

VALIANT SHIELD 2020



**MULTI-DOMAIN
OPERATIONS CENTER**

VALIANT SHIELD 2020



**MULTI-DOMAIN
TASK FORCE**

VALIANT SHIELD 2020



PRECISION FIRES

VALIANT SHIELD 2020



MOVE MOUSE ACROSS IMAGE TO VIEW ANIMATION

ADVANCED IAMD

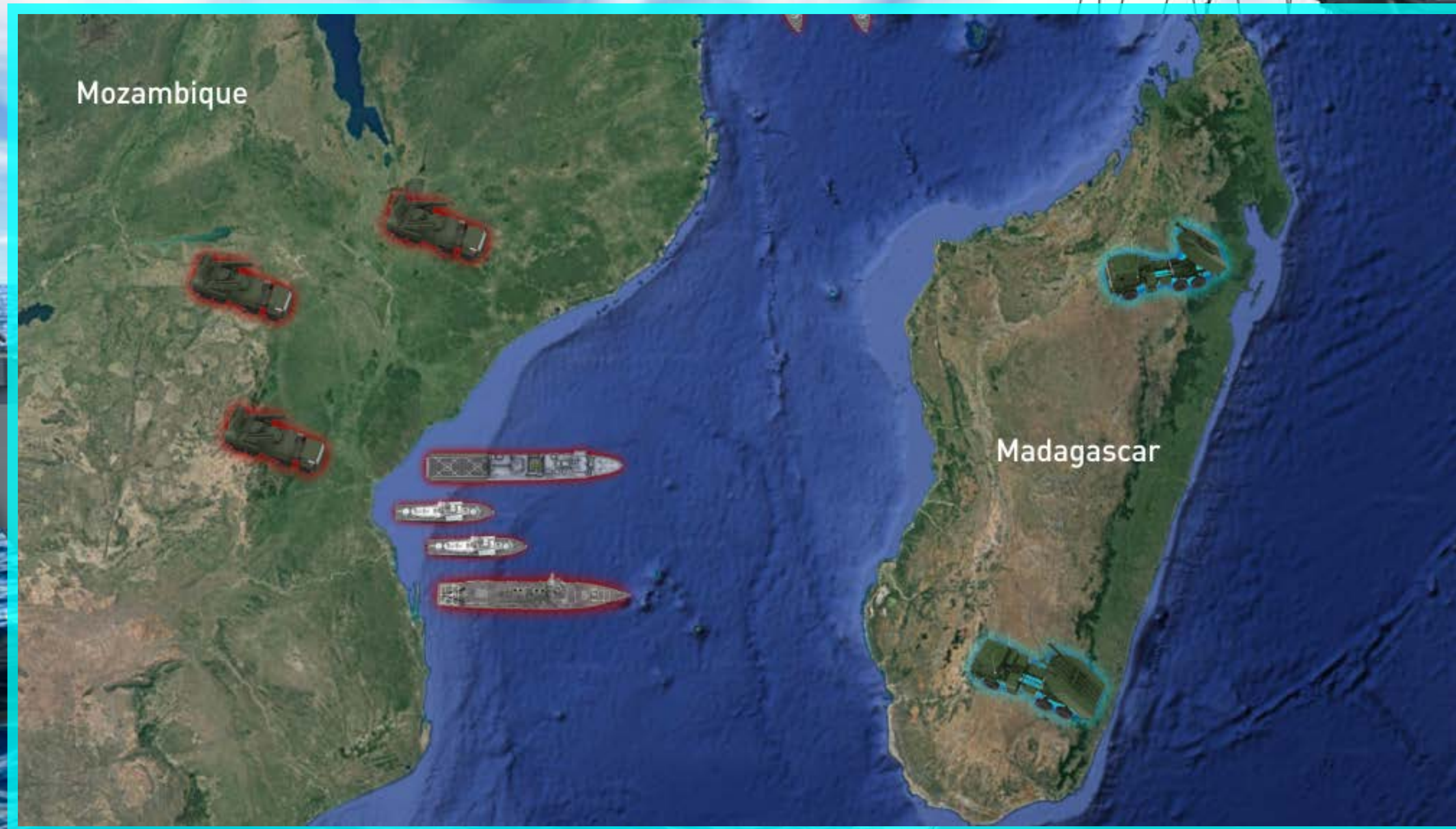
VALIANT SHIELD 2020



MOVE MOUSE ACROSS IMAGE TO VIEW ANIMATION

MULTI-DOMAIN BATTLE MANAGEMENT

VALIANT SHIELD 2020



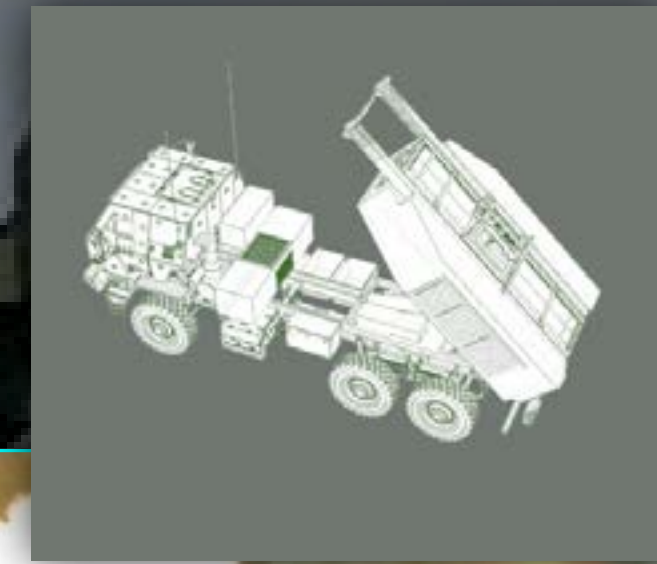
MOVE MOUSE ACROSS IMAGE TO VIEW ANIMATION

HIMARS ATACMS

HIGH MOBILITY ARTILLERY ROCKET SYSTEM

VALIANT SHIELD 2020

HIMARS is a lightweight mobile launcher, transportable via C-130 and larger aircraft for rapid deployment, that fires Guided Multiple Launch Rocket System (GMLRS) rockets, Army Tactical Missile System (ATACMS) missiles, the next-generation Precision Strike Missile (PrSM) and Extended-Range GMLRS rockets. HIMARS consists of a launcher loader module and fire control system mounted on a five-ton truck chassis. A specialized armored cab provides additional protection to the three crew members that operate the system.



ATACMS is a long-range guided missile that gives operational commanders the immediate firepower to win the deep battle. Each ATACMS missile is packaged in a MLRS look-alike launch pod and is fired from the MLRS Family of Launchers.

