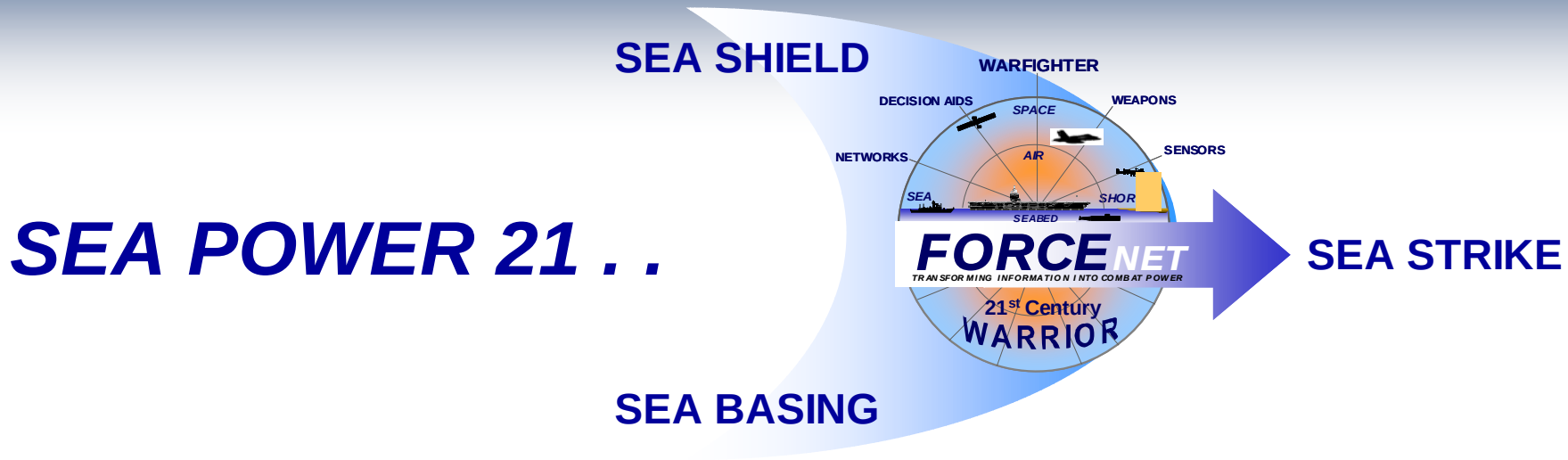

Navy Transformation

Network Centric Warfare and FORCEnet

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Naval Air Systems Command

24 September 2002

Report Documentation Page

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Why FORCEnet?

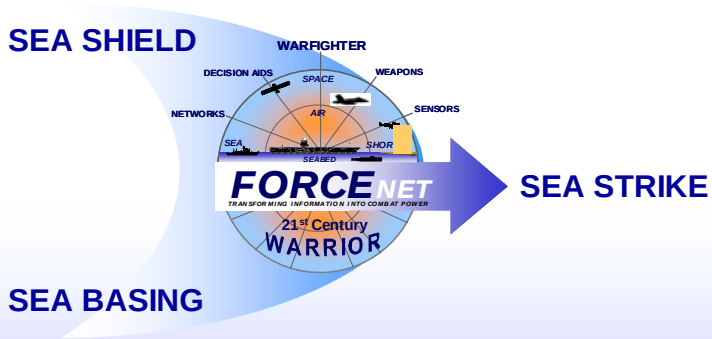
FORCEnet . . .

Transforming information into Combat Power

Why SEA POWER 21?

- Current force structure must adapt to changing threats and environments
- US Naval Forces must sustain combat advantage
- Must direct investments providing 21st Century Warrior with affordable, integrated and maximized kinetic effects

