PSA Winter Roundtable 2008 Agenda

JOINT CAPABILITY AREAS OVERVIEW:
Joseph C. Bonnet, III—Deputy Director for Joint Force Development & Integration, Operational Plans & Joint Force Development Directorate (J-7), The Joint Staff

APPLICATION OF ISR CAPABILITIES TO TIGHTEN THE KILL CHAIN:
Colonel Dash Jamieson, USAF — AS/A2 Director, ISR Transformation
LRD LASE  DES Video  mpeg Movie file Window Media

THE JOINT CAPABILITIES INTEGRATION & DEVELOPMENT SYSTEM (JCIDS)—DEMONSTRATING RELEVANCE TO DECISION-MAKERS:
Lieutenant Colonel Prince Valin, USAF—Chief, Kinetic Weapons Branch, Force Application Engagement Division (J-8), The Joint Staff

MISSILES & WEAPONS MARKET IN PERSPECTIVE:
Jeff Ryder—Director, Strategic Markets, BAE Systems
U.S. HOUSE OF REPRESENTATIVES PERSPECTIVE ON DEFENSE WEAPONS SYSTEMS:
Representative Joe Sestak (D-PA, 7th District)—Member, House Armed Services Committee
(no presentation)

GMLRS OVERVIEW & LESSONS LEARNED FROM IRAQ AND AFGHANISTAN:
Colonel Gary Kinne, U.S. Army—TRADOC Capabilities Manager, Precision Fires, Rocket & Missile Systems
(presentation not approved for distribution)

CONGRESSIONAL OUTLOOK—DEFENSE CHALLENGES:
Richard B. Ladd—Chairman, Robison International, Inc.
(presentation not approved for distribution)

KEYNOTE ADDRESS: TOMORROW’S PRECISION ENGAGEMENT BATTLEFIELD CHALLENGES—DOD’S NATIONAL DEFENSE STRATEGY:
Honorable Ryan Henry—Principal Deputy Under Secretary of Defense for Policy
(presentation not approved for distribution)

JOINT CAPABILITY AREAS OVERVIEW:
Joseph C. Bonnet, III—Deputy Director for Joint Force Development & Integration, Operational Plans & Joint Force Development Directorate (J-7), The Joint Staff

CONGRESSIONAL STAFFERS’ PANEL—PRIORITIES AND ISSUES:
Greg Kiley
(presentation not approved for distribution)

A POLITICALLY INCORRECT GUIDE TO DEFENSE POLICY IN WASHINGTON
Peter Huessy—President, GeoStrategic Analysis
(presentation not approved for distribution)

APPLICATION OF ISR CAPABILITIES TO TIGHTEN THE KILL CHAIN:
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EMERGING TECHNOLOGIES FOR PRECISION WEAPONRY
Stephen Welby—Director, Tactical Technology Office, Defense Advanced Research Projects Agency
(presentation not approved for distribution)

MISSILES & WEAPONS MARKET IN PERSPECTIVE:
Jeff Ryder—Director, Strategic Markets, BAE Systems
Joint Capability Areas

Presented to

Future of Precision Strike Conference

23 Jan 08

Mr Joe Bonnet
Deputy Director for Force Development & Integration
Joint Staff J-7
JCA Lineage

Aldridge Study recommended them...

OSD asked for them...

OA-05 delivered them...

SECDEF directed them...

QDR and SPG re-affirmed them...

JROC approved refinement...

DSD directed Baseline Reassessment...

JROC approved 9 new Tier 1s...

JROC approved Tiers 1 – 3...

JROC approved Tiers 1 – 3...

DAWG approved Tiers 1 – 3...

15 Jan 08

13 Dec 07

23 Jul 07

15 Mar 07

24 Aug 06

22 Mar 06

6 May 05

30 Jan 05

6 Feb 06

27 Mar 07

15 Mar 07

22 Mar 06

30 Jan 05

6 May 05

JROCM 182-07

JROCM 193-06

OA-05 Recommendations

Joint Capabilities Study

QDR Findings and Implications

Joint Defense Capabilities Study

UNCLASSIFIED
Capabilities Based Approach

**Bottom-Up**

*Threat Based*

- Partially Interoperable Capabilities
- Late Integration
- Service Acquisition
- Service Experimentation, Assessment & Selection of Solutions
- Service Requirements

**Top-Down**

*Capabilities Based*

- Strategic Direction
- Joint Concepts
- Joint Experimentation, Assessment & Selection of Solutions
- Sponsors Build DOTMLPF Solutions
- Fielded Joint Capabilities
CBP Process Objectives

A top-down, competitive process that weighs options vs. resource constraints across a spectrum of challenges

• Link DoD decision-making to the Defense Strategy
  – Apportion risk across external challenges – traditional, irregular, catastrophic, and disruptive
  – At the level of portfolios and current/future concepts

• Inform risk tradespace – identify joint capability gaps, redundancies, and opportunities

• Facilitate the development of affordable capability portfolios that:
  – Hedge against uncertainty
  – Increase costs to adversaries while suppressing our costs

• Integrate and synchronize the requirements process, PPBE, and the acquisition system
JCAs...What Are They?

“…integral part of the evolving Capabilities-Based Planning process…the beginnings of a common language to discuss and describe capabilities across many related Department activities and processes.”
(SecDef Memo, 6 May 2005)

JCAs are collections of like DOD activities functionally grouped to support capability analysis, strategy development, investment decision making, capability portfolio management, and capabilities-based force development and operational planning.
(JCA Baseline Reassessment Terms of Reference)
“Develop a capability portfolio framework, building on the Joint Capability Area re-baseline effort...”

“...these manageable groups provide a common lexicon to compare Service contributions to joint warfighting and enterprise support and, therefore, support cross-Service trades.”

“As an integral part of the evolving Capabilities-Based Planning process...Joint Capability Areas representing the beginnings of a common language to discuss and describe capabilities across many related Department activities and processes.”

“The JCAs are fundamental to establishing a common language to support the many DoD capabilities-base planning processes.”
What Problem Does JCAs Address?

• DOD processes currently talk in five different languages...
  – Policy talks in terms of strategic priorities
  – Programming talks in terms of appropriations and PEs
  – Planning talks in terms of force packages
  – Acquisition talks in terms of cost, schedule and performance parameters
  – Requirements talks in terms of capabilities and gaps

• You cannot have an enterprise-wide capabilities-based strategy-to-task discussion without a common language

• JCAs have provided a rudimentary language which have some traction, but fall short of being ....

