## Transformation Study

## **Press Briefing**

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General Jim McCarthy, USAF Retired

## Transformation Study Context

- Undertaken by Institute for Defense Analyses
  - Federally Funded Research and Development Center (FFRDC)
- Two month study by a group of senior military professionals, scientific advisors and intelligence specialists
- Study is not a decisional briefing
  - Purpose was to provide Secretary of Defense with new concepts and approaches to transform the military
  - Integrated with other studies to form the intellectual basis for SECDEFs Quadrennial Defense Review

## **Broader Transformation Issues**

- Missile Defense
  - Integrate ballistic, cruise and air defense
  - Develop a single battle management concept
- Space Superiority
  - Support Space Commission Report
  - Fund EELV and follow-on access to space
  - Accelerate R&D on Space Maneuver Vehicle, Common Aerospace Vehicle and micro-satellites
- Information Dominance
  - Defense of networks needs significantly more resources
  - Major Information Warfare policy issues need to be worked
  - Sensor integration and information management require attention
- Intelligence
  - Dramatically improve access to adversary secrets
  - Combine intelligence and operational communication links
  - Share all sensors inputs with operational commanders rapidly
- Forward Based & Deployed Forces
  - provide rapid response and access globally

## Future Warfighting Concepts -- New and Different

- No capability is more important than situational knowledge <u>shared</u> among <u>all</u> elements of the joint force (much greater emphasis on "shared," "all,"and "joint"). This shared situational knowledge provides the foundation for new capabilities.
- New warfighting concepts include:
  - Projecting force both rapidly and potently to stop the aggression, killing, dying ...
  - Combining precision with speed (controlling the tempo)
  - More parallel, continuous and seamless operations (vice sequential, scheduled and segmented)

## Transforming Conventional Capability

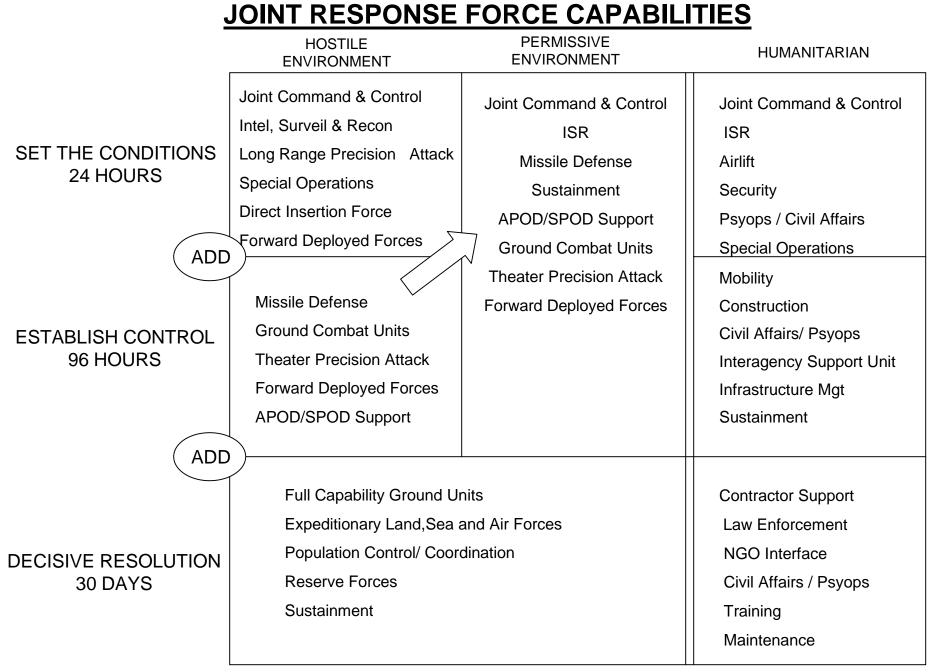
- Focus transformation on Global Joint Response Forces
- Ensure US forces have the capabilities to operate across the full spectrum -- major conflict through peacetime activities
- Significantly enhance operational capability by building a true joint integrated force capability
  - Organize, train and equip a standing joint command and control system
  - More frequent exercising and experimentation with Joint forces
- Transform early entry forces (the Joint Response Force Concept) as the first phase of eventual transformation of more of the force --
  - Priority recipient of proven transformational technologies and concepts
  - Experimentation and actual use will determine when and what to transform
- Build on forward deployed capability (stationed and rotating deployments)
- Its "tip of the spear" capabilities permits longer effective life for the legacy forces

