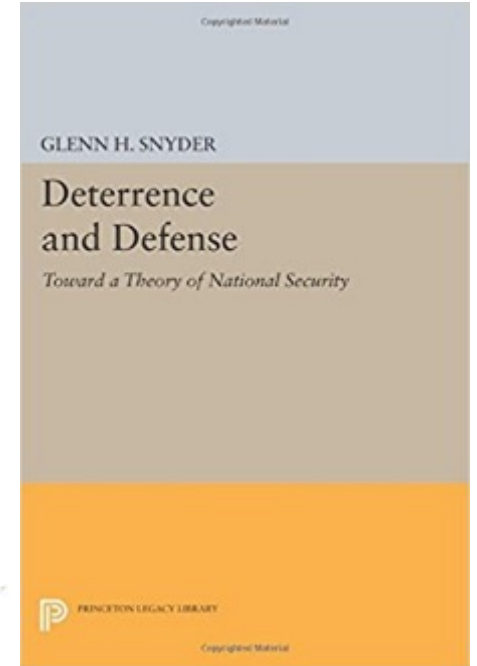
## NUCLEAR DETERRENCE

- Developed in the 1950’s to dissuade acts of aggression by USSR
- Became the core of US deterrence strategy

## NEW FACTORS

- Addition of space and cyber as domains of warfare
- Many new threat actors have come online

**New domains & players have added a level of complexity to the strategic environment that traditional nuclear deterrence theory can no longer adequately address**





# The Threats of Today

We're trying to deter in increasingly congested and contested environments with multiple adversaries that are developing and deploying capabilities at alarming speeds

## Multi-Player Game

- 9 nuclear weapon states, likely more to come

## Loosening of Nuclear "Taboos"

- Increased use of tactical nukes
- Perception that benefits of nuclear outweigh costs

## Imbalance in Political Stakes

- US: limited stakes in conflicts
- Adversaries: US conflict is existential

## Catalytic Instability

- Quick escalation due to terrorist action or nuclear accident

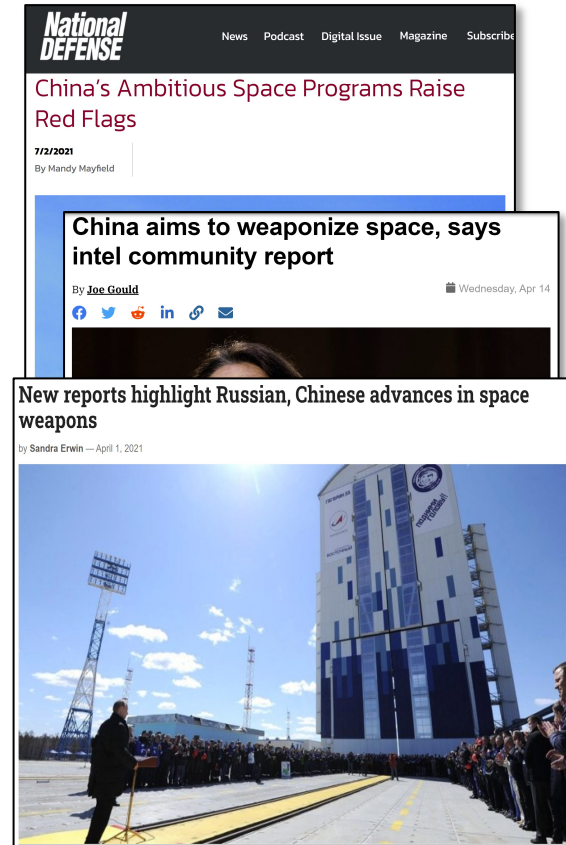
## Multi-Domain

- Cyber, Space, Economic, Information, Lawfare



*"...the pace at which China is moving is stunning. The pace they're moving and the trajectory they're on will surpass Russia and the United States if we don't do something to change it."*

— Gen. John E. Hyten, USAF, Retired  
Former Vice Chairman of the Joint Chiefs of Staff





# Timeless Aspects of Deterrence

Even though the threat is evolving, the basics of deterrence remain the same:  
Leverage the “Three C’s” to influence your adversary’s attack calculus

## Capability

We must possess the capability to:

1. Impose costs that the adversary fears (“punishment”)
2. Deny benefits the adversary desires to achieve (“denial”)

## Communication

The adversary must understand what kind of behavior we seek to deter, and how we will respond

## Credibility

The adversary must believe that we will actually respond

Together, these  
“Three C’s” influence an  
adversary’s behavior by:

- Denying benefits
- Imposing costs
- Encouraging restraint



# Integrated Deterrence

## INTEGRATED DETERRENCE

- Discouraging a particular enemy from taking aggressive action through your ability to leverage all offensive & defensive capabilities in an incremental manner, simultaneously.
- Provides regional deterrence when integrated with the capabilities of our allies and partners

## REQUIRES

1. All sensor and other operational data to be available and usable;
2. by all other relevant systems and operators;
3. at the moment that they need it.

