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**MULTI-DOMAIN BATTLE IN MEGACITIES
CHALLENGES AT THE OPERATIONAL AND STRATEGIC LEVELS OF WAR**

The Future of Multi Domain Battle

Rethinking How We Think About Joint and Combined Integration



The overall classification of this brief is: **UNCLASSIFIED**

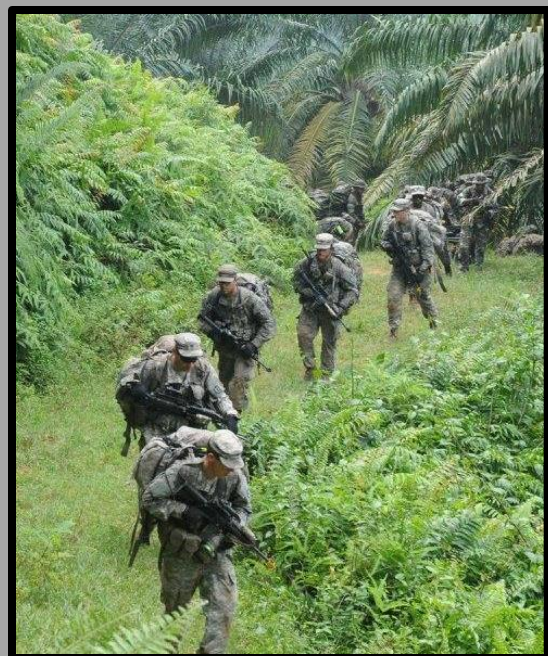
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U.S. Army Pacific***

21 March 2018

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Agenda



- **The Strategic Landscape**
- **Future Battlefield Framework**
- **MDB Objectives & Strategic Approach**
- **Key MDTF Concepts**
- **MDB Milestones FY17-18**
- **Key MDTF Capabilities**
- **Discussion**



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Complexity ^{2.0}



THE WORLD
PHYSICAL

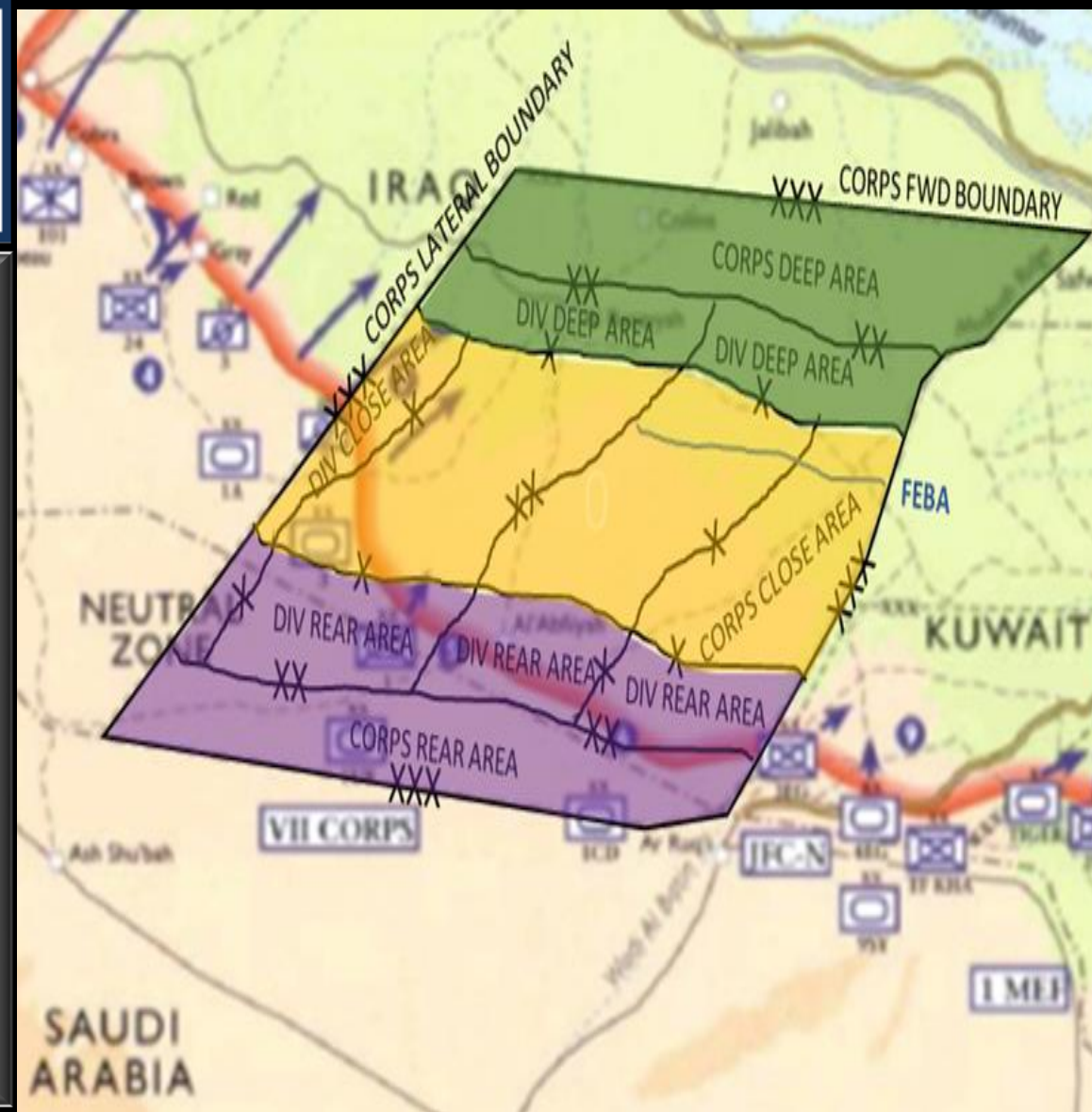
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- The rapid growth in Chinese A2AD capabilities and Grey Zone operations are undermining deterrence and increasing the risks of a major conflict.
- Russia presents similar challenges in Europe and has also pivoted to the Pacific as a spoiler.
- The DPRK will soon have the capability to attack the US and Japan with nuclear weapons.