DoD’s Capabilities-Based Planning “Rosetta Stone”
“...To broaden JCA use as a framework for capability management throughout the Department, the following tasks are assigned:

• The Chairman of the Joint Chiefs of Staff will conduct a base line reassessment of the JCAs and provide an update to the Deputy’s Advisory Working Group...”
JROC Decision on Top-level JCAs

Criteria

- Functionally decomposed
- 100% of DOD capabilities
- Uniform decomposition
- Maximize mutual exclusivity
Current JCA Usage

- Organizing construct for GDF & JPG
- Organizing construct for assuming risk / increasing focus
- Strategy to task analysis
- Operational to Functional Concept crosswalk
- JCIDS documents
- IPL submissions
- Capability Prioritization
- Capability gap assessments
- Lines of Joint Experimentation (LOJX)

- Matrix Mapping Tool mapping to MDAPS
- Joint Testing & Evaluation analysis construct
- Program Element mapped to JCAs
- Linking Plans to Resources (LPTR)
- Defense Readiness Reporting System (DRRS)
- Global Force Management
- Critical Infrastructure Program vulnerability analysis
Joint Operations Concepts

STRATEGIC GUIDANCE

Capstone Concept for Joint Operations (CCJO)
Broad statement of how to operate 8-20 years in the future

Joint Operating Concepts (JOC)
Operational design and capabilities

1. Homeland Security 1.0 (Feb 04)
Homeland Defense and Civil Support 2.0 (in-progress)
2. Strategic Deterrence 1.0 (Feb 04)
Deterrence Operations 2.0 (Aug 06)
3. Major Combat Operations 1.0 / 2.0 (Sep 04 / Aug 06)
4. Stability Operations 1.0 (Sep 04)
Military Support to Stabilization, Security, Transition and Reconstruction Operations 2.0 (Aug 06)
5. Irregular Warfare 1.0 (Feb 07)
6. Shaping 1.0 (in-progress)

Joint Functional Concepts (JFC)
Enduring functional capabilities

1. Battlespace Awareness (Dec 03)
2. Command and Control (Feb 04)
3. Force Application (Feb 04)
4. Focused Logistics (Dec 03)
5. Force Management (Jun 05) *
6. Net-centric (Apr 05)
7. Protection (Jun 04)
8. Training (in-work) *

Joint Integrating Concepts (JIC)
JOC and/or JFC-derived tasks, conditions and standards

1. Global Strike (Jan 05)
2. Joint Forcible Entry Operations (Sep 04)
3. Joint Undersea Superiority (Jan 04)
4. Seabasing (Aug 05)
5. Integrated Air and Missile Defense (Dec 04)
6. Joint Logistics-Distribution (Dec 05)
7. Joint Command and Control (Aug 05)
8. Net-Centric Operational Environment (Oct 05)
9. Persistent ISR (in-progress)
10. Combating WMD (in-progress)
### Appendix C-2: Joint Capability Area Matrix

<table>
<thead>
<tr>
<th>SSTR Capability</th>
<th>Most Relevant JCA(ies)</th>
<th>Comparison - Implications</th>
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</thead>
<tbody>
<tr>
<td>U.S. Government Institutional Agility</td>
<td>Joint Command &amp; Control, Joint Logistics, Joint Shaping</td>
<td>Exercise Command Leadership; Manage Risk</td>
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<td>U.S. government institutions must be able to distribute funds, goods, and services rapidly and efficiently to successfully conduct SSTR operations</td>
<td>Joint Stability Operations, Joint Interagency/NGO Coordination</td>
<td>Joint Deployment/Rapid Distribution, Agile Sustainment, Joint Theater Logistics, Multinational Logistics</td>
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<tr>
<td>Building Military Partner Capacity, Building Military Partner Capacity</td>
<td>Basic Services Restoration; Humanitarian Assistance; Reconstruction</td>
<td>All Tier 2 Joint ID/OM/NGO Coordination JCAs</td>
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<td>The ability for DOD to systematically plan, program, budget, and allocate funds for SSTR operations</td>
<td>Joint Force Management</td>
<td>Future Capability Identification; Planning</td>
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<tr>
<td>Future Capability Identification; Planning</td>
<td>JCAs don’t cover PP&amp;E cycle</td>
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<tr>
<td>The ability for U.S. commands to have access to contingency funds that can be spent in a flexible and adaptive manner</td>
<td>Joint Force Management</td>
<td>Future Capability Identification; Planning</td>
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<tr>
<td>Joint Force Management</td>
<td>JCAs don’t cover PP&amp;E cycle</td>
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<tr>
<td>The ability for U.S. commands to rapidly bring to bear reliable, expert foreign and domestic contractor support a wide variety of SSTR undertakings</td>
<td>Tier 1 JCAs</td>
<td>No Tier 2 JCAs</td>
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<tr>
<td>JCAs don’t address contingency funds; tie to Tier 2 Restoration of Basic Services under Joint Stability Operations.</td>
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### SSTR JOC - 10 Critical Capabilities - Aligned to JCAs

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<tr>
<th>JCA</th>
<th>SSTR Capabilities</th>
<th>Indirect &amp; Asymmetric</th>
<th>Coord Control</th>
<th>Global</th>
<th>Kill Chain &amp; Attrition</th>
<th>Secure Environments</th>
<th>Humanitarian Assistance</th>
<th>Infrastructure &amp; Critical Exports</th>
<th>Support &amp; Ext Dev</th>
<th>Effective Influence &amp; Engagement</th>
<th>Effective Governance</th>
<th>Strategic Commitments</th>
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#### Force Application

**Engagement**
- Kinetic fires
- Non-Kinetic fires

**Maneuver**
- Maneuver to Engage
- Maneuver to Insert
- Maneuver to Influence
- Maneuver to Secure

#### Command & Control

**Organize**
- Establish & maintain unity of effort w/mission partners
- Structure organization to mission
- Foster organizational collaboration

**Understand**
- Develop & Share Situational Awareness
- Develop knowledge
- Share knowledge

**Plan**
- Analyze problem
- Apply situational understanding
- Develop strategy
- Develop courses of action
- Analyze course of action

**Decide**
- Manage risk
- Select actions
- Establish rule sets
- Establish intent and guidance
- Initiate

**Direct**
- Communicate intent and guidance
- Task
- Establish metrics

**Monitor**
- Assess compliance with guidance
- Assess effects
- Assess achievement of objectives
Joint Operating Concepts (JOC)

Joint Functional Concepts (JFC)

- Force Application
- Command & Control
- Battlespace Awareness
- Net-Centric
- Building Partnerships
- Protection
- Logistics
- Force Management
- Corporate Management & Spt

Vision

- Homeland Defense & Civil Support
- Major Combat Operations
- Deterrence Operations
- Shaping
- Irregular Warfare
Functionally aligned JCAs simplify the framework & increases utility across DOD by facilitating cross-referenced views by operations, components, processes, and activities.
LPTR : Informing Apportionment of Risk & Resources Across Plans

Rather than reduce mission risk by mitigating this capability gap, a Commander may prefer to reduce theater risk by mitigating this capability gap that is shared across multiple missions.