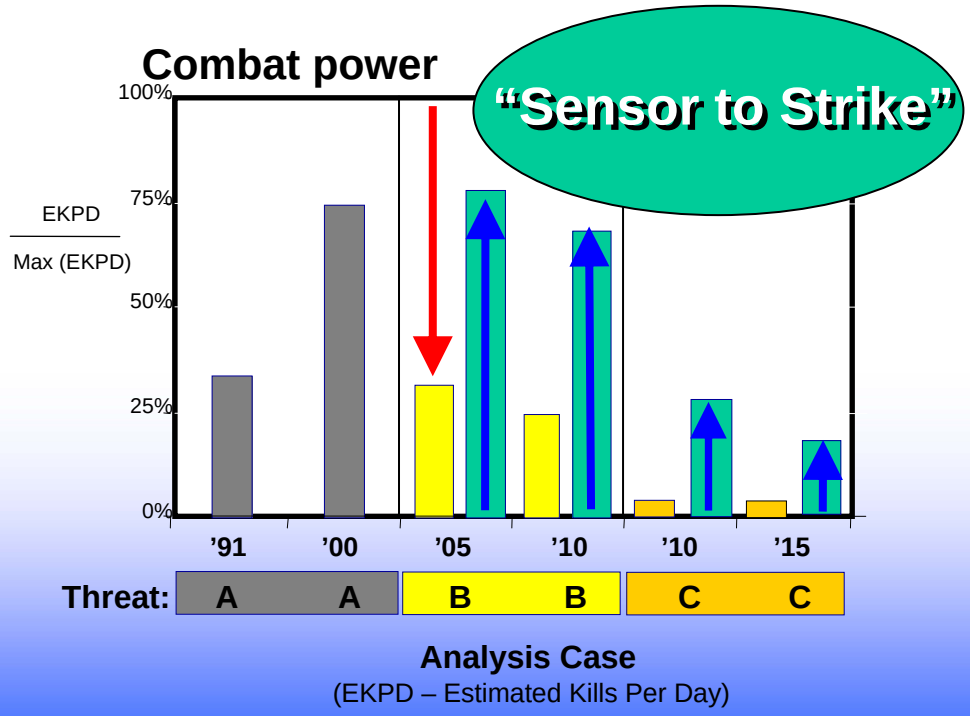
SEA POWER 21 . . .

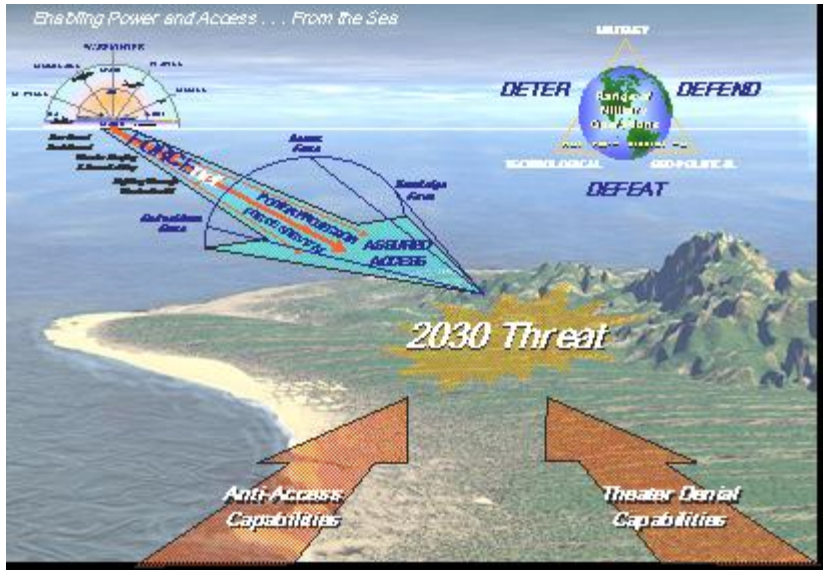


Transforming the Navy to meet 21st Century Challenges

Why SEA POWER 21?

NCW provides the dominant combat power as adversary capabilities grow



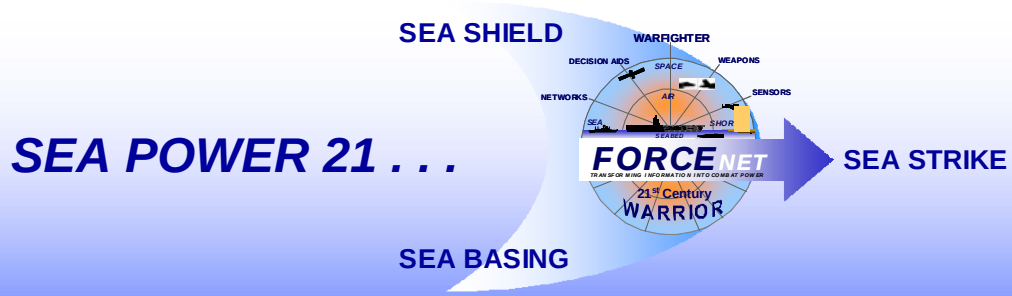


Advanced Combat Power for the Naval Force

- Pervasive Littoral Awareness
- Total Force Network
- Self-Synchronized, Effects-Based Information & Kinetic Operations

