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 shared among all 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
# Joint Response Force Capabilities

## Joint Command & Control
- Intel, Surveil & Recon
- Long Range Precision Attack
- Special Operations
- Direct Insertion Force
- Forward Deployed Forces

## Missile Defense
- Ground Combat Units
- Theater Precision Attack
- Forward Deployed Forces

## Full Capability Ground Units
- Expeditionary Land, Sea and Air Forces
- Reserve Forces
- Sustainment

## Joint Command & Control
- ISR
- Missile Defense
- Sustainment
- APOD/SPOD Support
- Ground Combat Units
- Theater Precision Attack
- Forward Deployed Forces

## Airlift

## Security

## Psyops / Civil Affairs

## Special Operations

## Populations Control / Coordination

## Reserve Forces

## Sustainment

## Mobility

## Construction

## Civil Affairs / Psyops

## Interagency Support Unit

## Infrastructure Mgt

## Humanitarian

## Contractor Support
- Law Enforcement
- NGO Interface
- Civil Affairs / Psyops
- Training
- Maintenance

## Hostile Environment

## Permissive Environment

## Humanitarian Environment

## Set the Conditions
- 24 Hours

## Establish Control
- 96 Hours

## Decisive Resolution
- 30 Days
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 mid-long 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: Command and Control

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: Command and Control

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