Similarly, a Commander can look across multiple missions to identify areas in which to accept increased risk that have minimal theater-wide impact.
Near-, Mid-, and Long-term Assessments

Execution / Budget Year (0-24 months: Current Force)

FYDP (2-7 years: Programmed Force)

FYDP+ (7+ years: Projected Future Force)

Undersea Warfare Assessments

Shortfall

Sufficiency
**Capability Prioritization Path**

- **Top Level JCA Construct** (DAWG Approved) **May 07**
- **POM Builds** **Feb-Aug 08**
- **CPP Test Case Prioritization** **JCB Oct 07**
- **CPP Decomposition** **JROC Approved Dec 07**
- **OA 08**
- **Sufficiency/Capacity Results (w/OA-08)** **Apr/May 08**
- **OA 08 Case Results** **DAWG Approved Feb 08**
- **CPP Round 2** **Target: Jul-Sep 08**
- **POM Lock Aug 08**
- **CPP Round 2 Brief to JROC** **Target: Oct 08**
- **POM Build**
- **CPP Assessment JROC (Phase I,II) Target: Jun 08**
- **JPG Developed OSD(PA&E) May / Jun 08**
- **Sufficiency & Capacity Results (w/OA-08)**
- **JCA 101**
- **JCA 102**
- **JCA 101**
- **JCA 102**

**Targets:**
- POM 2011
- PBR IP Guidance
- GDF Oct 08

**POM2012**
- NSS 09
- NMS 09
- GDF 09
- GEF 09
Overlap in UTCs and JCAs makes this process significantly more difficult.
Joint Capability Development Process

Policy

Concepts

Capability Assessment

Provide Operational Capability with fielded Systems to meet Warfighter requirements

assesses potential programmed capabilities in a warfighting operational context

Process that decomposes from policy guidance to warfighting concepts to Joint Capability Areas, to fielded material and non-material solutions
Proposed LP Approach

- For each major system, determine capability contribution to each JCA by scenario (1-n)
- Assess total capability contribution (supply) against OPLAN (demand) by scenario

Assesses Gaps and Overages at the Enterprise Level

LP Measurable Attributes (Metrics)

- Characteristics
  - Multiple significant attributes of each JCA
  - Evaluate attributes separately for each scenario
- Challenges
  - Determine appropriate attributes
  - Prescribe attributes as effects (behavioral & function)
  - Ensure attributes allow flexibility in means and ways
  - Validate assessments in more detailed campaign models
- Benefits
  - Accounts for range of system contributions
  - Enables competition across means to achieve effect
  - Separates Services’ supply from COCOMs’ demands
  - May assist determining portfolio funding level
Illustration of the Preemptive Goal Programming Solution Space – Robust Solution across Capabilities

Problem Data:

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<th>System</th>
<th>Rate of Contribution to Capability</th>
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<tr>
<td>Platform 1</td>
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<td>Platform 2</td>
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<th>Priority</th>
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<td>C1 &gt;= 20</td>
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<td>3rd</td>
<td>C3 &gt;= 20</td>
</tr>
<tr>
<td>4th</td>
<td>C1 &gt;= 30</td>
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</table>

Weighted Goal Program
Feasible Region Formed by Budget Constraint

Preemptive Goal Program
Feasible Region Reduced by First Goal

Corner Solutions

<table>
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<tr>
<th>Systems</th>
<th>Capability Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform 1</td>
<td>Platform 2</td>
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<td>2</td>
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<tr>
<td>S2</td>
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Note: Each solution has best and worst capability values.

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<th>Systems</th>
<th>Capability Levels</th>
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<tbody>
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<td>Platform 1</td>
<td>Platform 2</td>
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Note: The new solution meets all the goals with good, not best, values across the goals.
System Capability Contribution to JCAs

**Scenario 1**

**Sample Portion of STRATCOM Model**
JCAs / JE Integration

JCDE Community & FCBs
Assess WFCs ID’s potential Solutions sets/ JE activities & venues

FCBs
Continuous Involvement in JE Activities

JE Results & Recommendations
Results & Recommendations are tied to JCA Tier I & II

Service/CoCom WFC inputs
Asks for JCA Tier I & II Applicability, Org priority, and 2-5?’s the org wants to answer with JE

JCDE Enterprise Develops Lines of Joint Experimentation (LOJX)

JE CPlan Developed & approved By JCDE community

JE Execution

Annual JE Status & Recommendations Report to JROC
Recommended Lines of Joint Experimentation (LOJX) by JCDE Community

Command and Control
Net-Centric
Force Application
Battlespace Awareness
Force Projection
Logistics
Protection
Building Partnerships
Homeland Defense
Combating WMD
Irregular Warfare
Cyberspace Operations

JFCOM uses approved model to begin binning 129 WFCs by proposed LOJX and conducting Prelim analysis for FY 09-11 JE CPlan
Way Forward

- 6 Dec: JROC
- 13 Dec: JROC Executive Session
- 15 Jan: DAWG

Post DAWG Actions

- Support DJS & PDUSD(P) in developing Departmental JCA implementation plan
- Follow-on refinement; directed by flag level steering group, and approved by DJS & PDUSD(P)
- Deploy JCA Management System (JCAMS)
  - Web-base authoritative JCA database
  - Rebaselined JCAs mapped to initial 21 tier 1 & 240 tier 2 JCAs
- Update JCA linkages
  - UJTLs
  - PEs
  - MDAPs
Questions?
### UTC to JCA Mapping

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<th>ID</th>
<th>UTC</th>
<th>Group Name (Gen)</th>
<th>UnitTypeNm</th>
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Note: The table above represents a mapping of UTC to JCA, indicating the corresponding groups and units for each entry.
“Although I recognize this lexicon needs further development, I encourage you to begin using the Joint Capability Areas where appropriate. The attached action items address specific taskers.”

- Incorporate the JCAs where appropriate across acquisition activities including the DAB, capability roadmaps, and technology investment decision opportunities
- Incorporate the JCAs as appropriate into future Defense Planning Scenarios (DPSs) and Strategic Planning Guidance (SPG)
- Refine Tier 2 layer of capabilities lexicon as required to provide sufficient detail to enhance usefulness
- Use the capabilities lexicon in the continued evolution of the Joint Capabilities Integration Development System (JCIDS) where appropriate
- Integrate the capabilities lexicon into the future Universal Joint Task List (UJTL)
- Incorporate the JCA into evolving Global Force Management (GFM) and Joint Force Provider (JFP) initiatives where appropriate
MEMORANDUM FOR DISTRIBUTION

Subject: Joint Capability Area Baseline Reassessment

1. The Joint Requirements Oversight Council (JROC) approved a functional restructuring of the Joint Capability Areas. The following nine top level Joint Capability Areas were approved: Force Application, Influence, Command and Control, Net-Centric, Battlespace Awareness, Protection, Logistics, Force Support, and Corporate Management and Support.