Armed Conflict

	<u>AirLand Battle</u>		
	Rear	Close	Deep
	Rear Area	Close Area	Deep Area
	<p>Area in which operations are conducted that assist in providing freedom of action and continuity of operations, logistics, and battle command. Primary purposes are to sustain the current close and deep fights and to posture the force for further operations.</p>	<p>Area in which offensive or defensive operations are conducted, where forces are in immediate contact with the enemy.</p>	<p>Area in which operations are conducted in depth to secure advantages in later engagements, protect the current close fight, and defeat the enemy more rapidly by denying freedom of action and disrupting or destroying the coherence and tempo of its operations.</p>



Operations conducted at tactical and operational levels of war.



Expanded Battlefield

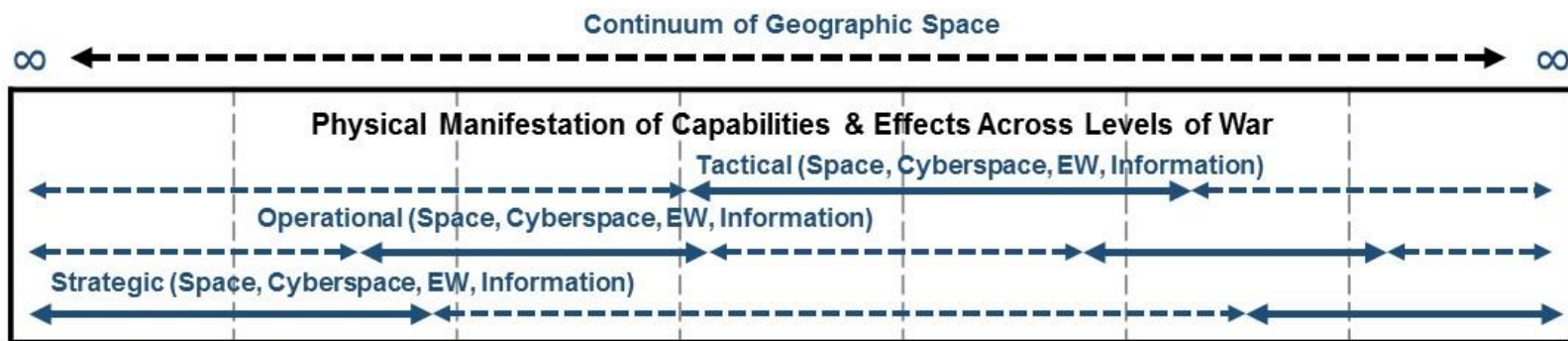
- Time (not just conflict)
- Domains (cyber, space, info)
- Geography (effects felt anywhere)
- Actors (proxies & surrogates)

Converged Capabilities

- Integrate capabilities across domains and functions in time
- Achieve effects at any geographic location

Compressed Levels of War

- Result of adversaries' extended-range capabilities
- Place friendly formations at risk from many enemy systems



Key Point of physical manifestation of capabilities/effects Pathways capabilities must traverse to create effect



Strategic Support Area	Operational Support Area	Tactical Support Area	Close Area	Deep Maneuver Area	Deep Fires Area
Cross-CCMD coordination, strategic sea/air LOCs, and the homeland.	Key Joint Force C2, sustainment, and fires/strike capabilities are located (land or sea-based).	Directly enables operations in the Close, Deep Maneuver, and Deep Fires Areas	Friendly and enemy formations, forces, and systems in imminent physical contact contesting for control of physical space in support of campaign objectives	Conventional maneuver (ground or maritime) requires significant support from multi-domain capabilities; commanders must make a concerted effort to "break into"	Beyond feasible range of conventional forces; where joint fires, special operations forces (SOF), info and virtual capabilities can be employed



MDB Objectives & Strategic Approach



PROBLEM. Rapid growth in adversary A2AD capabilities and Grey Zone operations are undermining deterrence and increasing the risks of a major conflict.

HYPOTHESES.

- 1) U.S. Joint and Combined forces can strengthen deterrence by creating multiple dilemmas in multiple domains with multiple partners to decisively complicate the war plans of potential adversaries and, thereby, discourage their actual execution.**
- 2) Should conflict occur, this approach can provide Commanders with multiple options to enable Joint and Combined maneuver to achieve a decisive advantage.**

STRATEGIC GOAL. Strengthen Deterrence

OPERATIONAL GOAL. Radically improve the resiliency, lethality, and overmatch potential of Joint and Combined forces over time.

- Calibrate Forces
- Resilient Formations
- Human Domain
- Convergence
- Joint & Combined Integration
- Rapid Capabilities Development
- Strategic Communications
- Evolutionary, but ...





