

Ad Hoc Study on Space & Missile Defense Organization

Final Briefing to Mr. Gil Decker

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Study Participants

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Terms of Reference

- II. The study should develop answers to the following questions:
- a. What are the current missions, organizational capabilities, and assigned programs of the three referenced organizations (SSDC, MICOM, PEO-MD) plus PEO-MSL?
 - b. Do areas of overlap or shortfall (wrt mission execution) currently exist in organizational capability? Are missions clearly delineated and are the organizations staying within their assigned mission responsibilities?
 - c. Are the organizations currently optimally configured and workloaded to minimize cost and structure and to effectively and efficiently execute their combined space and missile missions?
 - d. What are future projected workloads and organizational utilization in light of anticipated available funding?
 - e. What alternative organizational approaches, if any, should be considered by the Army? Identify the advantages and disadvantages of each alternative, along with the potential for each alternative to affect supported agencies such as U.S. Space Command and the BMDO. Consider organizational approaches used elsewhere in the Army and in the other Services.



Driving Issues and Constraints

- 1) Goldwater - Nichols Legislation
- 2) BRAC
- 3) Importance of Overall Missile Defense Mission
- 4) SDIO/BMDO Charter - Dual Acquisition Executive Responsibilities
- 5) BMDO Funding of SSDC Headquarters Operations
- 6) Importance and Complexity of Missile Defense Integration/BMC3 Activities
(Multiple Interactive Missions, Multi-Mission Elements, 4 Pillars, Multi-Service Roles/Jointness, International Systems, Integration with Existing/New Theater C3I)
- 7) SSDC "Advocate" Charter
- 8) Requirement that PEO-MD Successfully Complete Major Acquisition Programs
- 9) Resurgence of Interest in National Missile Defense
- 10) Emergence of Cruise Missile and UA V/RPV Threats
- 11) MICOM's Long History of Successes in Tactical Missile Programs
- 12) SSDC's National Center of Excellence in Ballistic Missile Defense Technology



Objectives

Retain the Army's Preeminent Position in Missile Defense

- 1) **Maintain 3-Star Advocate Position... Bring Army's Vast Experience to Appropriate Forums for National Benefit**
- 2) **Increase Influence in JROC Process for Joint TMD**
- 3) **Provide Support to CINCs (Warfighters) and Protect the Force**
 - Achieve Integration Over 4 Pillars and Across Services
- 4) **Secure Major Role for Army in CMD Mission**
- 5) **Secure Major Role for Army in Any NMD Mission**
- 6) **Maintain Preeminent Missile Defense Technology Capability**
- 7) **Increase Influence in National Use-of-Space Debates and Operations**
- 8) **Assure Continued BMDO Funding of SSDC Headquarters Operations**
- 9) **Reduce Redundant Overhead**



Missile Defense Mission Evolution

Pre-1990's

- SSDC Mission: NMD
- MICOM Mission: AD Plus First Generation TMD (PAC II Patriot)
- Clear Strategic (SSDC)/Tactical (MICOM) Separation
 - No Significant Technology Commonality
 - No Dual-Mission System Elements
 - Separate Integration/BMC3 Structures

Post-1990's

- Steady Increases in SSDC/MICOM Mission Overlap and Interaction
 - Upper-Tier TMD: Endo NMD Technology Genesis (SSDC)
 - Lower-Tier TMD: Primarily AD Technology Genesis (MICOM)
Dual-Mission (TMD/AD) System Elements (PAC III Patriot)
 - TMD Integration /BMC3: Air Defense Derivative
 - TMD Fielding: Sustainment Planning Requirement (MICOM)
- Emergence of Cruise Missile Defense (CMD) Mission
 - Air Defense Technology Genesis
 - All CMD System Elements Also Perform AD, Derived from AD
 - Tri-Mission (BMD/CMD/AD) System Elements
 - Complex Multi-Mission/Multi-Service Integration/BMC3
- Resurgence of NMD Priority and Budget

Bottom Line: Serious Consideration Must be Given to Organizational Realignment for the Future



Missile Defense Mission Evolution (Con't.)