2. The JROC requests assistance from addressees in providing the necessary manpower and analytical support to ensure key objectives are achieved.

E. P. GIAMBASTIANI
Admiral, US Navy
Vice Chairman
of the Joint Chiefs of Staff

DISTRIBUTION:
Under Secretary of Defense (Acquisition, Technology and Logistics)
Under Secretary of Defense (Intelligence)
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Commander, US Forces Command
Commander, US Northern Command
Commander, US Pacific Command
Commander, US Southern Command
Commander, US Special Operations Command
Commander, US Strategic Command
Commander, US Transportation Command
Vice Chief of Staff, US Army
Vice Chief of Naval Operations
Vice Chief of Staff, US Air Force
Background Study Guidance

Joint Defense Capabilities Study
(“The Aldridge Study”) – Jan 04

The Problem Today

If you want to answer...
• What? How Much? When? Then...

At the Department level, you need to:
• Elevate the discussion above the platform and “single solution” level
• Communicate consistently, with a shared vision and common language
• Have a single set of facts and assumptions to guide analysis and decisions

- To-Be

• Joint community defines Joint needs
• Allows Services to map to Joint capabilities
• Facilitates analysis by capability

- As-Is

• Currently no linkage to commonly defined Joint capabilities
• Difficult to do cross-Service capability trades
• Services define Joint capability needs

Joint Force Capabilities Assessment (JFCA) Sub-Study language: “identify, organize and prioritize capabilities required for the Defense Strategy.” (S: 30 Jan 05)
What Needs To Be Done

- Reach a common definition of “capability” and associated terms
- Identify capability categories (functional and operational)
- Develop a hierarchy of capability categories that support:
  - Cross Service trades
  - Strategy guidance articulation
  - Inclusion of operational and support capabilities
  - Gap analyses and evaluation of program contributions to the capability
  - Assessment of program execution
- Develop a compatible planning and programming framework
- Foster a “capabilities culture” that considers divestiture in tandem with initiatives; integrates risk; considers near and far term needs; is fiscally responsible
(U) Joint Force Capabilities Assessment. Taking into account the modular forces and capability equivalency substitution framework tasked later in this document (see Section IV, Global Force Management), the OA 05 study will identify, organize, and prioritize capabilities required for the Defense Strategy. The identification of joint force requirements will be based on both warfighting analyses and rotational methodologies.
Recent Strategic Direction - 2006 QDR & SPG

- Reaffirms Department’s shift from Threat-Based Planning to Capabilities-Based Planning
- Links JCAs specifically to joint capability portfolio concept
- Emphasizes the need to manage the Department via joint capability portfolios to meet President & Combatant Commanders’ needs
  - Initial effort includes 3 JCAs
    (Joint C2, Joint Net Centric Operations, Joint Space Operations*)
  - Plans to expand to other JCAs
- Lauds PACOM’s efforts (Linking Plans to Resources (LPTR)) to map resource needs to plans and operations
  - Working to expand program to enable Department-wide assessment of JCAs

* DAWG deleted Space Operations; added Battlespace Awareness & Joint Logistics
130 respondents of which 109 use JCAs

- COCOMs – 60
- Services – 28
- OSD – 2
- Joint Staff – 19
(Survey Question # 2 / 2a)
How an organization benefits from and uses JCAs

- JCAs being used across all activities
- Cross-talk between activities beginning
- Preponderance of use seems to be in requirements and portfolio management
- Use is based on utility rather than DoD directive
Written comments discussing how JCAs have limited an organizations use and suggestions for improvement (Survey Question #2b)

- 75 survey respondents had written comments
- 43% of respondents indicate JCAs need additional detail (*too general* + *decompose*)
- Reduce overlap and decompose comments mirror check blocks
- No common theme for “add / delete / modify”. All address individual “issues of the day”
  - Combating WMD
  - IED Defeat
  - Force Readiness
  - Homeland Defense binning

![Pie chart showing percentages of responses]

- JCAs too general / too many gaps / seams (32%)
- No limit to use (20%)
- Reduce overlaps / simplify (11%)
- Decompose (11%)
- Add / delete / modify current JCAs (23%)
- Non warfighting issues (include or not) (3%)
Overwhelming response for reducing overlap and improving level of detail
- 61% say reduce overlap
- 61% say decompose further
- Majority of responses in “Other” amplify first two responses (see next chart)
Written comments suggesting improvements to the JCA Framework
(Survey Question #3)

- 56 survey respondents had written “specify / explain” comments for question 3
- Reduce overlap and decompose comments mirror in check blocks
- Identifies a need for a guidance and educational effort
- Comments regarding adding JCA were “issues of the day” type
Battlespace Awareness – UJTL Structure & JCA Tier 2s
Visualizing the Overlap

129 UJTL tasks mapped to Joint Battlespace Awareness

95 “core” Intelligence tasks

Joint Battlespace Awareness displayed as RED

UJTL Task: Plan  Collect  Process  Produce  Disem  Eval  Tgt  S:A

Targeting tasks
Situation Awareness tasks
<table>
<thead>
<tr>
<th>Force Application</th>
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<tr>
<td>Conduct Op Movement and Maneuver</td>
<td>Joint Lead Ops</td>
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| Undersea Warfare                         |                        |
| Antisubmarine Warfare                    |                        |
| Subsurface Warfare                       |                        |
| Mine Warfare                             |                        |
| Mine Countermeasures (MCM)               |                        |
| Mining                                   |                        |

| Maritime/Interdictive Ops                |                        |
| Sea Lines of Communication Disruption    |                        |
| Maritime Interdiction                    |                        |

| Maritime/Littoral Expeditionary Ops      |                        |
| Amphibious Force Operations              |                        |
| Riverine Operations                      |                        |
| Advance Force Operations                 |                        |

| Maritime/Littoral Fires                  |                        |
| Naval Fire Support                       |                        |

| Ocean/Hydro/River Survey & Op Ops        |                        |
| Space Control                            |                        |
| Space Force Application                   |                        |
| Offensive Counterair Ops                  |                        |

| Joint Space Operations                    |                        |
| SEAD                                      |                        |
| Offensive Counterair Sweep                |                        |
| Escort                                    |                        |
| Offensive Counterair Attack Operations    |                        |

| Strategic Attack                          |                        |
| Conventional, Kinetic Attack              |                        |