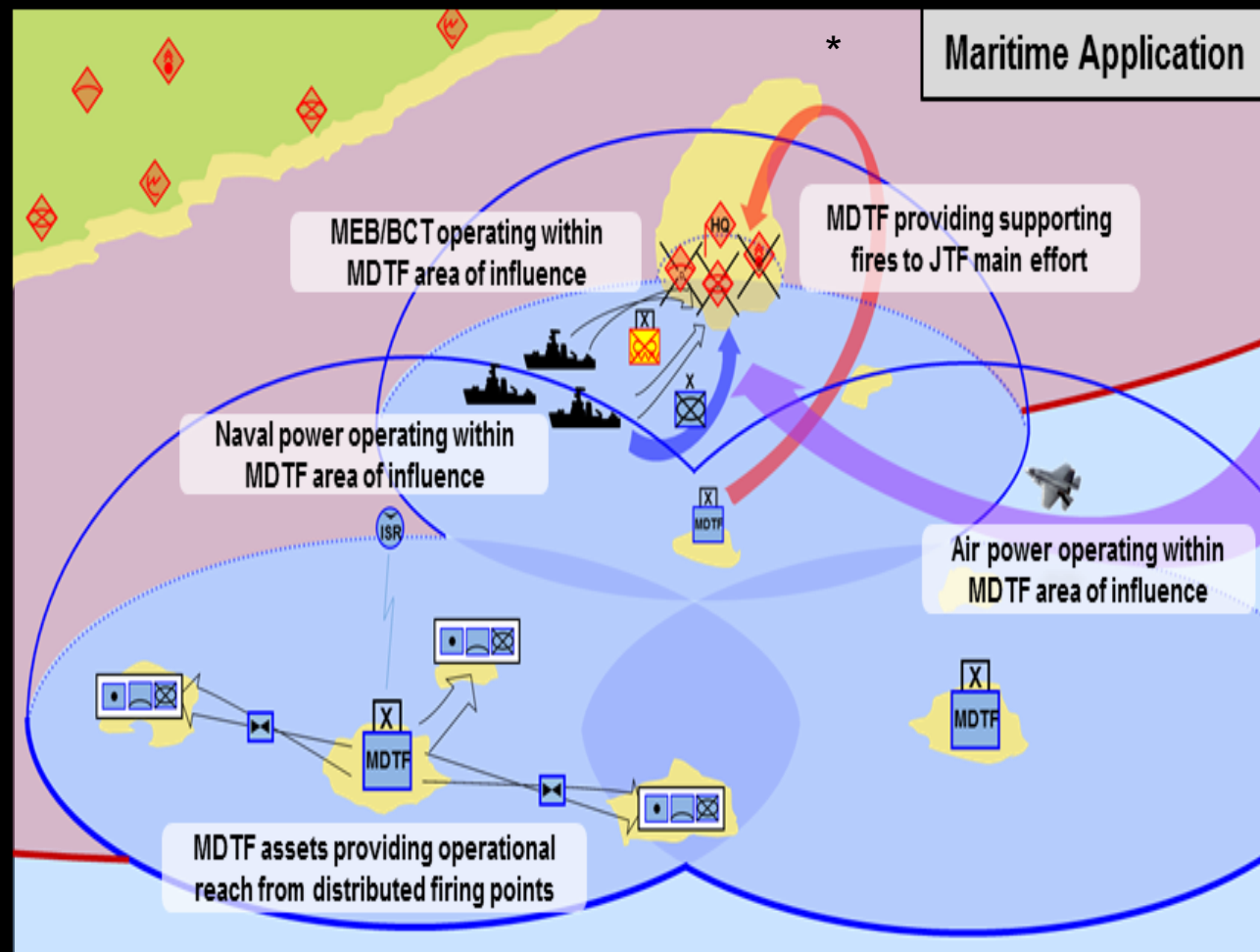
Key MDB Milestones (FY17-18)



- **USPACOM directed redesign of Joint exercise program to enable MDB experimentation**
- **CSA directed U.S. Army to develop plans to build up to 5 Multi-Domain Task Forces (MDTF)**
- **CSA directed USARPAC to lead U.S. Army MDTF Pilot Program 2018-2021**
 - **Will inform fielding of future MDTF capabilities (2020-2025), resources permitting**
- **CSA approved force structure for Intelligence, Cyber, Electronic Warfare, and Space (ICEWS) detachment in 2019 which will integrate with 17th Field Artillery Brigade (I Corps) at JBLM**
- **Key MDTF Exercises 2017-2018**
 - **Talisman Sabre (Australia) , Dawn Blitz (California), Lightning Forge (Hawaii), Yama Sakura (Japan) , Pacific Sentry (Hawaii)**
 - **Pacific Sentry / Keen Edge (Hawaii/Japan), RIMPAC (Hawaii), Valiant Shield (Guam)**

**The MDTF will employ organic, Joint, and multi-national capabilities in all domains
Air, Sea, Land, Space, Cyberspace, Information Operations and the Human Domain
to strengthen deterrence in peacetime and re-enable Joint and Combined maneuver in combat**

- **Integrated Joint/Partner Fires Targeting**
 - Lethal & non-lethal
- **Long Range Cross-Domain Fires**
 - Land-based anti-ship missile
 - Long range strike (499K+ if INF compliant)
 - Multi-Domain Artillery
- **Integrated Intelligence, CEMA, Space Effects @ Operational/Tactical Levels**
- **Organic OTH Surveillance**
 - Including space, elevated sensors and UAS
- **Integrated and Layered Air and Missile Defense**
 - Low-cost effectors, mobile, survivable radars
- **Camouflage, Concealment, and Deception**
 - multi-spectral, cyber, active RF
- **Multi-Domain Common Operating Picture**
- **Survivable UAS** (point launch/recovery, low observable, multi-payload: ISR, EW, SIGINT, Kinetic)
- **Advanced Logistics and Sustainment**
- **Assured Comms and PNT**
- **Manned-Unmanned Teaming (MUM-T)**
- **Agile Leaders (Human Dimension)**





