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## **34<sup>th</sup> Atlanta Executive Seminar**

*“Supporting the Warfighter in an Era of New Challenges”*

**Atlanta, Georgia**

**21 - 23 April 2009**

**Wednesday, April 22, 2009**

***“A Wall Street Perspective on Defense”***

- Dr. Myles Walton, Ph.D., CFA, Executive Director, Senior Aerospace/Defense Analyst Oppenheimer & Company

***“Looking Into the Crystal Ball - An Outside View of Possible Defense Budget & Program Priorities”***

- Mr. James McAleese, Esq., Principal, McAleese & Associates, P.C.

***Panel - “Warfighter’s Perspective”***

- BG James M. McDonald, USA, Deputy Commanding General, III Corps and Ft Hood

***“Army Contracting Command”***

- Mr. Jeffrey P. Parsons, Executive Director, U.S. Army Contracting Command

***“Global Business: Challenges, Trends and Future Outlook”***

- Mr. Stephen J. Rohleder, Chief Operating Officer, Accenture

***“Air Transportation Support of Ground Combat Operations in Southwest Asia”***

- General Arthur J. Lichte, USAF, Commander, Air Mobility Command, Scott Air Force Base, IL

**Thursday, April 23, 2009**

***“Foreign Military Sales: Army Perspective”***

- BG Michael J. Terry, USA, Commanding General, U.S. Army Security Assistance Command

***“Foreign Military Sales: Industry Perspective”***

- Mr. Jeffrey L. Johnson, Vice President, International Business Development, Middle East & Africa Region, The Boeing Company

***Panel - “Government-Industry Partnering : Challenges & Opportunities”***

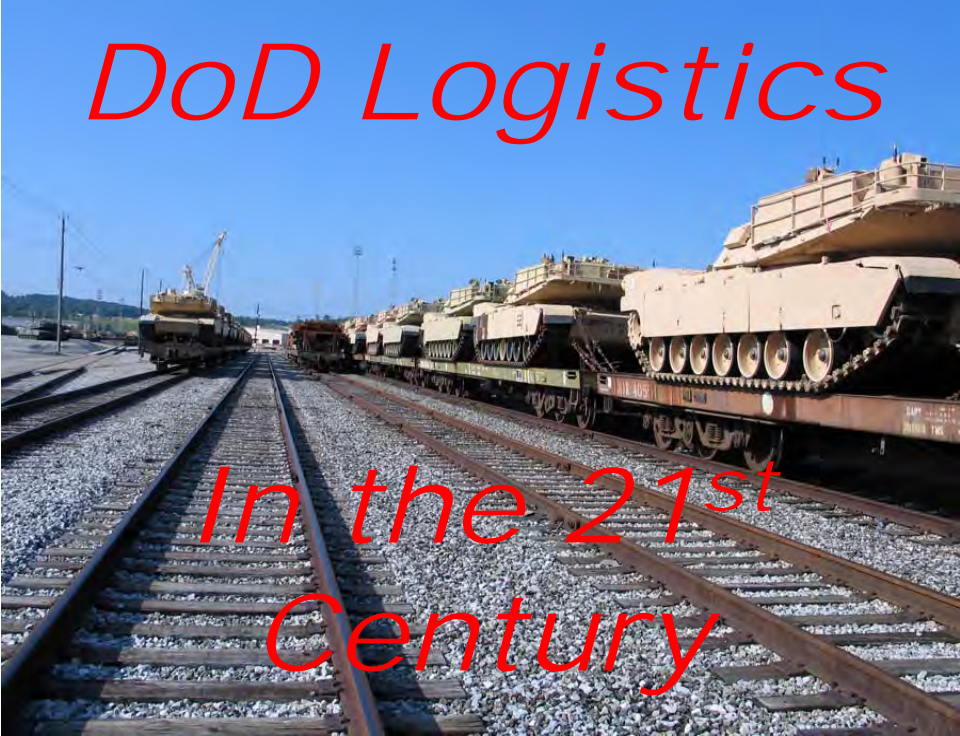
- Mr. James R. Myles, USA, Commanding General, U.S. Army Aviation and Missile Command, Life Cycle Management Command
- BG R. David Ogg, Jr., USA, Program Executive Officer, Ground Combat Systems
- Mr. R. Andrew Hove, Executive Vice President and President Defense Oshkosh Corporation
- Mr. Vince Trim, President, Honeywell Technology Solutions, Inc.