| Air Interdiction                          |                        |
| Tactical Air Support                      |                        |
| Close Air Support                         |                        |

| Joint Air Operations                      |                        |
| Assault Support Operations                |                        |

| Special Operations                        |                        |
| Special Recon                             |                        |

| Joint Special Ops & Irregular Ops         |                        |

| Kinetic Fires                             |                        |
| Fixed Target                              |                        |
| Above surface                             |                        |
| Surface                                   |                        |
| Sub-surface                               |                        |
| Cyber                                     |                        |

| Mobile Targets                            |                        |
| Above surface                             |                        |
| Surface                                   |                        |
| Sub-surface                               |                        |
| Cyber                                     |                        |

| Non-kinetic Fires                         |                        |
| Fixed Target                              |                        |
| Above surface                             |                        |
| Surface                                   |                        |
| Sub-surface                               |                        |
| Cyber                                     |                        |

| Mobile Targets                            |                        |
| Above surface                             |                        |
| Surface                                   |                        |
| Sub-surface                               |                        |
| Cyber                                     |                        |

| Maneuver                                  |                        |
| Mobility                                  |                        |
| Above surface                             |                        |
| Maritime                                  |                        |
| Sub-surface                               |                        |
| Tunnel                                    |                        |
| Maritime                                  |                        |
| Cyber                                     |                        |

| Counter-Mobility                          |                        |
| Surface                                   |                        |
| Land                                      |                        |
| Maritime                                  |                        |

46
Experience and Analysis on JCA Use

• **Senior Leaders**
  – Too complex; fewer is better
  – Reduce overlap; endorsed way ahead

• **COCOMs**
  – Eliminate redundancy
  – Align functionally
  – Decompose to support planning & IPL development; need more granularity to express needs
  – Eliminate disconnects between COCOM and JS binning
  – Too many non-warfighting capabilities fall outside JCAs

• **OSD / AT&L**
  – MMT indicates overlaps in over 60% of JCAs
  – Reducing overlaps would increase use/effectiveness

• **OSD / PA&E**
  – Any framework can be used; needs stability

• **JS**
  – Overlaps create ambiguity when binning gaps
  – Meaningful work will occur at Tier III
  – Many capabilities do not fall neatly within current JCAs

• **Services**
  – Eliminate redundancy
  – Decompose to support refined planning & requirements development

• **Planners**
  – Decompose to support planning (Strategy to task)
  – Stabilize the framework

“...Grab bag of capabilities, missions and functions defined by analytic and bureaucratic imperatives.”
### Activity Overlaps Among Original JCA Tier1

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- Every JCA shows overlap with one or more other JCAs
- 50% or more shared activities
- Over a third of the time, two JCAs share 50% or more activities
We compared capabilities called out for each Tier 1 JCA using MMT cross-referencing function. The percentage of shared activities reflects relationships among different capability areas. The table shows the count of activities that map to each JCA and those that map to both JCA Tier 1, as well as the percentage of activities mapped to Joint Air Operations JCA that are also mapped to Joint Access Denial JCA. A higher percentage of shared activities indicates a stronger relationship between the JCA Tier 1.
The basic C2 functions are listed below:

- Monitor and collect data on the **situation**.
- Develop an **understanding** of the situation.
- Develop a **course(s) of action** and select one.
- Develop a **plan** to execute the selected course of action.
- Execute the plan, to include providing **direction** and leadership to subordinates.
- **Monitor** execution of the plan and adapt as necessary.
Application of ISR Capabilities to Tighten the Kill Chain: USAF Perspective

Colonel Dash Jamieson
Director of ISR Transformation, HQ USAF
ISR Effects

Collect

ANALYZE

DISSEMINATE

APPLY

NetCentric Ops
Changing Focus

- ISR has always been about the kill chain
  - Artillery spotting
  - Roots of airpower

- 20th century – Hitting Targets
  - Anywhere, anytime

- 21st century – Determine and Assess Effects
  - Kinetic or non-kinetic

Fly – Fight – Win

MK 84 class bomb, Med Alt

Korea (1000 ft)

Vietnam (400 ft)

OAF/OEF/OIF

(40 ft)
The Prominence of ISR Operations

- Not just the enemy or type of war
  - Non-state actors, Irregular warfare

- Expectations

- Desert Storm: 99% of sorties had assigned targets
- OIF: 99% of sorties take off w/unknown target

- Requires flexibility
  - Extremely netted operations
  - Global effects
  - Minimal footprint, risk
  - Projects power, not vulnerability

Fly – Fight – Win
“Interoperability is all about what capabilities I have that can make your operations better. Interdependence is all about what you need done that you can’t live without, (and) my capability is the only capability you have.”

General Ronald E. Keys
Predator Video

Fly – Fight – Win
The Wave of the Present
How Do We Improve Today?

- UAS role surpassing expectations
  - Capability, versatility
  - Value for cost
  - Reliability, maintainability
  - Significantly reduce risk
- Deputy SecDef Memo 13 Sep 07
F2T2EA…and E Again
ISR Inventory Evolving

- Paradigm shift in terms of iron
- Legacy ISR Aircraft: LD/HD won’t be fixed through procurement
- Mission Migration From Manned To Unmanned
  - Deliver wide range of kinetic and non-kinetic effects
  - Increased ranges, loiter times, payloads with decreased risk and footprint
- Sensor-Shooter line blurring
  - UAS adding attack capability
  - Next gen aircraft incorporate ISR capability

Fly – Fight – Win
Predator: 600+ hours looking for and tracking al-Zarqawi

2 F-16Cs: 10 minutes of force application

= DEAD

Fly – Fight – Win
Self-Imposed Hurdles
Overcoming Semantics

- Strategic – Operational – Tactical
  - Effects not platforms
- Sensor – Shooter
  - Nomenclature constrains potential
  - Misperceptions
    - F/A and non-traditional ISR
    - RQ can’t shoot
- ISR: Support or Operations?
  - ISR Is Ops…the Hunter in Hunter-Killer
ISR Capabilities

- Result in a value-added effect
- Intelligence cycle as a lens
  - Traditional view
  - Transformational view
- Assessment

Cross-domain integrated ISR optimizes effects chain

Fly – Fight – Win
Missiles & Weapons Market in Perspective

Jeff Ryder
BAE Systems, Inc.
January 23, 2008
Introduction

1. US defense budget outlook
   - Scenarios
   - Drivers

2. Missiles & Weapons budget outlook
   - Missiles, PGW, munitions and ordnance
   - Market forecast

3. Trends to reorient capabilities
   - Capability gaps
   - Future scenarios

Approach
   - GEIA: interview based, cross-industry analysis
   - Defense budget analysis
The defense budget is approaching record-breaking levels