ONE TEAM

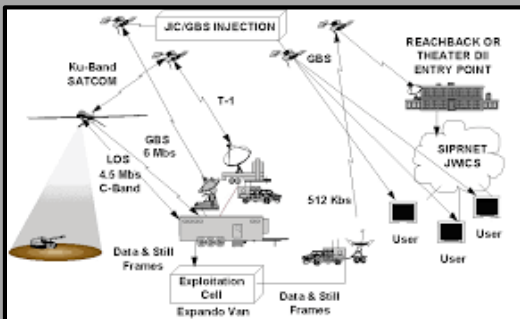


Key Concepts – Calibrate Forces

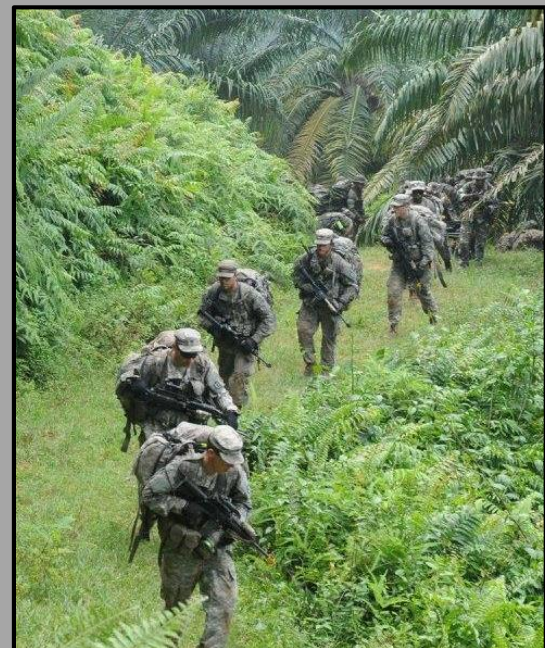


- The U.S. Army requires some forward stationed MDTFs that routinely demonstrate capabilities to complicate adversary war plans in the Competition Phase.
- Forward stationed forces are also required to execute deterrent options in days (versus a month deploying from CONUS).
- Strategic communications plans are required to punctuate capability demonstrations to achieve desired effects.
- Forward stationed forces must routinely plan and train with host-country forces to execute Joint and Combined Operations.
- Forward stationed forces must also have habitual training relationships with tasked organized forces that will reinforce the MDTF lead formation over time.

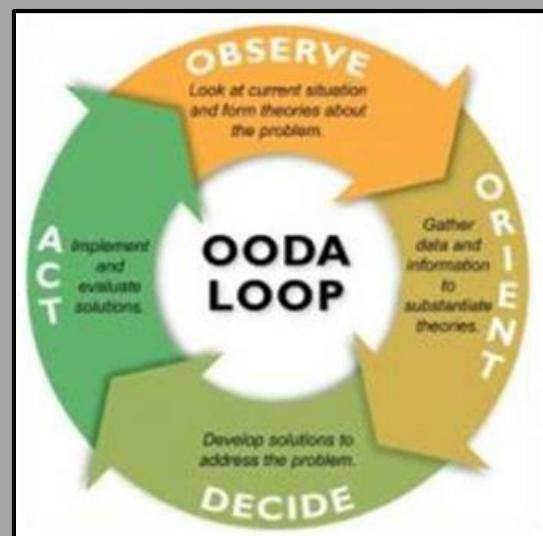
Key Concepts – Resilient Formations

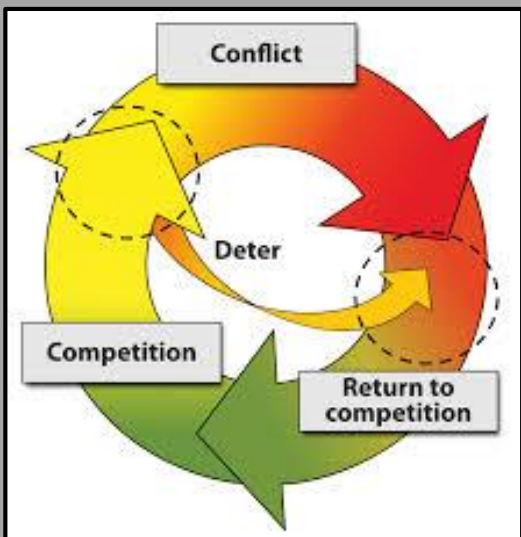
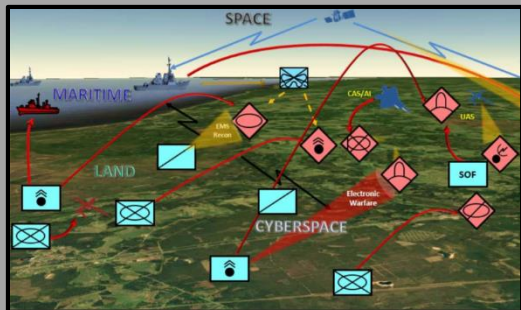


- Dispersed and mobile formations with organic air defense
- Mobile mission command
- Emission control and electromagnetic deception
- Camouflage, concealment, and use of physical decoys
- Reduced Logistics Demand: self-sustainment (15 days), reach-back, manned-unmanned teaming, production at the point of need (energy, water, etc), undersea fuel delivery, precision aerial resupply.
- Employment via watercraft or on land
- Redundant jam-resistant comms and precision navigation and timing
- Passive organic surveillance and robust OTH surveillance to queue air defenses and other force protection assets
- Space, EW, and Cyber operation to set the conditions to achieve lethal effects and for force protection.