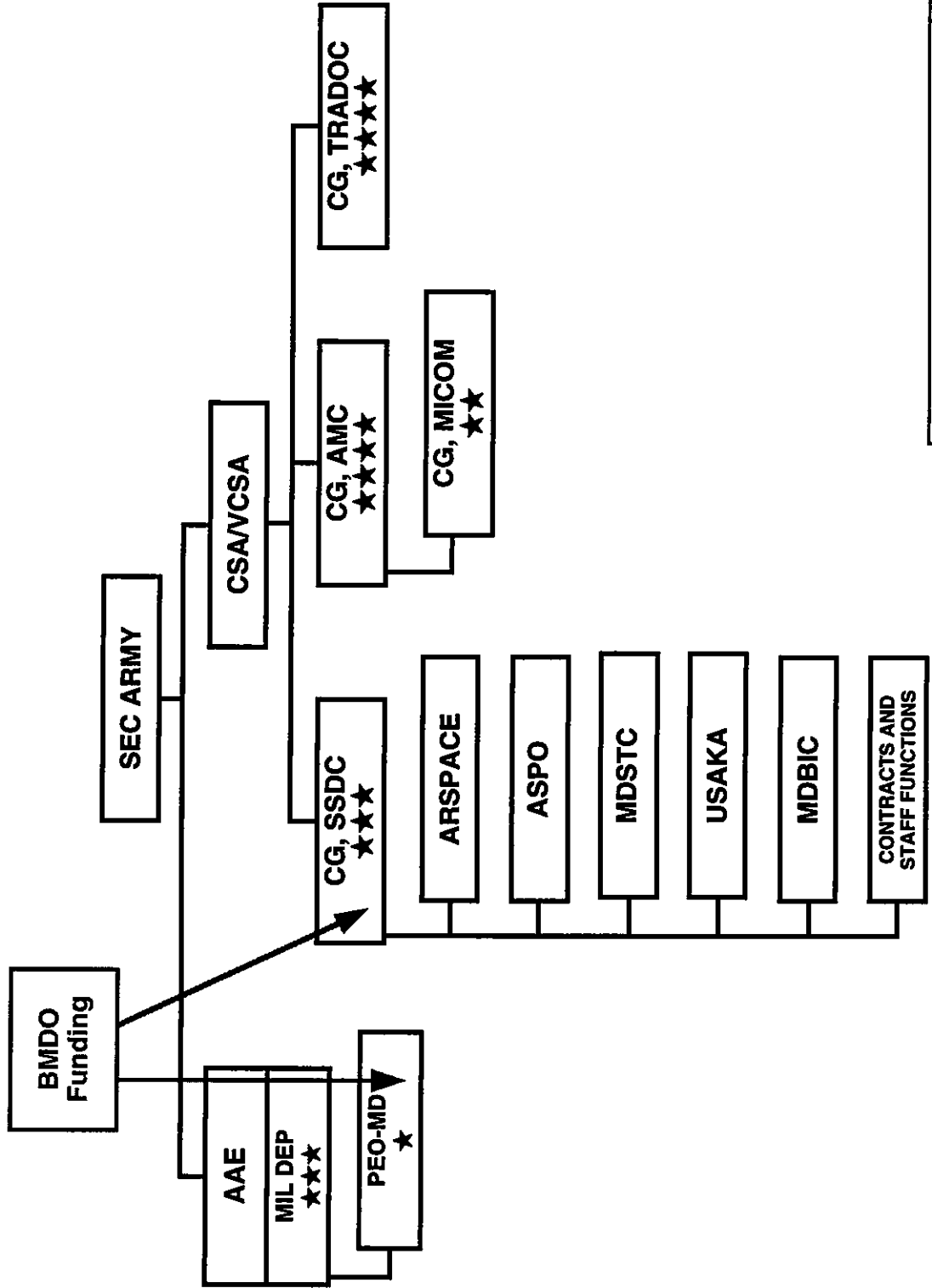


- For TMD, Expected to Remain Approximately Constant
 - But Competition For Funds Among THAAD, Corps SAM, Navy Upper Tier, and AF BPI Will Be Intense
- For NMD, May Increase Significantly
- Studies that Will Affect Budgets
 - JCS "Graybeards" (Jeremiah, Riscassi, Wendt, Welch)
 - DSB/DPB Task Force on TMD (Gold, Jeremiah)

Bottom Line: Army's Ability to Compete for Funds and Missions Must Not Be Damaged



Current Organization Chart





What's Right About the Organization?

PEO

- Sound Management of Two Major Acquisition Programs
- Intra-System BMC3
- Good Use Made of Extensive Matrix Support From SSDC & MICOM

SSDC

- 3-Star MACOM Influence
- Advocate, Architect, Integrator with Inter-System BMC3, Rapid Prototyper, and TBMD/CMD/NMD System Trades
- Large Scale Demos (~ATDs)
- National Center of Excellence for BMD
- Exploitation of Space

MICOM

- World-Class Tactical Missile (TM) Development/Acquisition/Sustainment Programs
- Decades of World-Class TM Technology Development
- Long List of Successfully-Fielded and Sustained Systems
- World-Class Hardware-in-the-Loop (HWIL) Simulation Facilities



What Could Be Improved?