**Integrated deterrence denies benefits and encourages restraint by imposing incremental costs on adversaries**



*Describing integrated deterrence: "What we need is the right mix of technology, operational concepts, and capabilities — all woven together and networked in a way that is so credible, so flexible, and so formidable that it will give any adversary pause."*

— Defense Secretary Lloyd Austin



# What is Enterprise Integration?

**“Enterprise Integration” is the alignment of each enterprise activity to increase overall speed, efficiency, flexibility, and resilience**

Enterprise Integration	Enterprise Activity	Realization	Outcomes
	Business Operations	USSF as a “Digital Service”	Speed, Efficiency, & Flexibility
	Capability Development	Common Standards & Infrastructure	Speed, Efficiency, & Flexibility
	Operations	JADC2; Resilient Enterprise Ground; Warpcore	Ops Speed, Resilience, & Lethality; Threat Credibility

**Integration of operations offers the most tangible deterrent, which is further reinforced by integration of business operations and capability development**





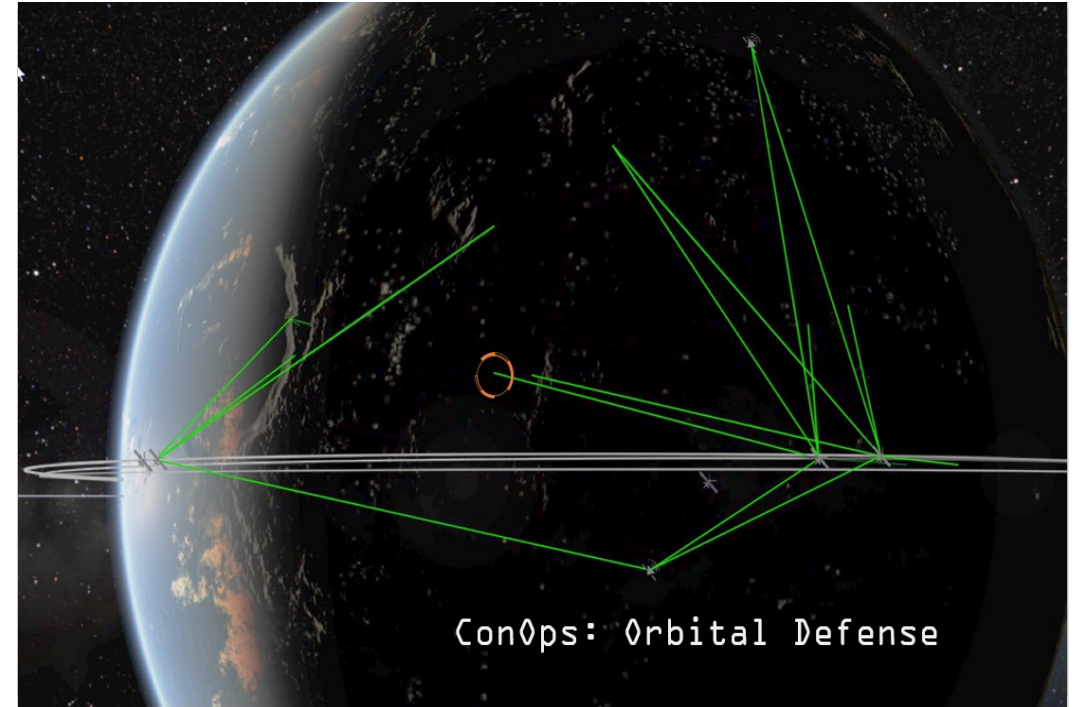
# Enterprise Integration of Operations

## OPS INTEGRATION

- Alignment of enterprise-level capabilities to allow for continuous reorientation and reconfiguration of assets to better detect, track, and respond to emergent threats

## OUTCOMES

- Builds new levels of resiliency and flexibility into the ground segment and communication pathways
- Increases incremental deterrence options available to combatant commanders



**Ensures future capabilities can be effectively integrated  
and immediately made available to operations**



# Enterprise Integration of CapDev & BizOps

## CAPDEV & BIZOPS INTEGRATION

- The implementation of common digital collaboration and development environments supported by streamlined business practices to speed-up capability responsiveness (e.g., development & delivery)

## OUTCOMES

- Increased responsiveness to emergent threats
- Development and delivery of new capabilities at speed due to efficiencies resulting from integration of BizOps and CapDev

## Cross-Mission Ground & Communications Enterprise

### We Are...

Integrating space ground assets for more efficient and effective space warfighting

Modernizing systems, capabilities and processes to maintain U.S. space dominance

Leveraging partnerships across the DoD, Civil, industry and with our Allies to achieve our aim

### Developing Capabilities to Enable...

Resiliency in the space ground architecture

Joint-All-Domain C2

Synchronization of space warfighting effects

ECX

**Ensures new capabilities further optimize enterprise flexibility and responsiveness at the speed of relevance**





# How Does Enterprise Integration Deter?

## Deny Benefits

- Resilient ground and communications enterprise has many paths to ensure uninterrupted SATOPS support to multi-domain operations
- Immediate C2 support for rapid launch and reconstitution
- Superior SDA ensures positive attribution of attacks in the space domain
- Enterprise cyber defenses prevent disruption to continued operations