- A key U.S. strength is highly educated and well trained officers and NCOs who thrive in ambiguity and chaos.
- A second strength is a doctrine that empowers leaders to translate a Commander's intent into military actions that rapidly exploit opportunities and mitigate threats.
- Empowering leaders enables US forces to operate inside the adversary's highly centralized and relatively prolonged decision cycles to out-think and out-rate opponents.



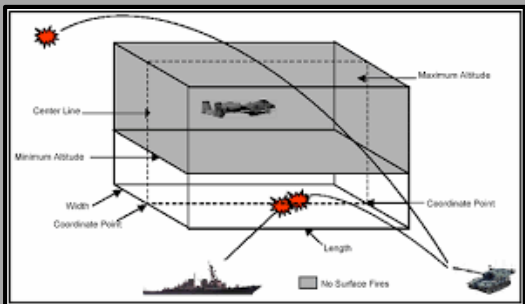


- Potential adversaries are equipped to handle a linear threat in a single domain, but they are less well prepared for multiple dilemmas in multiple domains.
- U.S. forces have demonstrated the potential to create multiple dilemmas in multiple domains and to mass kinetic and non-kinetic effects in time, place and purpose to achieve a relative advantage.
- Effective employment of non-kinetic effects is increasingly important to achieve a relative advantage in the execution of kinetic effects.
- Integration with whole-of-government plans, capabilities, and effects is also a foundational requirement for military success and vice versa.



Technical Integration.

- Joint and Combined Forces require common operational pictures tailored for each echelon based on shared databases and interoperable network architectures.
- Joint and Combined Forces require full sensor-to-shooter loop functionality so any sensor can support any shooter and vice versa.



Procedural Integration.

- New procedures are required to exercise mission command over a Joint and Combined schemes of maneuver and attack. Deconfliction is “Old Think.”
- New procedures are required to push strategic and operational capabilities downwards in support of tactical operations.



Cultural Integration. Senior leaders must drive Joint, Combined, and Civil-Military integration. It won't happen of its own.



Key Concepts – *Rapid Capabilities Development*



- The commercial sector is starting to out-pace DoD sponsored technology development in critical areas—meaning, leading edge commercial capabilities are more accessible to adversaries.
- Lengthy DoD acquisition processes exacerbate this trend and increase the probability that DoD will field obsolete capabilities.
- The Army is attempting to address this issue with Cross-Functional Teams that can accelerate the acquisition process.
- The Army should consider adopting a “Buy, Try, Decide” model for MDTFs modeled after US Special Operations Command.
- MDTFs can become pace-setting formations for the Army by testing capabilities that might have broader applicability across the force.

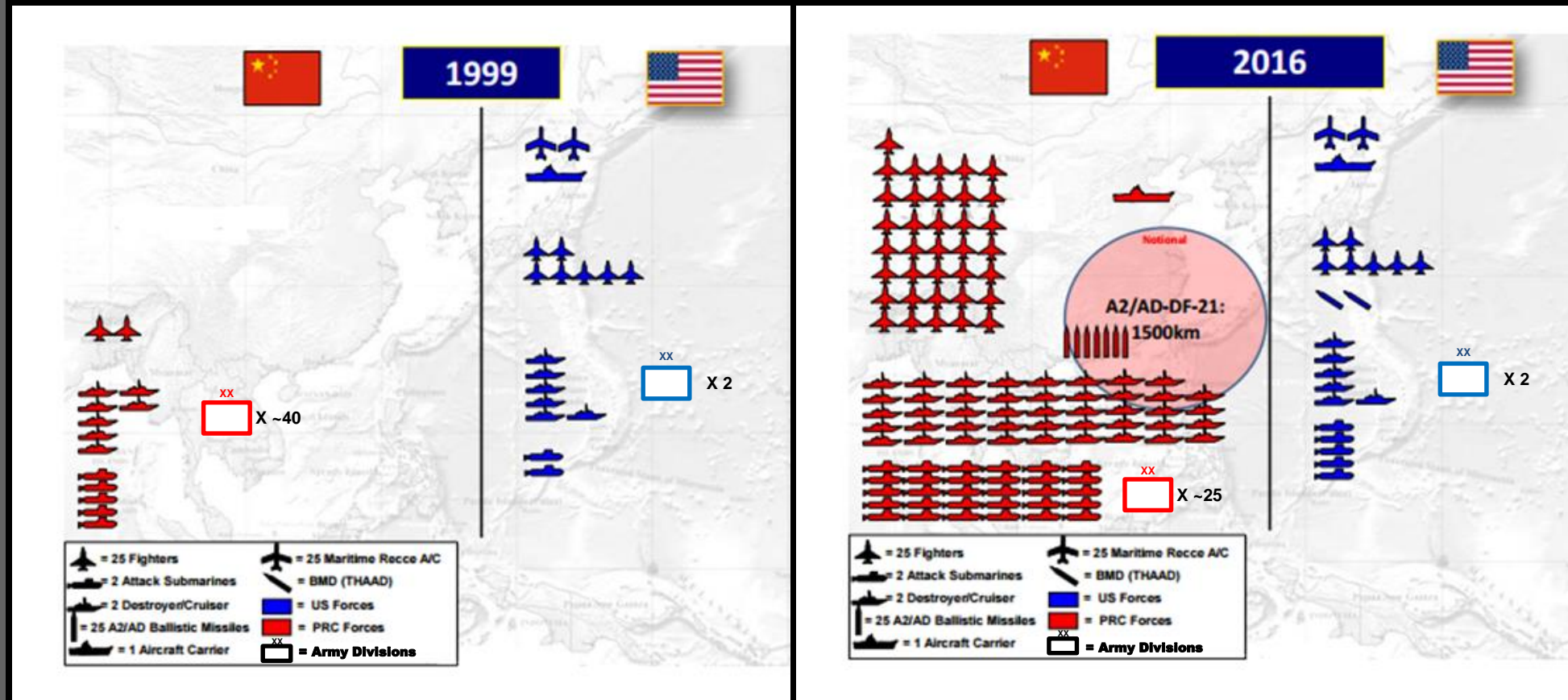
Relative Growth in Military Capabilities