SEA POWER 21 Starts NOW

- **Incremental delivery of prototypes to Fleet through experimentation**
- **Integrate capabilities to deploying Naval forces according to the Blueprint**
- **Engage Industry**
- **Apply guiding concepts and requirements to POM**
- **Refocus recruiting, training and retention on 21st Century Warrior**
- **POM 04 supported**



Transforming the Navy to meet 21st Century Challenges

FORCEnet Definition*

"The operational construct and architectural framework for Naval Warfare in the Information Age which integrates Warriors, sensors, networks, command and control, platforms and weapons into a networked, distributed combat system, scalable across the spectrum of conflict from seabed to space and sea to land."

*SSG-XXI recommended definition from 22 July 02 CNO Briefing

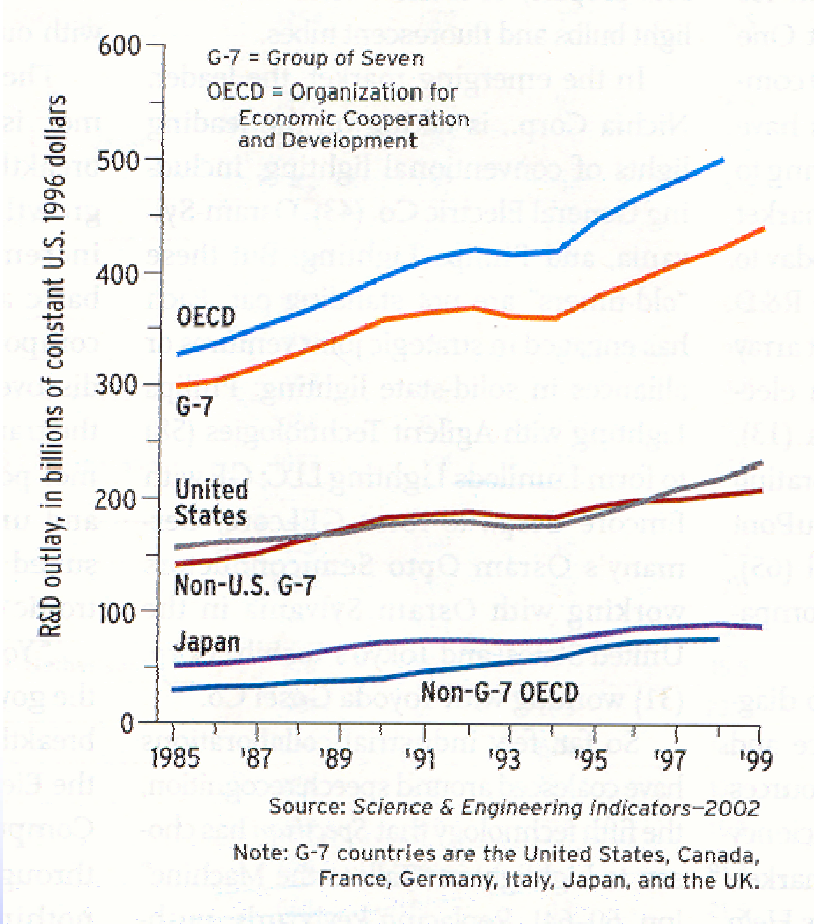
Our Challenge

- Can’t afford to maintain current force structure
- Can’t afford to lose next war
- Must redirect investments to provide the 21st Century Warrior with integrated, interoperable combat and combat support systems

FORCEnet . . .

Transforming information into Combat Power

International R&D Investment



R&D Expenditures (1985-1999)