## Impose Costs

- Resilient ground and comms enterprise forces adversaries to dedicate additional resources for countermeasure development and re-signaling

## Encourage Restraint

- Actions are not worth the risk of escalation and incurring of costs without the certainty of benefits (achieving objectives) due to the US' resilient enterprise SATOPS and likely attribution

**We want our adversaries to say “Is this a good day to attack America? ...no, NOT today.”**



# Achieving Enterprise Integration

## CRITERIA FOR SUCCESSFUL INTEGRATION

1. Clearly defined enterprise boundaries
2. Only intentional duplication in contribution
3. Establishment of the three types of architectures for each enterprise
4. Alignment of all core business decisions with mission threads and guiding doctrine to counter the threat
5. Lower-level alignment of segment and solution components

- Allows for effective inventory of all the functions, resources, and responsibilities that fall under a specific enterprise

**If these criteria cannot be met, optimal enterprise integration is not possible**



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- Each enterprise should be directly and uniquely contributing to the mission, strategic goals, and objectives of the larger entity under which it falls
- Duplication means:
  1. Resources are not being optimized
  2. Strategic misalignment is occurring
- Exception: when an enterprise's key objective is to support resiliency through redundancy

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1. Baseline (“as-is”) Architecture: establish the current “as-is” state of an enterprise
2. Target (“to-be”) Architecture: outlines the “desired state” of an enterprise
3. Strategic (“transitional”) architecture: identifies the steps needed to get the enterprise from its “as-is” state to its “to-be” state

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- Enterprise business decisions should be tied to their effectiveness against the threat.

**Countering the threat MUST be a consideration at all levels, and for all decisions.**

- Enterprise business decisions should be aligned with your specific mission threads and guiding doctrine. Reason: doctrine and mission threads are the two most significant constraining factors on intra-enterprise integration.

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- Segment-level and solution-level components should be aligned to their enterprise's mission, strategic goals, and objectives
- “Segment level” is comprised of services or efforts within an enterprise that either generate revenue, or produce its own product / service
- “Solution level” details how segment-level components orient towards each other and work together to solve a specific problem

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# Benefits, Challenges, & Risks to Integration

## BENEFITS

- Improved Deterrence: A more diverse and sophisticated toolkit improves our ability to deter across all domains by encouraging restraint due to denial of benefits and cost imposition
- Increased Resiliency: Increased operational resiliency due to integrated ground & comms enterprise
- Increased Effectiveness: Overall increase in operational speed and efficiency due to data integration across the enterprise, immediate C2 support, reconstitution, and attribution

## CHALLENGES

- Technical Barriers: re-engineering disparate systems and sensors to work together
- Funding & Institutional Mindset: There is limited funding for integration efforts; funding is program-focused and leaders are trained to advocate for their programs - not for integration. How do we transform this mindset to better address the threat?
- Communication (“Signaling”): How do we demonstrate we’ve achieved enterprise integration so that it becomes an effect deterrence factor?

## RISKS

- Simplified Attack Surface: Will enterprise integration simplify the attack surface for our adversaries? If so, how do we mitigate for that?
- Inadvertent Escalation: Integration increases the potential for miscommunication, which runs the risk of unintended escalation.



# Moving Forward

There is an acute urgency to address the threat of today –  
if not made a top priority, we run the risk of being overtaken by our adversaries

- ✓ Use threat focused decision-making
- ✓ Digital Transformation is key to developing, delivering, and operating integrated capabilities:
  - Resilient and speedy development of enterprise architectures
  - Transform Space Operators through enterprise automation
- ✓ Leverage Partnerships
  - Allied by Design: bring allies into our integrated deterrence architectures
  - Commercial sector emergent technology adoption and dual-use capabilities

## Back to the Future: Is 'Integrated Deterrence' the New 'Flexible Response?'

The Biden administration plan to deter the Soviet Union some of the pitfalls that

by Michael Clarke

**T**he concept of administrative Strategy. Sec

## 'Integrated deterrence' taking shape against China

New defense doctrine recognizes US needs a network of allies to counter the threat of China's growing military capabilities

By RICHARD JAVAD HEYDARIAN  
OCTOBER 18, 2021

VOICES OCT. 20, 2021 / 6:00 AM

'Integrated deterrence' must be a strategy, not a slogan

**National  
DEFENSE**

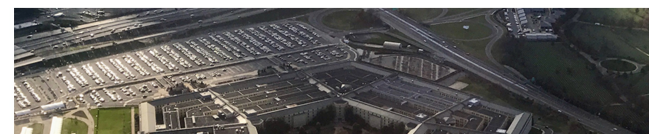
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DEFENSE DEPARTMENT

## AFA NEWS: 'Integrated Deterrence' to Drive National Defense Strategy

9/22/2021

By Meredith Roaten





# Contact Information

Thank you!

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