PEO

- Improve Focus by Removing Distractions (e.g., ARROW, JTAGS, UAVs)
- Position Organization to Support Expanded NMD Mission

SSDC

- Support Joint Doctrine Development (with TRADOC)
- Strengthen TMD Integration (Army and Joint)
- Maintain/Upgrade BMD Technology Center of Excellence

MICOM

- Leverage SSDC BMD Center of Excellence Capabilities
- Provide Administrative Support

- Leverage MICOM Life Cycle Development and Sustainment Capabilities

- Improve "Space Advocacy" for Army in National Settings

- Improve Integration of MD, ASPO, and ARSPACE/ARNORAD Activities



Benefits From Improved Integration of MD, ASPO, and ARSPACE/ARNORAD Activities

TMD

- **Better ISR Information to Support:**
 - **Pre-launch Attack Operations Against Launchers and Support Facilities (BM & CM)**
 - **Post-launch Attack Operations**
 - **Active Defense Against Cruise Missiles**
- **Facilitate Stimulation of Force Projection TOC by BIC for Training and Exercises**
- **Discipline Missile Defense Community to “Think Space” and Routinely Use “All Sources”**

NMD

- **Better Support to SSDC Combat Development and System Development**
- **Better Support to ARNORAD System Deployment, Operations and Training**



Reorganization Options Examined

- **Combine SSDC and MICOM, Under AMC**
 - Lose Effective Advocate... CG, SSDC No Longer Reports to VCSA
 - Operations (ARSPACE) and Combat Development Functions Inappropriate for AMC
- **Move Missile Defense Technology from SSDC to MICOM**
 - High Risk of Losing BMDO Funding for SSDC Headquarters Operations
- **Clean-Up/Focus Existing Organization**
 - Best Option, All Constraints/Risks/Benefits Considered

In All Cases:

- **SSDC/MICOM Common Staff Support Functions Combined**
- **"Distractions" Removed from PEO-MD**



Recommendations

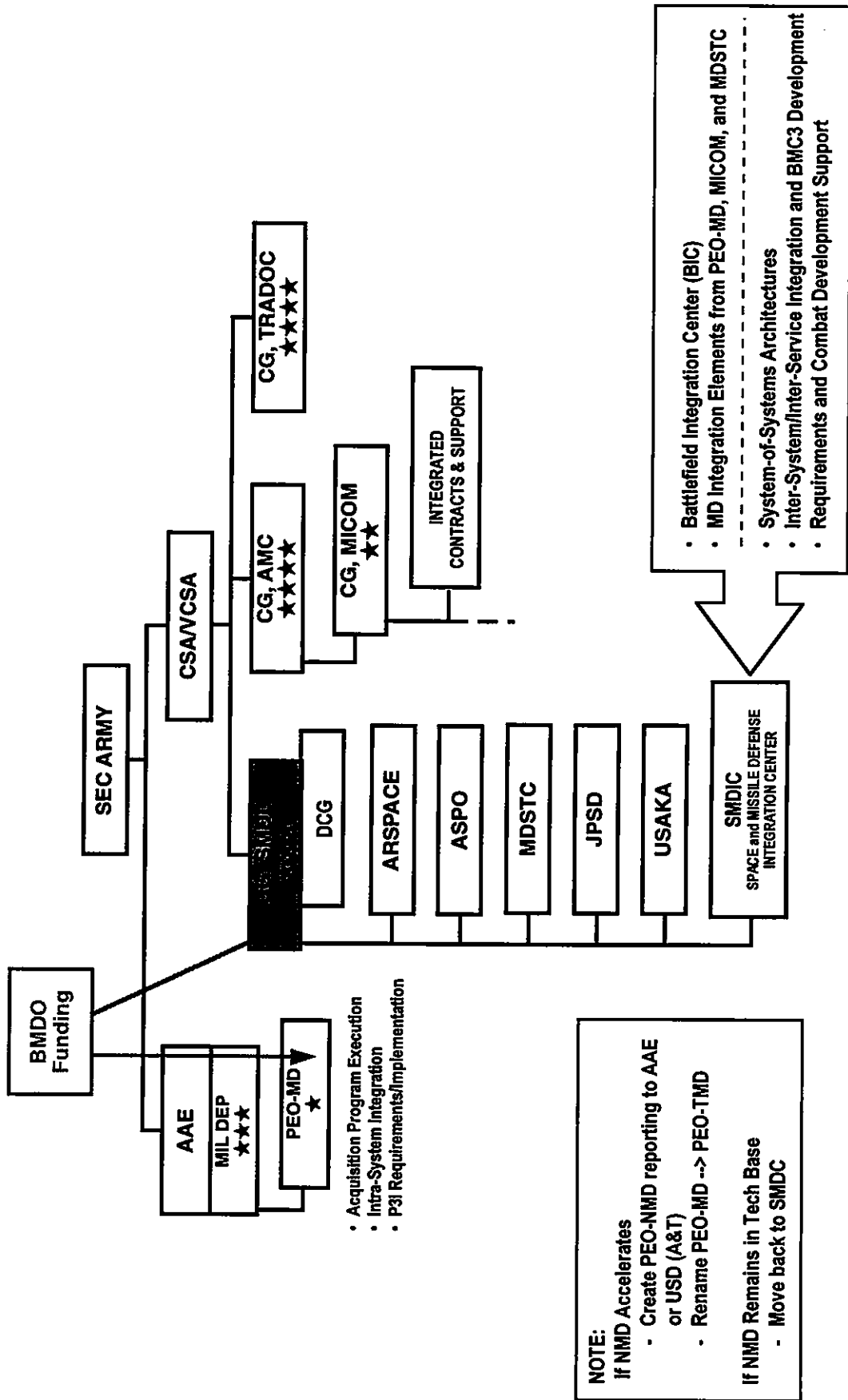
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Realigned Organization Chart