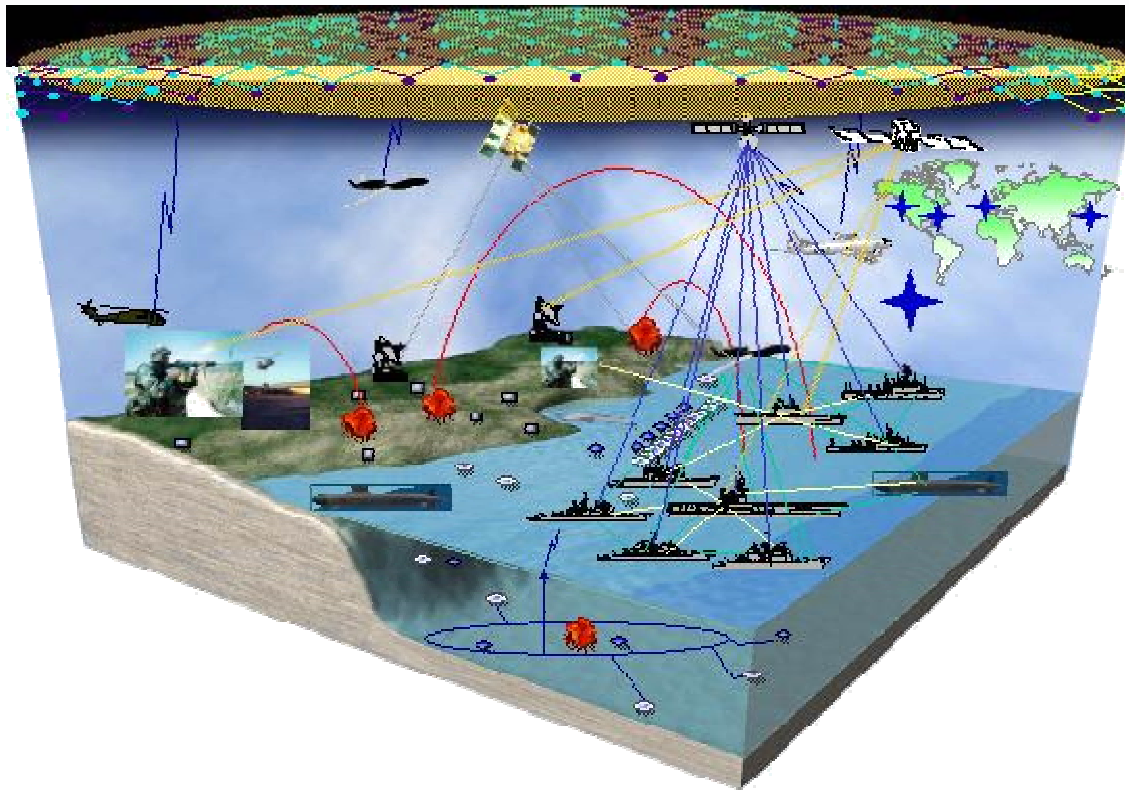
FORCEnet

Network Centric Warfare is the theory.

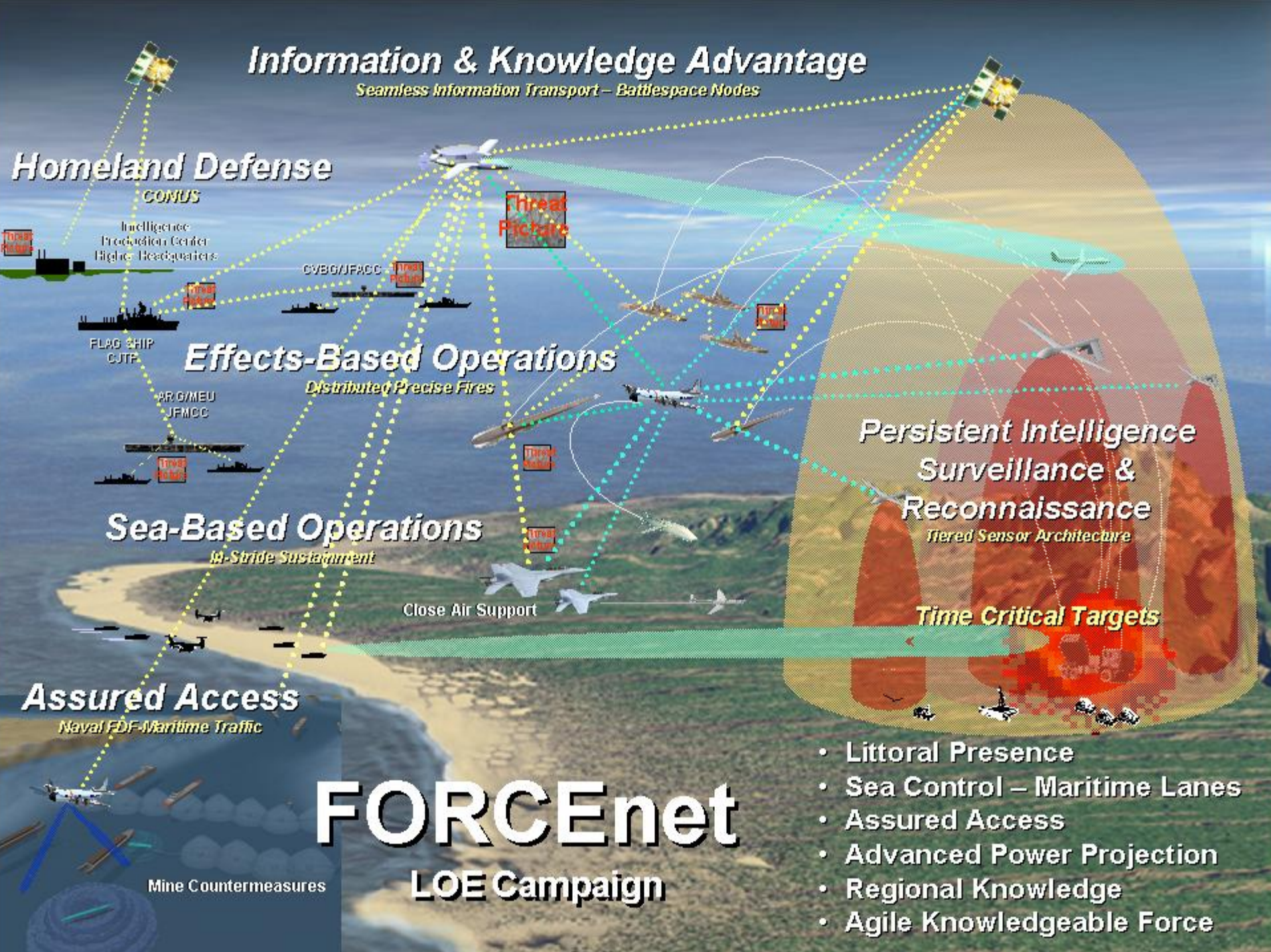
Network Centric Operations is the concept.