DoD Budget Authority
Current and Constant FY08 $B

FY08 budget approaching WWII peak

Source: DoD Greenbook
The budget is currently “off cycle” – a return to historical cyclicality would suggest a decline is imminent.
A number of factors shape the budget outlook – threat perception, politics and economics matter most

Primary budget-shaping factors:
- Threat
- Politics
- Economics

Factors that pressure the budget:
- Withdrawal from Iraq
- Increase in mandatory spending
- Popular disapproval of defense spending

Factors that buoy the budget:
- High Optempo
- Rising Operations & Support (O&S) costs
- Reset requirements
- Investment requirements
The security environment has become increasingly complex

Global Security Environment

- Al Qaeda Attack
- Conflict Zone
- Ongoing Concern
A key economic/fiscal factor in the defense forecast is the rapid growth in mandatory spending accounts.
Future spending will likely remain high by historical comparison

Source: DoD Greenbook FY08, GEIA, BAE Systems, Inc.
Upwards budget pressure is driven by the inexorable rise in Operations & Support costs

- **O&M drivers**
  - High Optempo
  - Aging fleets
  - Increasing complexity of weapons
  - Rising fuel costs
  - Increasing use of industry contractors

- **MilPers drivers**
  - Force augmentation (+92,000)
  - Healthcare (costs doubled 2000-2005)
  - Rate of military retiree and dependents increased 6.0% per year 2001-2005
  - Upwards pressure on compensation due to private-sector benchmarking

- **Risk that O&S costs will erode investment accounts**
- **The only historical means to curb O&S growth has been to reduce end strength**

Source: DOD Greenbook
Investment spending will decline in real dollars

Investment = Procurement + RDT&E

Budget Authority, Constant $

- Current investment funding forecast insufficient to fully fund current portfolio
- Cost increases, (historically 15%) could add a $25B burden
- May see additional Service requests
- O&S budget intrusion
- Portfolio trades will continue, placing premium on program performance

Source: DoD Greenbook FY08, GEIA
The Services indicate investment prioritization on platforms

### Service Investment Priorities

<table>
<thead>
<tr>
<th>Service</th>
<th>Investment Priorities</th>
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| Air Force     | • F-22  
                • KC-X  
                • C-17/C-5  
                • CSAR-X  
                • JSF  
                • LRS  
                • SBIRS  
                • TSAT  
                • Space Radar                                      |
| Navy          | • Shipbuilding (CVN-78, DDG-1000, LPD-17, LHA(R), Virginia)  
                • Aircraft modernization (JSF, F/A-18 E/F, EA-18G, BAMS, MMA/P-8A) |
| Army          | • FCS  
                • FMTV/JLTV  
                • Helicopter modernization  
                • MRAP  
                • Force augmentation                                     |
| Marine Corps  | • JSF  
                • Expeditionary Fighting Vehicle (EFV)  
                • Light Armored Vehicle (LAV)  
                • Amphibious shipbuilding  
                • V-22  
                • CH-53K  
                • Force augmentation                                 |
Missiles & Weapons budgets will decline over the next decade, with emphasis on upgrades as opposed to new starts

- Missiles & weapons budget will decline over the forecast period
  - Pressure on topline and between Services
  - Supplemental war funding expected to drop off in near term
  - Several major programs have/will be winding down
  - Concern weapons will become bill payer for platforms

- Spending profile shows few new program starts
  - Emphasis on improving and upgrading legacy systems
  - Iraq/GWOT driving primary requirements and capability gaps
  - Replenishment for expended ordnance and fatigue
  - Force Augmentation (Army, USMC) in near term

Source: GEIA
Market Forecast: By Military Service

CAGR: FY08-18
Def Agencies -4.3%
Air Force -3.3%
Navy -4.7%
Army -6.0%

Source: GEIA
Market Forecast: By Segment

Source: GEIA
Market Forecast: Procurement vs. RDT&E

CAGR: FY08-18
- RDT&E: -5.2%
- Procurement: -7.3%

Source: GEIA
Evolution of precision engagement drives perception of missiles and weapons versus other defense investment segments

1943
1500 B-17 sorties
9000 bombs
3300 ft CEP
One 60’ x 100’ target
WWII

1970
30 F-4 sorties
176 bombs
400 ft CEP
One Target
Vietnam

1991
1 F-117 sortie
2 bombs
10 ft CEP
Two Targets per Sortie
Desert Storm

2003
1 B-2 sortie
80 bombs
<20 ft CEP
80 Targets per Pass
All Weather

Accuracy

Source: USAF
Despite today’s battlefield challenges, US forces are using existing weapons for desired effect…

…the real issue is targeting and networking
Iraq is driving many of the capability requirements

- Moving targets, fleeting targets
- Precision engagement in all weather
- Urban Close Air Support (CAS)
- Shortened kill chain
- Improved reliability
- Low collateral damage
- Non-lethal effects
- GPS interrupted / denied environments
- Hard and Deeply Buried Targets (HDBT)
- O&S assumptions built into design due to captive carry

Source: GEIA
Current Environment: Key Technologies

- Multi-mode seekers
- Datalinks
- Sensor fuzing
- Flexible warheads, scalability
- Hypersonic
- Smart fuzes
- Directed energy

Smart technology insertion needed to achieve cost-friendly, balanced capability portfolio

Source: GEIA
### Numerous potential opportunities…

<table>
<thead>
<tr>
<th>Near term &lt;2010</th>
<th>Mid-Term 2010-2015</th>
<th>Far-Term 2015+</th>
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</thead>
<tbody>
<tr>
<td>- JAGM</td>
<td>- FCS Precision Munitions</td>
<td>- Directed Energy</td>
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<tr>
<td>- Smart artillery, mortars, rockets, tank rounds</td>
<td>- Weapons for UAVs</td>
<td>- Future Cruise Missile</td>
</tr>
<tr>
<td>- Direct attack moving target capability (DAMTC)</td>
<td>- Hard and Deeply Buried Targets</td>
<td>- Electro Magnetic Rail Gun</td>
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<td></td>
<td>- Tactical Laser</td>
<td>- Autonomous Target ID</td>
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<td></td>
<td>- High Power Microwave</td>
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<tr>
<td></td>
<td>- Over-the Horizon Anti-Surface Warfare Weapons</td>
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<tr>
<td></td>
<td>- Swarm Ship Defense</td>
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<tr>
<td></td>
<td>- Joint Dual Role Air Dominance Missile (AA, AG)</td>
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<tr>
<td></td>
<td>- Long-range strike weapon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Next-gen Torpedoes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Non-Lethal Effects</td>
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</tr>
</tbody>
</table>