- **Violent Extremism:**
Potential for ISIS / AQ expanding pockets of disenfranchised youth
- **Natural Disasters:**
Sustained potential for HA/DR support
- **U.S. is the Counterbalance:**
Many opportunities for engagement

U.S. Army Pacific Must:

- **Engage** continuously across the Region
- **Sustain** Alliances and Partnerships
- **Set The Theater** with *Foundational Capabilities* (Logistics, Communications, and Missile Defense)
- **Remain** Vigilant, Ready and Prepared

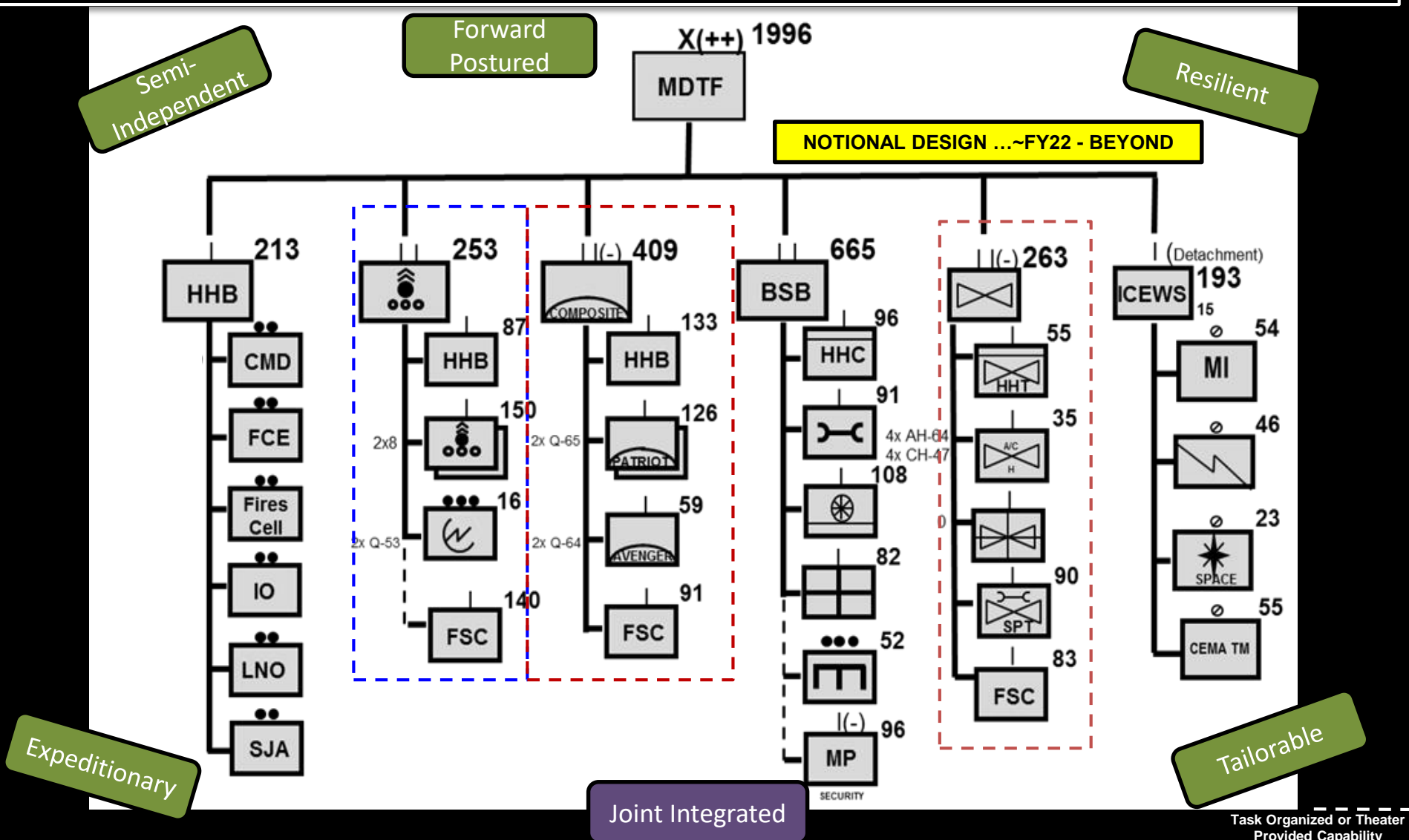


(U) Since 2015 the PLA began a force modularization converting Division-size elements into expeditionary Brigades

Multi-Domain Task Force (MDTF)



PURPOSE: MDTF will play critical role in **neutralizing enemy anti-access and area denial (A2AD)** capabilities by **opening windows of advantage** for Joint Force exploitation while **defending critical assets**, setting the conditions for follow-on offensive operations by the Joint Task Force (JTF) or headquarters that the MDTF supports.