FORCEnet is the process of making the theory and concept a reality.

FORCEnet is the integration of sensors, networks, weapons, platforms, information and <u>people</u> to provide agile, lethal, efficient combat power.



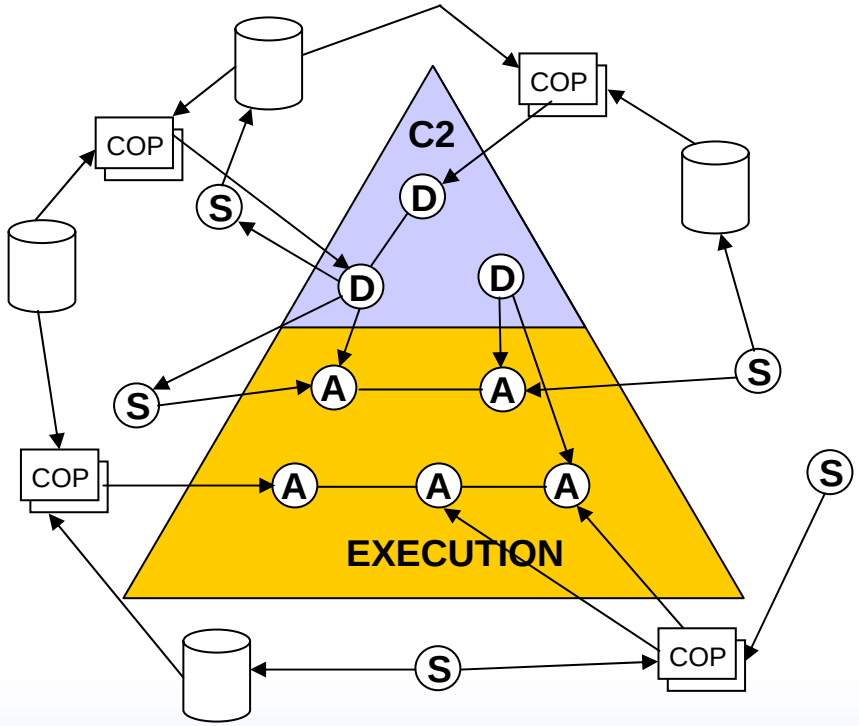
FORCEnet is the Systematic Acceleration of NCW to Reality