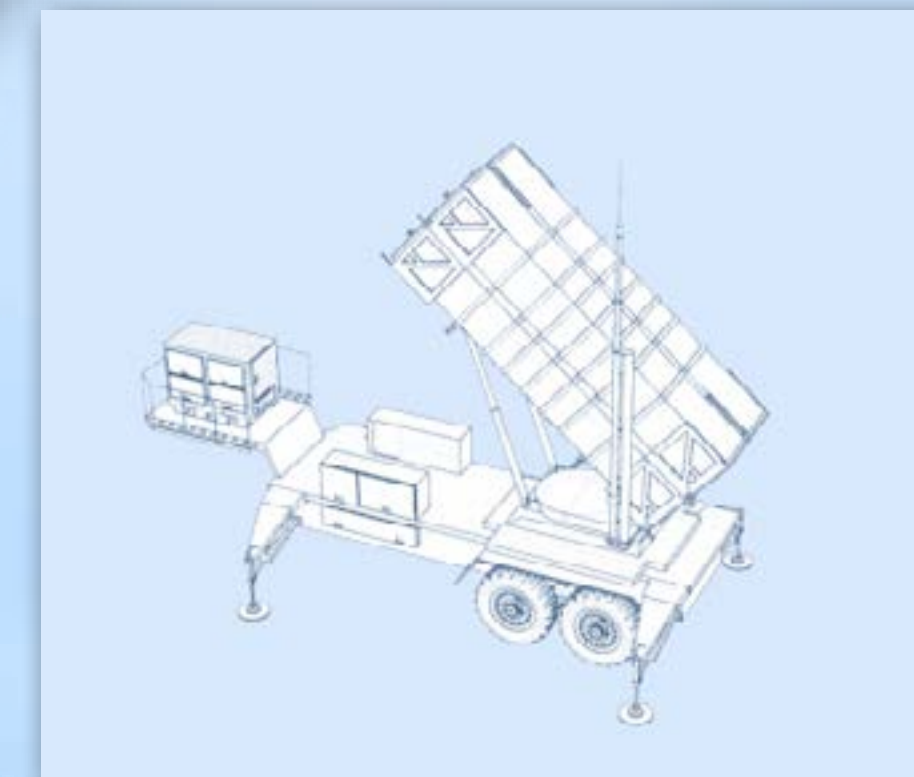
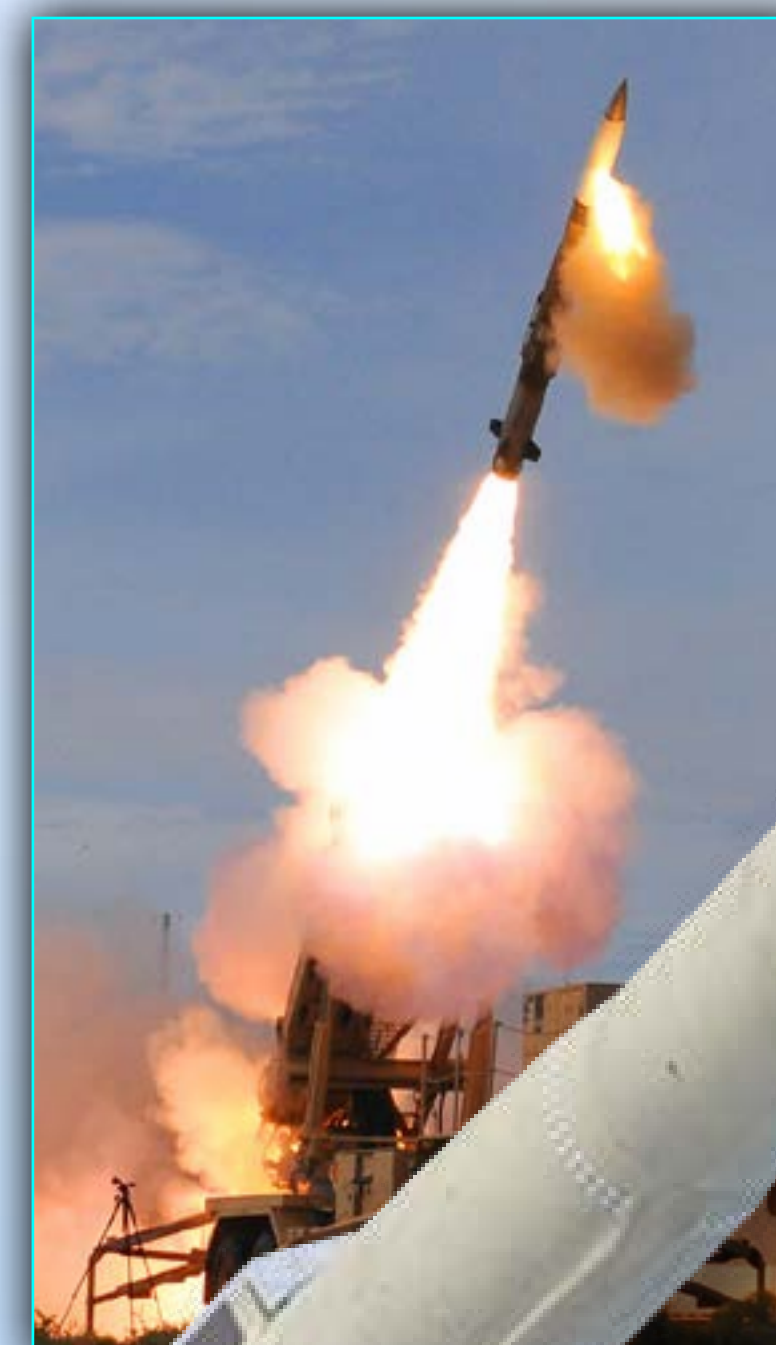


PAC-3 MSE

VALIANT SHIELD 2020

The PAC-3 family of missiles are the only combat proven Hit-to-Kill interceptors that defend against incoming threats, including tactical ballistic missiles, cruise missiles and aircraft. Building on the combat-proven PAC-3 Cost Reduction Initiative (CRI), the PAC-3 MSE expands the lethal battlespace with a two-pulse solid rocket motor, providing increased performance in altitude and range.

PAC-3 MSE In Flight



F-35

VALIANT SHIELD 2020

The F-35 strengthens national security, enhances global partnerships and powers economic growth. As the most lethal, survivable and connected fighter jet in the world, the F-35 gives pilots the critical advantage against any adversary, enabling them to execute their mission and come home safe.