## Why the Early Entry Joint Response Force Concept As the Focus for Transformation

- It meets a US strategic need: a greatly enhanced capability to act decisively before the facts on the ground become more difficult to change
- It presents an ambitious and demanding set of objectives much beyond what we have today and whose achievement would be truly transformational.
- Its "tip of the spear" capabilities permits longer effective life for the legacy forces
- It builds on emerging efforts in the Services and Joint Communities
- Its achievement does not require new physics or technical discovery
- The enabling capabilities needed to achieve the Joint Response Force objectives are broadly relevant to other elements of the force and other situations

## Elements of the Joint Response Force Concept

- Deployable Joint Command and Control system
- Tailorable force modules that train and exercise together
- Robust connectivity
- Pervasive networks of intelligence, surveillance, reconnaissance and targeting assets
- Long range precision strike and Information Operations
- Forward deployed forces
- Rapidly deployable ground component of the joint force
- Deploy and sustain without buildup of vulnerable logistic nodes and lines of communication
- Able to cope with WMD, missiles, mines, other anti-access measures



# Military Capabilities

- Achieving Information and Decision Superiority
  - Command and Control
  - Information and Communications
  - Intelligence, Surveillance and Reconnaissance
  - Information Operations
- Striking with Precision
  - Long Range Precision Attack
  - Time Critical Precision Targeting
  - Supporting Forces
  - Direct Force Insertion
- Deploying and Sustaining Military Power Rapidly
  - Command and Control
  - Deploying
  - Focused Logistics
  - Forward Basing and Infrastructure
- Dominating Land, Sea, Air and Space Battlespace
  - Command and Control
  - Maneuver and Mobility
  - Intelligence
  - Fires and Precision Attack
  - Logistics
  - Protection
  - Nuclear Chemical and Biological Defenses

## Transformational R&D

- Develop and mature the technology needed to enable midlong term continuous transformation
- Major thrusts
  - Information and Decision Superiority
  - Information Warfare offensive & defensive
  - Advanced Power
  - Directed energy
  - Stealth & counter stealth
  - Robotics
  - Non-lethal capabilities
  - CW/BW

## **Consequences of Transformation Focus**

### **Enhanced military capabilities**

- Establishes Integrated Joint Force Information/ Decision Superiority
- Enhances Striking with Precision
- Strengthens Global Power Projection of Forces
- Allows Rapid Land, Sea, Air, and Space Battlespace Dominance

### Other important consequences

- Force size offset by increased capability
- Reduced O&S cost
- Reduced logistics tail
- Faster application of new technology

# Institutionalizing Transformation

- Establish a means for independent input and assessment of transformation
- Establish USJFCOM as an integral part of the development and validation of future transformation visions and initiatives.
- Establish a SecDef Transformation Discretionary Fund
- Establish a periodic SecDef Transformation Review Process
- Establish an educational initiative to engrain transformational thought processes throughout the professional military and civilian career development paths.

# Study Conclusions

- Integration and synergy that true Jointness brings is the most powerful transformation concept
- Joint Command and Control is the most enabling transformation program
- Focus Transformation on new capabilities for Joint Response Forces
- Initiate new programs identified as essential in transformation
- Accelerate key special access programs
- Missile defense, space dominance, information dominance and intelligence are also essential transformation areas
- Institutionalize the transformation process in the DOD

## Achieving Information and Decision Superiority

#### • Value of the Capability

- To a much greater extent than today, be able to conduct operations that:
  - Operate inside the adversary's decision cycles
  - Combine both precision and speed (controlling the tempo)
  - Can respond rapidly and potently to the full range of contingencies
  - Are parallel, continuous and seamless rather than sequential, scheduled and segmented
  - Match tactical actions to strategic and operational ends (effects-based operations)
- Move from multi-service operations that merely deconflict services' jobs to joint operations that exploit the potential for synergy of true teams (whole greater than sum of the parts)