Information & Knowledge Advantage
Seamless Information Transport – Battlespace Nodes
Homeland Defense
CONUS
Intelligence Production Center Higher Headquarters
Threat Picture
CVBG/JFACC
FLAG SHIP CJTF
Effects-Based Operations
Distributed Precise Fires
ARG/MEU JFMCC
Persistent Intelligence Surveillance & Reconnaissance
Tiered Sensor Architecture
Sea-Based Operations
Sea-Stride Sustainment
Close Air Support
Time Critical Targets
Assured Access
Naval EDF-Maritime Traffic
Mine Countermeasures
FORCEnet
LOE Campaign
• Littoral Presence
• Sea Control – Maritime Lanes
• Assured Access
• Advanced Power Projection
• Regional Knowledge
• Agile Knowledgeable Force

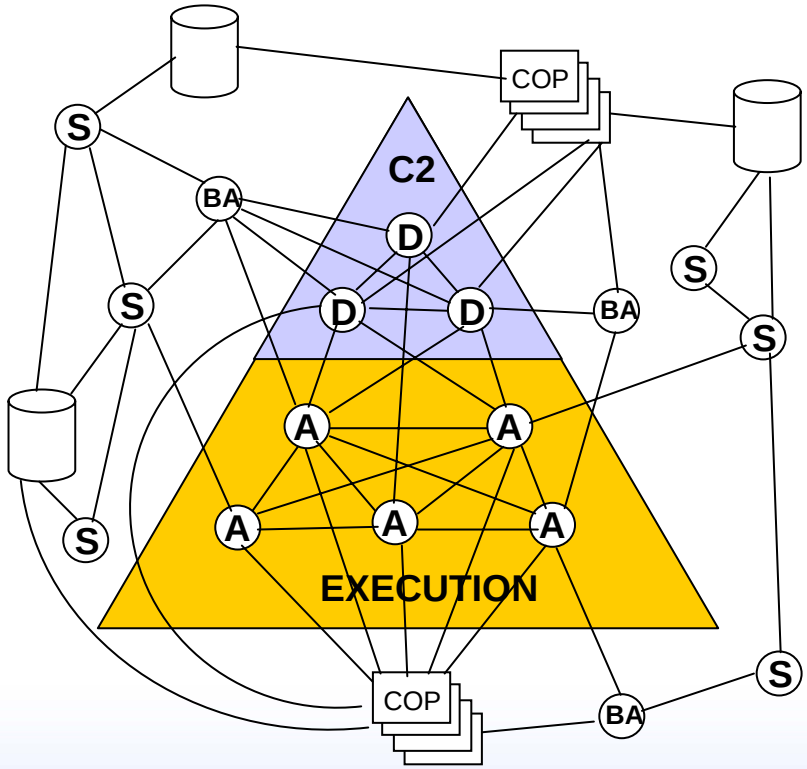
Network Centric Warfare - C4ISTAR Implications

Transforming Roles of Battlespace Entities

Late 20th Century



21st Century



Data & Information Store

COP Process

S Sensor Entities

A Actor Entities

BA Battlespace Agents

D Decision Entities

FORCEnet Human Element

- Provide the Fleet with highly skilled, trained, and continuously educated teams
- Task Force Excel and Sea Warrior
- Recruit, train, educate and retain skilled Sailors and Officers
- Create challenging learning opportunities with flexible incentive packages
- Support/meet both the Fleet and individual needs

STRONG CONTRIBUTOR TO HOLISTIC NAVY HR IMPROVEMENTS

Major Activities

- Enhanced Naval and Joint Force Experiments
- Industry to augment Naval, Joint experimentation
- Leverage Academic Institutions' initiatives
- Revised Mission Capability platform and equipment roadmaps driven by quantitative and qualitative analysis
- Modeling and simulation and war gaming coupled with enhanced integrated ground test systems
- Utilize Naval Warfare Systems Forum (NWSF) as a single POC for Navy Warfare Center's Laboratories (Foundation for FORCEnet Development Center)

SUMMARY

- FORCEnet is the foundation for Sea Power 21
- FORCEnet operations require a highly networked force supported by advances in information age capabilities
- 50% of FORCEnet will be the Human element - - 21st Century Warrior
- FORCEnet is not a box
  - Will serve as a catalyst for enabling Sea Power 21
- FORCEnet has no end state
  - Will evolve as technologies allow
- Implementing FORCEnet requires new organizational approaches and implementation strategies

A FULLY NETTED FORCE + 21ST CENTURY WARRIOR = FORCENET

FORCEnet Points of Contact

- OPNAV Leadership
  - VADM Nathman, N6/N7 (FORCEnet Director)
  - RADM Bowler, N60/N70
  - RADM Zelibor, N61
- FORCEnet Team Leadership
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    - 703-601-1791
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