NOTE:
 If NMD Accelerates
 - Create PEO-NMD reporting to AAE or USD (A&T)
 - Rename PEO-MD --> PEO-TMD

If NMD Remains in Tech Base
 - Move back to SMDC



Features of a Strengthened SMDC

- New Name to Emphasize All Aspects of Missile Defense Responsibilities
- Retains GO Deputy Because of Breadth of Responsibilities
- CG Has Strengthened Platform for Missile Defense Advocacy
 - 1) Requirements Spokesman to OSD, BMDO, JCS, JROC, Congress and International Missile Defense Forums
 - 2) Lead for Coordination with TRADOC on All TMD-Related Requirements and Combat Development Activities
 - 3) For NMD: Architect, Combat Developer, Force Developer, Technology Base and Component Commander
 - 4) System Integrator for Intra-Army and Inter-Service TMD Systems, to Include BMC3 Architecture. Related Elements Now in PEO-MD and MICOM Moved to SMDC.
 - 5) Training of FP TOC Operators for Both TMD and NMD Engagements, Through Interactive Stimulation Linkup From BIC
 - 6) JPSD Missile Defense Attack Operations Exercise Support, Under PEO-IEW, Moved to SMDC
 - 7) ATD/ACTD/AWE Support
 - 8) Improved Integration of TMD Architecture with Space/Airborne ISR and Communications Capabilities
- Technical Elements of SMDC Collocated with MICOM RDEC
- Administrative Support by MICOM



Primary Personnel & Function Transfers

PEO-MD

- Technical Support Dir.
 - Intra-system Integration
 - Inter-system Integration
 - BMC3 Requirements Development
 - ACTD/AWE Support
- NMD PO
- ARROW
- JTAGS
- UAVs

To SMDC
 To SMDC or
 To a New PEO-NMD
 To SMDC

SMDC

- HSV Admin. Staff (~150)
 - Contracts
 - Intel
 - Security
 - Legal
 - PR

To MICOM

MICOM

- Software Engineering Dir. (~115+)
 - Tactical Missiles/ Unmanned Vehicle Div.
 - MLRS Div.
 - Acquisition & Technology Div.
- Missile Defense Div.
 - BM & Interoperability Div.

To SMDC (~30)



Summary of Personnel & Facility Cost Savings

- **Collocate MDSTC and RDEC at Redstone**
 - Improve Technical Cross-Fertilization and Eliminate Lease Costs
- **Consider Moving PEO-MD and Remainder of SMDC (HSV) to Redstone as Space is Available**
 - Eliminate Lease Costs
- **Consolidate SMDC Admin. Staff Functions (Contracts, Security, Intel, Legal, PR) Into MICOM Admin. Staff**
 - Significant Personnel/Facility Savings Should Be Achievable (Manpower Survey Needed)
- **Consolidate Functions Under SMDC to Form Space and Missile Defense Integration Center (SMDIC):**
MDVIC and Part of MDSTC (SMDC), Enclave Integration (PEO-MD), and Inter-operability Engineering and Test (MICOM)
 - Personnel/Facility Savings Doubtful Because of Expanded Integration Role (Manpower Survey Needed)



Expected Outcome of Recommended Changes

- **Will Strengthen the Army's Management of All Aspects of Missile Defense Activities**
- **Will Improve the Army's Ability to Compete for Mission Leadership and BMDO Funding**
- **Will Achieve Organizational Efficiencies Without "Breaking" Critical Continuing Functions**
- **May Require Reinvestment of Some Savings to Better Perform Missions That Are Now Inadequately Resourced (e.g., Inter-system and Inter-service Integration)**
- **Implementation Must Be Carefully Coordinated With Other "Reengineering" Initiatives Being Considered by the Army as a Part of ARMY XXI Studies**



Discussion

- **Areas Needing Additional Emphasis in SMDC**
 - Cruise Missile Defense
 - TMD BMC3
- **Relations with BMDO**
 - PMAs
 - Filling Billets
 - Access to Army Technology
- **Gaining Consensus**
- **Implementation**