…but no clear roadmap

*Source: GEIA*
Impact of a “Global Terrorism” vector

- Emphasis on CAS in any environment with small, high-speed, precision weapons
- Requirements may expand for:
  - Fleeting target capability
  - Sensing and discriminating low-profile targets
  - Networking of all ISR platforms to rapid strike
  - Emphasis on speed over range
  - Low collateral damage
  - Scalability
  - Precision in all environments
  - Directed energy for non-lethal effects
  - Loitering weapons
  - Weaponizing UAVs

No appreciable difference versus baseline budget, though requirements may shift

Source: GEIA
Impact of a “Multipolar Alignment” vector

- Technology development to prepare for near-peer challenge:
  - Increased emphasis on baseline requirements (i.e. moving targets, all weather, networked weapons, etc.)
  - Emphasis on range as well as speed – fast, standoff weapons
  - Over-the horizon surface warfare
  - Advanced torpedoes
  - Cruise missiles
  - Hypersonic propulsion technology
  - Directed energy for force application / protection
  - UCAV weapons

Budget increases, though missiles & weapons will continue to compete with platforms

Source: GEIA
Potential disruptions

• Directed Energy
  – DE expected to be complementary to kinetic weapons
  – Technology development may come in advance of CONOPS / policy evolution
  – User pull required
  – ABL shootdown (FY 09) and ATL, HEL tech demonstration programs may indicate how quickly DE evolves operationally

• Cyberspace

• Convergence with or divergence towards other domains and sciences
  – Nano
  – Robotics
  – Bio

Source: GEIA
Messages to Industry

• Contractors are doing a good job developing technology and addressing capability gaps

• Make the dumb weapons smart and the smart weapons cheap

• Don’t try to add capability when it’s not needed

• Emphasize realistic cost estimates

Source: GEIA
Thank You
The Joint Capabilities Integration & Development System (JCIDS)
Demonstrating Relevance to Decision-Makers

14 January 2008

Lt Col Robert “Prince” Valin
Joint Staff (J8), Force Application Engagement Division
Disclaimer

- The views expressed here are my own and are not necessarily representative of DOD, the Joint Staff, or the Air Force
Why JCIDS?

• 2002 SecDef Memo
  – “... clear it [the requirements system] is broken ... inevitably continues to require things that ought not to be required, and does not require things that need to be required.”
  – Priority theme ...

• Change to Dynamic, Unpredictable Environment
  – Previous -- Cold War focus, singular threat source
  – New world order – threat is a “Hydra”
    • State and Non-State sources
    • Threats in every corner of the world

• What is the basis for saying “yes” to Program X, and “no” to Program Y?
“Capabilities-based planning focuses more on how adversaries may challenge us than on whom those adversaries might be or where we might face them. It focuses the Department on the growing range of capabilities and methods we must possess to contend with an uncertain future. It recognizes the limits of intelligence and the impossibility of predicting complex events with precision. Our planning aims to link capabilities to joint operating concepts across a broad range of scenarios. The Department is adopting a new approach for planning to implement our strategy. The defense strategy will drive this top-down, competitive process. Operating within fiscal constraints, our new approach enables the Secretary of Defense and Joint Force Commanders to balance risk across traditional, irregular, disruptive, and catastrophic challenges. **We will operationalize this strategy to address the spectrum of strategic challenges by setting priorities among competing capabilities.**”
“... the Department is shifting its portfolio of capabilities to address irregular, catastrophic and disruptive challenges while sustaining capabilities to address traditional challenges.”
The DOD Missions

Steady State

- Homeland Defense
  - Homeland Security
  - Interdiction
- War on Terror / Irregular Warfare
  - Counterinsurgency
  - Stability Operations
- Conventional Campaign(s)
  - Major Combat/Strike
  - Stability Operations
  - Reconstruction Support
  - Cons. Management

Surge

- Consequence Management
- Stability Operations
# The Analytic Agenda

<table>
<thead>
<tr>
<th></th>
<th>Steady-State</th>
<th>Surge</th>
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</thead>
<tbody>
<tr>
<td>Current</td>
<td>Plans (OPLANs, CONPLANs, etc.)</td>
<td></td>
</tr>
<tr>
<td>Mid-Year (+7 years)</td>
<td>Steady State Security Postures</td>
<td>Major Combat Operations Scenarios MCOs (WD, SDTE)</td>
</tr>
<tr>
<td>Out-Year (+20 years)</td>
<td>Swiftly Defeat the Efforts</td>
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</tr>
</tbody>
</table>

- Scenario Level – broad outline developed by OSD(P)
- Multi-Service Force Deployment (MSFD) data – detailed CONOPS, developed by Joint Staff with all relevant DOD organizations
- Analytic Baselines – specific details approved for DOD use, approved by OSD/PA&E
• Finding a “need” for Program X is not enough ...

• Need should be evaluated FIRST
  – Assess utility against (many) potential threats
  – Is the threat “grave”? How important is the need?
  – When do we need it?

• Potential solutions need careful attention
  – Alternative solutions (to include non-materiel)
  – Offset consideration

*Is doing nothing a reasonable alternative?*
FAA defines the military problem being addressed and specifies evaluation criteria as tasks, conditions, and standards (i.e. scope)

- Determine what will be evaluated (tasks), the relevant operational environments (conditions), and how well, or to what degree the joint force must do them (standards – proficiency and sufficiency)
- Analogy: What are the course objectives; prepare final exam

The FNA assesses how well DoD achieves the military objectives

- Evaluate how well the war fighter will do the tasks, to include with non-traditional means. Results should specify gap impact on objectives (e.g. minor inconvenience, ‘we lose the war’, or something in between)
- Analogy: How did the students do? Exam results?

“Capability gaps” come in two flavors:

- Proficiency – the ability to do the task in the specified conditions and to the specified standards
- Sufficiency – the ability to do the task as much/often as DoD needs
• Given that a gap exists (from FNA), what are the most promising solution paths available?
  – “Banded” solutions encouraged!
  – Solution maturity (tech, manufacturing, etc.) must be evaluated
  – Cost effectiveness, risk must be evaluated

• Two potential documentation paths
  – Initial Capabilities Document (ICD) – Materiel “heavy”
  – DOTMLPF Change Request (DCR) – Non-materiel “heavy”

• ICD may lead Analysis of Alternatives (AoAs), two documentation paths:
  – Capabilities Development Document (CDD), if material development required
  – Capabilities Production Document (CPD), if solutions is “off-the-shelf”
Concept Decision (CD)

• **Critical** Decision Point
  – Gap Identified
  – Potential Solution Paths Identified
  – Question: Should DOD apply resources to pursue a solution?
    • Viable answers require three big DOD tribes to agree!