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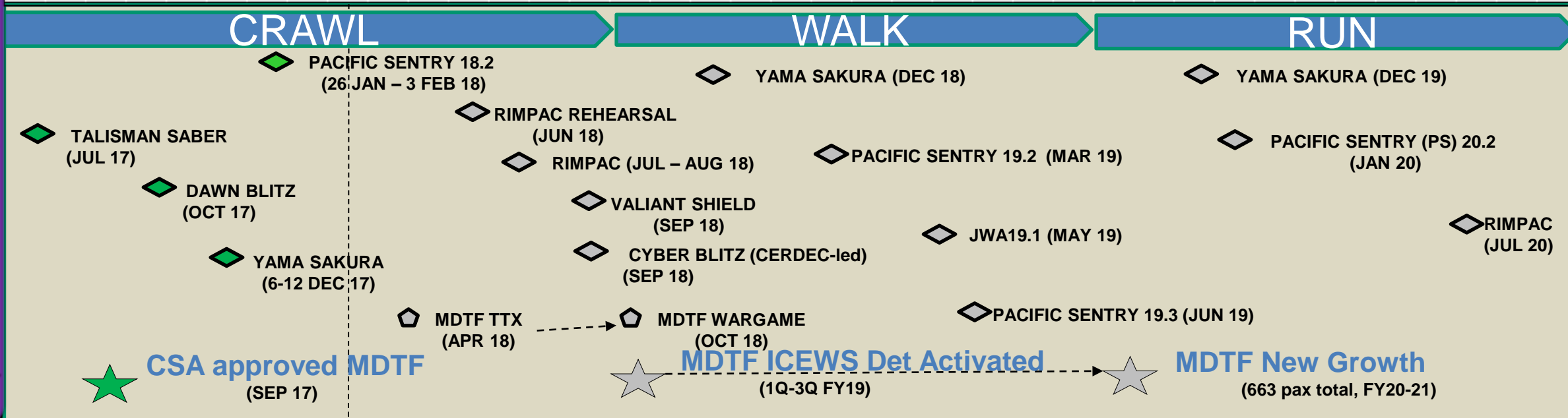
MDTF Pilot Program Exercise Plan



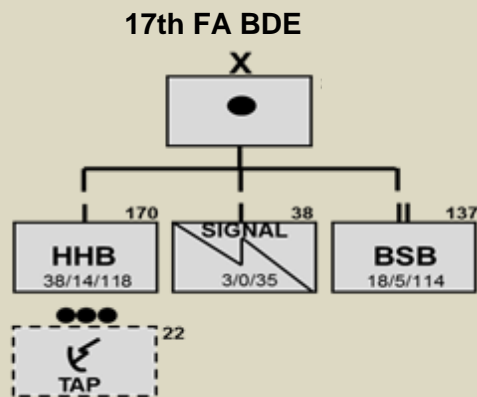
USARPAC / PACOM
(MJB Joint/Army Exercises)

MDTF Capability
Build

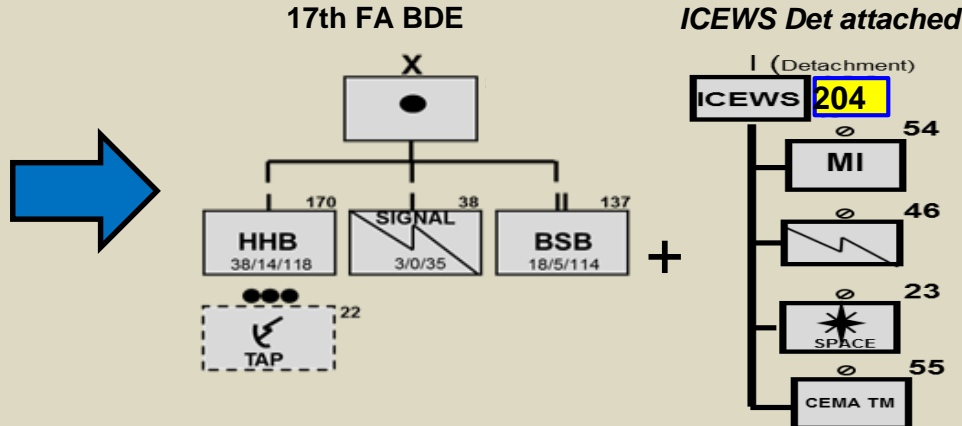
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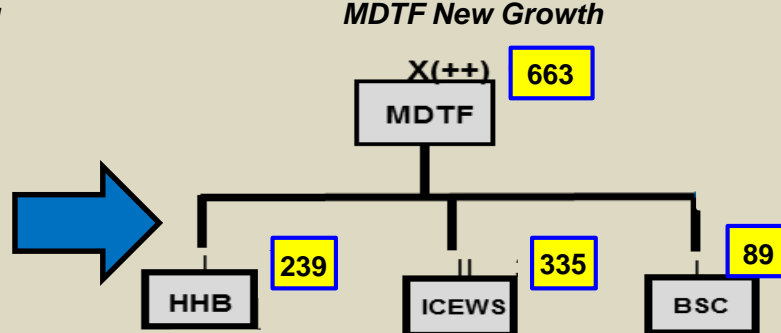
FY18