***Special Guest Presentation***

- Honorable Jack Bell, Deputy Under Secretary of Defense, Logistics and Materiel Readiness

# *DoD Logistics*

*In the 21<sup>st</sup>  
Century*



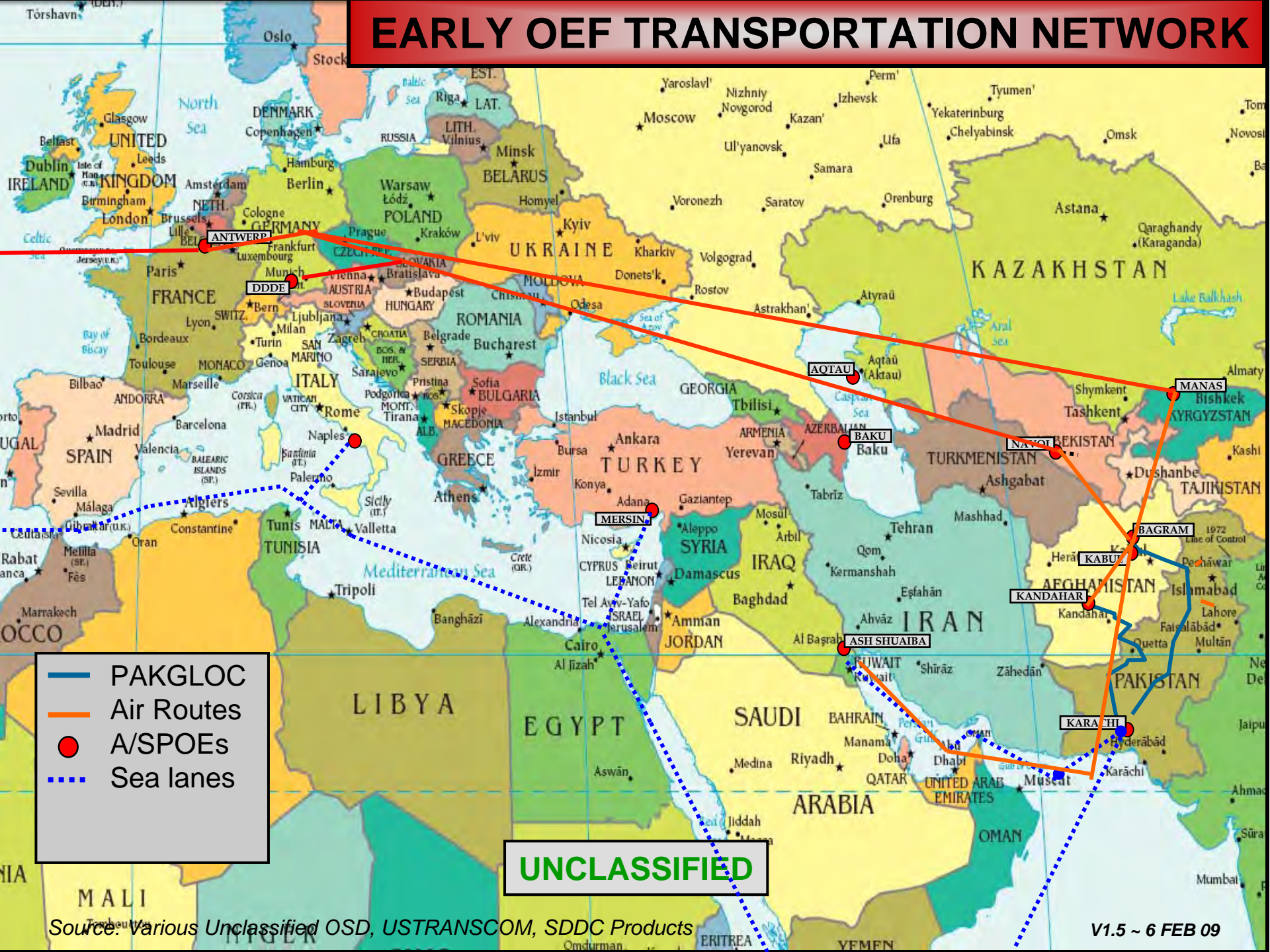








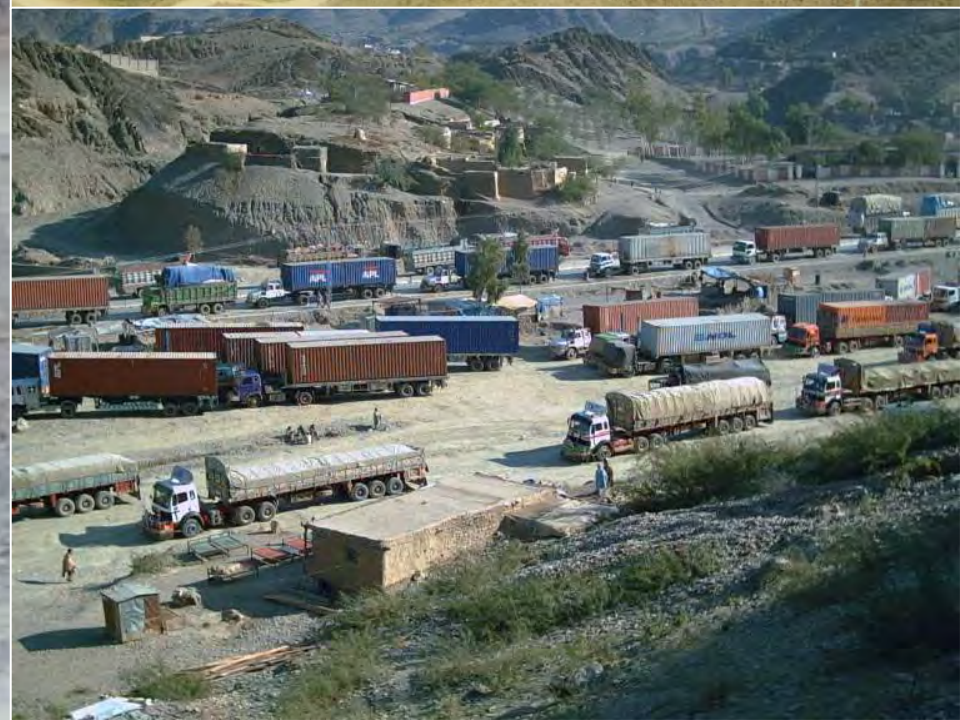
# EARLY OEF TRANSPORTATION NETWORK



**UNCLASSIFIED**

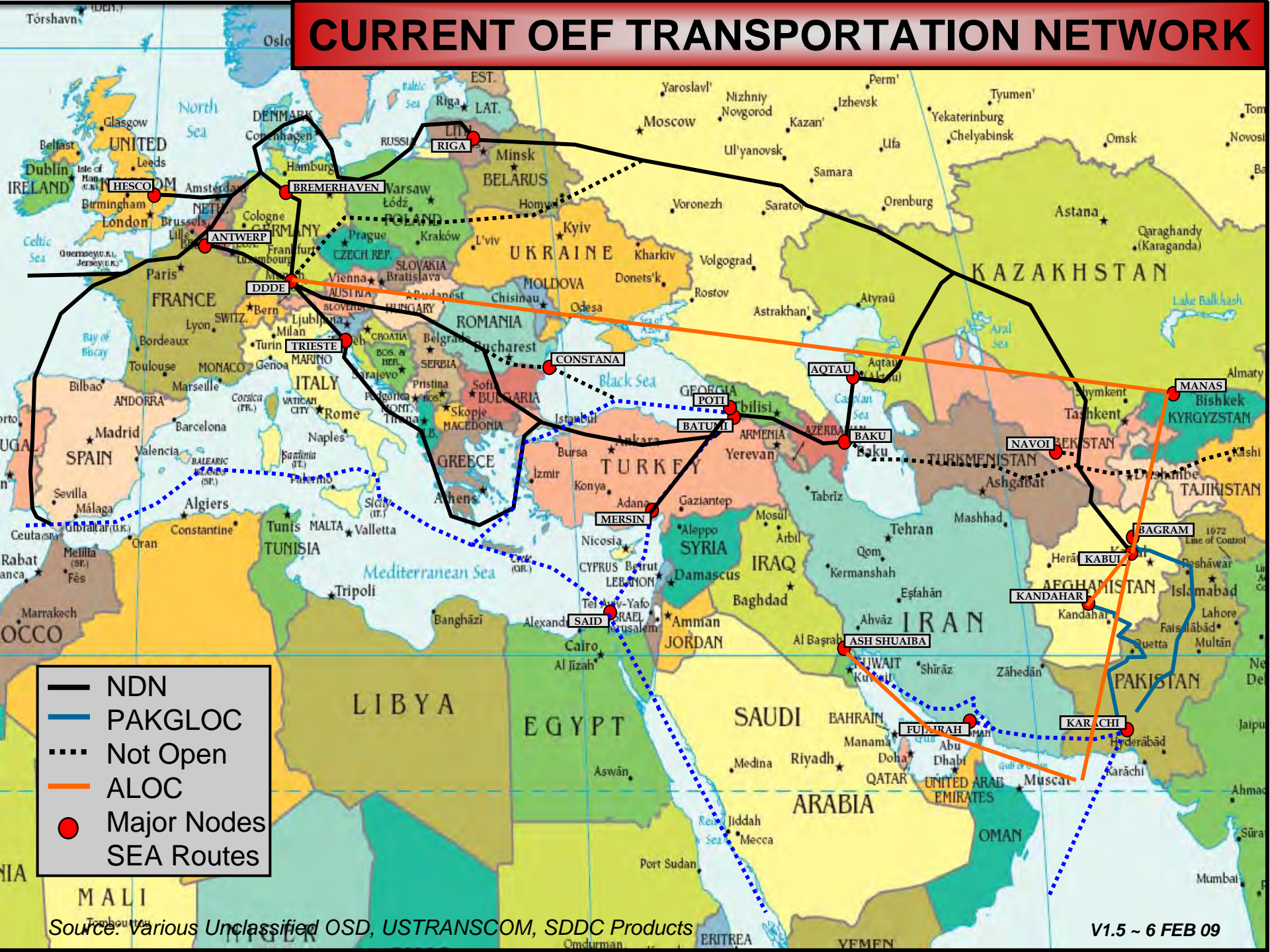








# CURRENT OEF TRANSPORTATION NETWORK



- NDN
- PAKGLOC
- .... Not Open
- ALOC
- Major Nodes
- SEA Routes

