#### Critical Elements

- Command and Control
- Information and Communications
- Intelligence, Surveillance and Reconnaissance
- Information Operations

# Achieving Information and Decision Superiority: <u>Command and Control</u>

#### Key Operational Capabilities

 A cohesive, always available, joint Command and Control system (people, networks and decision tools) able to conduct rapid and decisive operations with distributed joint forces across the full spectrum of contingencies

#### **Enabling Capabilities**

- Joint Task Force headquarters (vice Service-centric)
  - Cohesive standing teams (vice pick-up)
  - Small, mobile, employing reach-back, collaborative tools
  - Flatter, adaptive structure
- Standards of readiness, response and performance (expect and enforce these standards as we do for weapon systems and other force elements)
- Integrated planning, execution, assessment (vice sequential and separate)
  - Family of decision support tools

# Achieving Information and Decision Superiority: <u>Command and Control</u>

**Key Transformation Programs** 

"**A**"

- Develop Joint Command and Control as a core competence
  - Provide JFCOM the resources and authority (working with other CINCs) to design, organize and equip prototype lean, distributed and adaptive Command and Control system and associated joint headquarters
    - Establish more frequent, tailored training and exercise cycles to provide the necessary levels of readiness and cohesion for those forces that may be part of the Joint Response Force
    - Establish a major cooperative JFCOM/DARPA program to develop new joint command and control systems and headquarters
    - Co-evolve new Command and Control concepts, doctrine, organizations, leader development and training with technology and materiel
    - Involve interagency and coalition partners

## Achieving Information and Decision Superiority: Command and Control

#### Key Transformation Programs (Continued)

"**A**"

- Develop Joint Command and Control as a core competence (2)
  - Establish and enforce standards of performance, readiness, response
    - Treat joint Command and Control (and associated networks) as we do combat systems
  - Establish lean standing, deployable joint headquarters for rapid joint force response at the regional CINCs
  - Evolve capabilities from JFCOM and theater experiments and exercises
  - Implement Family of Interoperable Operating Pictures (FIOP) and other collaborative tools for planning, execution and assessment
    - Multi-level, user tailored

# Striking with Precision

• Value of the Capability

Forces that Deter, Assure, Dissuade with capability to:

- Rapidly respond globally with U.S. based long range forces to lead or support deployed forces to strike many critical targets nearly simultaneously
- Integrate with forward operating forces as a single integrated force package
- Plan operations enroute to reduce response time
- Responsiveness improved by various alert postures that also demonstrate U.S. resolve.
- Directly insert ground forces to control centers of gravity
- Critical Elements
  - Long Range Precision Attack
  - Time Critical Precision Targeting
  - Supporting Forces
  - Direct Force Insertion

# Striking with Precision: Long Range Precision Attack

#### Key Operational Capabilities

- Offset the adversary's key access denial strategies
- Execute operational strikes from relative sanctuaries
- Penetrate defended air space and disable or destroy defenses
- Gain control of key airfields, seaports, and infrastructure
- Defend deployed forces

#### **Enabling Capabilities**

- ISR assets that can locate key adversary's defenses and nodes
- Stealth aircraft with precision munitions
- Cruise missiles with precision strike capability
- Escort aircraft for force protection
- Direct Insertion Forces with standoff protection

# Striking with Precision: Long Range Precision Attack

#### Key Transformation Programs

"**A**"

- Convert four Ohio SSBNs to SSGNs with maximum number of cruise missiles
- Enhance the B-2A force with large carriage capacity and flexible targeting capability
- Produce the Small Diameter Bomb
- Convert ALCMs to CALCMs; Increase B-52 conventional force for carriage
- Accelerate an improved Global Hawk deployment
- Develop stealthy Joint Long Range Cruise Missile
- Develop a new long range precision strike capability
- Accelerate Navy JSF fielding