Present - FY19



~FY20 - 21





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Theater / Operational – Multi-Domain Battle Penetrate A2 / AD and Establish Operational Corridors



Establish Joint, Operational Strong Points

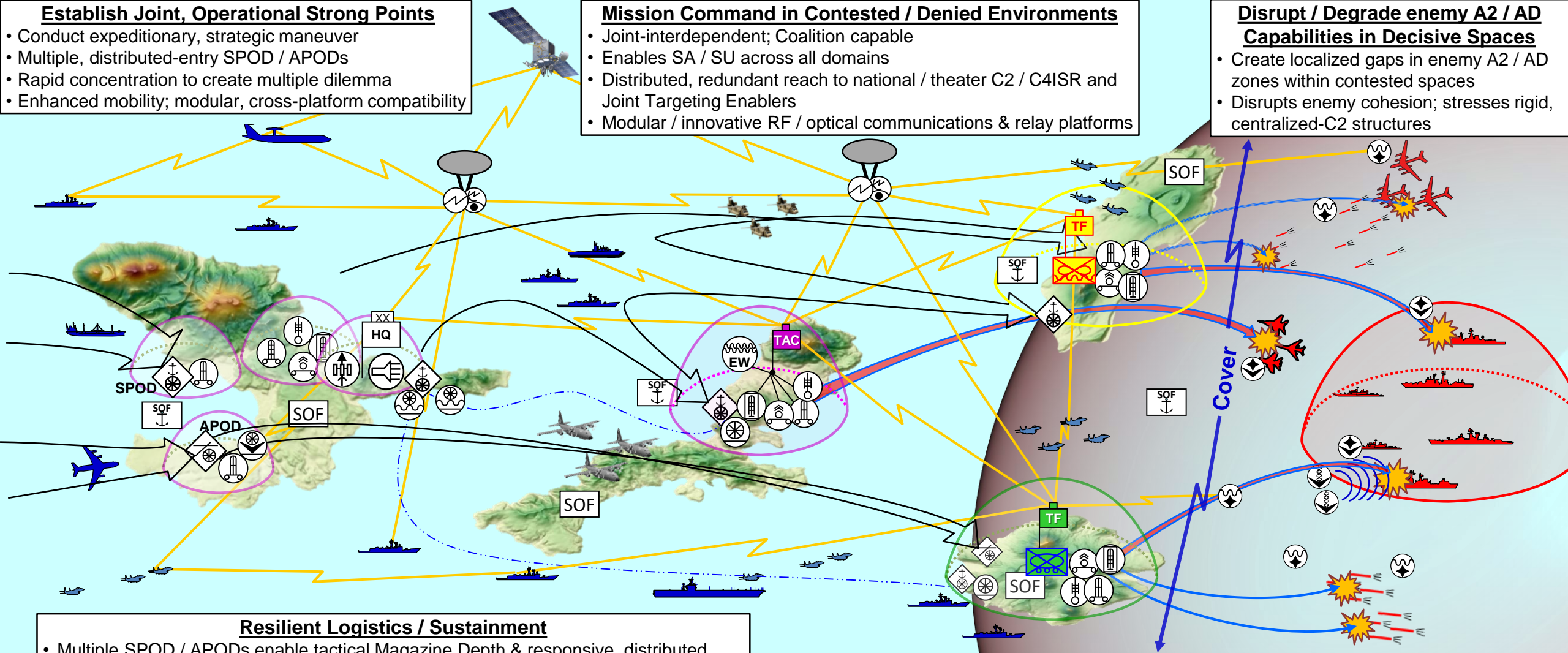
- Conduct expeditionary, strategic maneuver
- Multiple, distributed-entry SPOD / APODs
- Rapid concentration to create multiple dilemma
- Enhanced mobility; modular, cross-platform compatibility

Mission Command in Contested / Denied Environments

- Joint-interdependent; Coalition capable
- Enables SA / SU across all domains
- Distributed, redundant reach to national / theater C2 / C4ISR and Joint Targeting Enablers
- Modular / innovative RF / optical communications & relay platforms

Disrupt / Degrade enemy A2 / AD Capabilities in Decisive Spaces

- Create localized gaps in enemy A2 / AD zones within contested spaces
- Disrupts enemy cohesion; stresses rigid, centralized-C2 structures



Resilient Logistics / Sustainment

- Multiple SPOD / APODs enable tactical Magazine Depth & responsive, distributed sustainment (Land, Sea, Air)
- Able to receive – or further tailor – for distribution via land, sea & air to “point of need”
- Capabilities include VTOL / STOL (aerial), shallow-draft (amphibious) – autonomous and manned / unmanned teaming (MUMT) to enable precision delivery
- Leverages pre-positioned stocks, capability sets, host/partner nation goods/services

Long-range, Precision Fires (Strike and IAMD)

- Threaten / destroy enemy A2 / AD capabilities at range
- Destroy the “arrows” and the “archers”
- Leverages/integrates organic, Joint, national & partner ISR/capabilities
- CEMA, OSC/DSC (Space), EW / EA, Cyber & Info Operations

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