• The CD Experiments
  – GS-Raid (Global Strike Raid)
  – JLTM (Joint Lightweight Tactical Mobility)
  – IAMD (Integrated Air-Missile Defense)
  – JRSG (Joint Rapid Scenario Generation)
  – JAGM (Joint Air-to-Ground Missile)

• The Evaluation of Alternatives (EoA)

• Tri-Chair Review/Decision
Focus

Capabilities Based Assessment

- Capabilities
- Tasks
- Attributes
- Metrics
- Gaps
- Shortfalls
- Redundancies
- Risk areas
- Non-materiel solutions
- Materiel solutions
- S+T initiatives
- Experimentation

- Refined concept
- Analysis of Alternatives
- Technology Development Strategy
- SoS System Engineering
- Affordable military-useful increment
- Technology demonstrated
- Initial KPPs
- SEP
- Revise KPPs
- LRP
- Detailed design
- System integration
- DT&E

Services

Policy Capabilities Definition Concept Refinement Acquisition and Test

OSD (AT&L, PA&E), Services and OSD (DOT&E) → Joint Staff (JROC)
Capabilities Based Planning – The Big Picture

**Strategic Guidance**
- National Security Strategy
- National Defense Strategy
- National Military Strategy
- Quadrennial Defense Review

**Analytic Agenda**
- Defense Planning Scenarios
  - Steady-State
  - Surge
  - Current Plans (OPLANS, CONPLANS, etc.)
  - SSSPs
  - MCOs (WD & SDTE)
  - Mid-Year (+7 years)
  - Out-Year (+20 years)

**Doctrine & Concepts**
- Joint Doctrine
- Joint Concepts

**Why**

**What, Where, When, Who**

**How**

**Processes**
- Requirements
  - JCIDS
  - Joint Capability Integration & Development System
  - CJCSI 3170
- Acquisition
  - DOD 5000 Series
- PPBE
  - POM Builds Program/Budget Review
**JCIDS Critiques**

### Criticism

- **Not Responsive Enough**

- **Ties to “effects-based operations” and/or Joint Concepts**
  - Capabilities can’t be tied to specific adversaries or places
  - Too ethereal to substantiate real-world application

- **Ineffective Prioritization**
  - First attempts tied to “gaps” as proposed by COCOMs, Services
  - Impact of DOD mission objective attainment minimal, subjective
  - Current efforts to prioritized Joint Capability Areas (JCAs)

### Response

- Transition from RGS (3+ years)
  - JRAC
  - Increasingly flexible (rules)
  - Scrutiny will remain

- “Effects” and EBO not the same
  - Focus on need, not solution-based
  - Joint Concepts only help the “how”

- Guilty!
  - Way-Ahead TBD – hopefully based on mission priority, objective attainment, and time of need
  - Useful for trades
  - Not helpful in roll-ups
Prioritization Concept

• 1 to N, or Trades?

• Gap “grades”
  – Time
  – Impact to scenario
  – Scenario importance
    • How many scenarios?
    • Weighted importance?
  – Evaluation time – updates?

• Previous concept issues
Future

• Good bet
  – Emphasis on “Interdependence”
    • Beyond interoperability
    • Conflict with some established doctrine/concepts, particularly when “organic” solutions are offered to address enterprise-wide capability gaps
      – Logistics (e.g. airlift)
      – C4ISR (e.g. Intelligence collection, Information dissemination)
      – Electronic Warfare
    • More reliance on Service-based analysis (within natural domains)
    • Lower tolerance for organic capabilities beyond Service core-competencies (e.g. stovepipes, Service-unique programs)
  – Format changes (ACAT or JPD level views)

• Probable
  – Clarified “roles and missions” for COCOMs, Services, and especially Reserve Components
  – More focus on prioritization of individual capability gaps, enabling “trades” – requires “top-down” weighting of DOD missions
  – Less focus on prioritization of capability areas
QUESTIONS?

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BACKUP
• LtGen (Ret) Van Riper (11 Dec 05)
  – “… today JCIDS evidences all the signs of an overly bureaucratic and procedurally focused process …”
  – “… damaged the military lexicon …”
  – “… a truly useful military operating concept only results when there is a need to solve a significant problem ... perform some military function better or in a new way.”
  – “a ‘revolution in military affairs’ or a ‘military transformation’ ... now serve as a mantra for those advocating advanced technologies”
  – “… concepts to justify directly ... every programmatic decision …”
  – “seem to serve more as a means to slow innovation”
  – “lack of intellectual content in emerging joint concepts ... assigning our best thinkers to infuse content into vacuous slogans ... none more egregious that the idea of ‘effects-based operations’”
  – “Effects-based Operations ... not useful against ‘interactively complex systems’” (e.g. economic and leadership systems)
  – “… senior joint and service leaders must clearly identify the most significant problems …”
The Munitions Requirements Process (MRP)

- Tied to PPBE
  - Two-year effort
  - Process: A Simple View
    - OSD Policy and AT&L determine scenario list for enhanced review/analysis
    - DIA develops threat (near-term and future)
    - COCOMs develop near-term plans for listed scenarios
    - Joint Staff develops future plans for listed scenarios
    - Services develop individual munitions requirements
    - Risk Assessments by Services, COCOMs, Joint Staff, and OSD

- Tied to QDR’s Force Planning Construct
  - Traditional surge scenarios tend to be munitions “drivers”
  - Service munitions investments driven by needs in defined scenarios

- Munitions are typically not bought to full requirement
  - Shorter lead-time than many other needs, but not insignificant
  - Lesser impact on other force elements (force size, readiness, etc.)
QDR: Operationalizing the Strategy

• Defend the Homeland
  – Steady-state – detect, deter, and if necessary, defeat external threats to the U.S. homeland, and enable partners to contribute to U.S. national security.
  – Surge – contribute to the nation’s response to and management of the consequences of WMD attacks or a catastrophic event.

• Prevail in the War on Terror and Conduct Irregular Operations
  – Steady-state – deter and defend against external transnational terrorist attacks, enable partners through integrated security cooperation programs, and conduct multiple, globally distributed irregular operations of varying duration.
  – Surge – conduct a large-scale, potentially long duration irregular warfare campaign including counterinsurgency and security, stability, transition and reconstruction operations.

• Conduct and Win Conventional Campaigns
  – Steady-state – deter inter-state coercion or aggression through forward deployed forces, enable partners through theater security cooperation, and conduct presence missions.
  – Surge – wage two nearly simultaneous conventional campaigns (or one conventional campaign if already engaged in a large-scale, long-duration irregular campaign), while selectively reinforcing deterrence against opportunistic acts of aggression. Be prepared in one of the two campaigns to remove a hostile regime, destroy its military capacity and set conditions for the transition to, or for the restoration of, civil society.