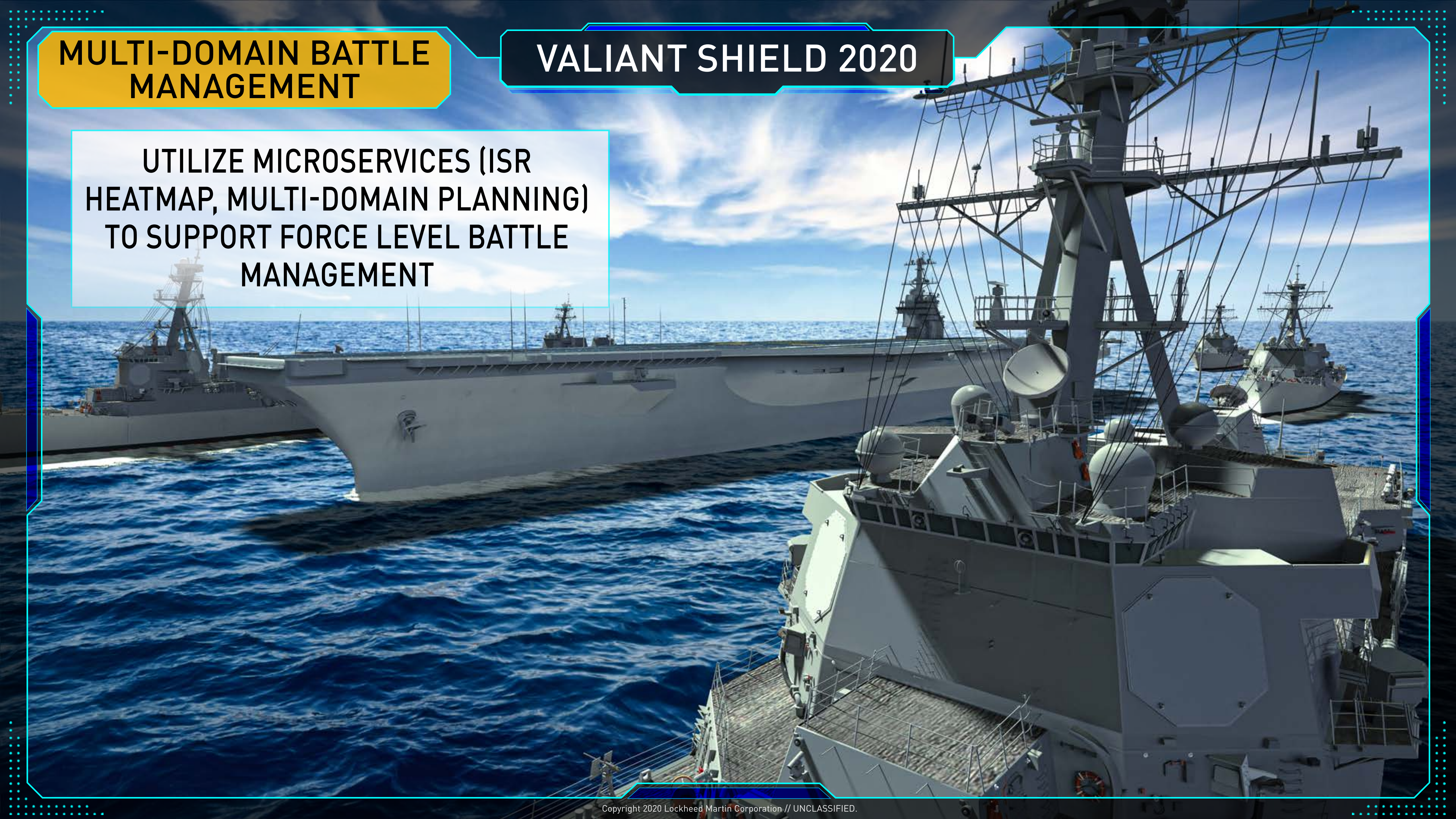


The F-35 brings a decisive advantage to the battlespace, providing an asymmetric advantage across the multi-domain spectrum. The F-35's transformational capabilities enable pilots to operate in any environment, against any threat. Simply put it is the most advanced multi-role fighter in the world – delivering unmatched lethality, survivability and connectivity.

MULTI-DOMAIN BATTLE MANAGEMENT

VALIANT SHIELD 2020

UTILIZE MICROSERVICES (ISR
HEATMAP, MULTI-DOMAIN PLANNING)
TO SUPPORT FORCE LEVEL BATTLE
MANAGEMENT



INTEGRATED COMBAT SYSTEM

Problem Statements:

- How can the Joint Force achieve a common operational picture (COP)?
- How can the Joint Force target maneuvering maritime targets?
- How can Joint fires be digitally coordinated?

Solutions:

1. Evolve Aegis to Integrated Combat System (ICS) & to Joint C2 node
2. Virtualization to deliver Aegis capability on new platforms & systems



1

Tenets of the Integrated Combat System

via OPNAV Surface Capability Evolution Plan (SCEP) Version PB20-04 v3

- Multi-ship Performance - Netted Combat Systems
Sensor and Engagement Coordination (HK/SK)
- Flexible & Resilient Composability
- Separate HW and SW - sustained Force-wide upgrades
- Cross-domain, UxS Integration
- Common combat system across the Force
- Integrates National to Tactical Systems
- Forward Edge Computing

2



Virtualized Aegis Weapon System (VAWS)