Torkham Border -- 19 Nov 08

# “Government-Industry Partnering: Challenges & Opportunities”

Andy Hove

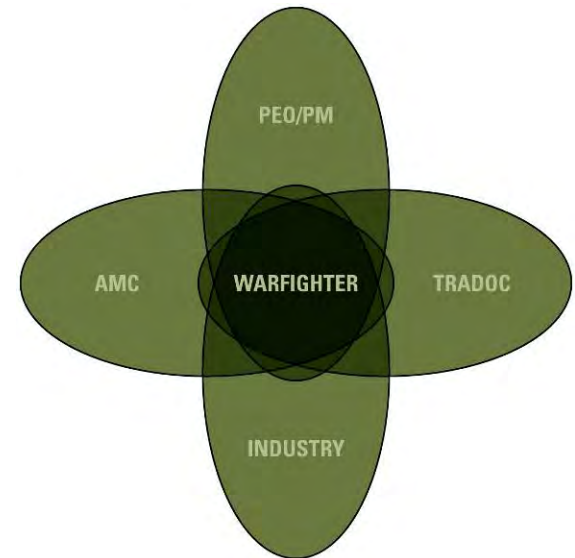
Executive Vice President and  
President, Oshkosh Defense



# Government – Industry Partnering

## Major Tenants

- Center on the Warfighter
- Partner across the entire lifecycle
  - Demonstration/Definition
  - Development
  - Production
  - Sustainment
- Adjust to major muscle movements via the partnering model.
  - Business transformation
  - Enterprise management



# Government – Industry Partnering Challenges

## **“What makes it difficult to work with the Army?”**

- Production lead time management and risk mitigation
- Requirements definition and development pipeline
- Rules and behaviors to protect intellectual property
- Governance mechanisms for Government/Industry “partnering”
- Balance of funding across the lifecycle
- Balance of RDT&E across products and needs



# Government – Industry Partnering Opportunities

**“What can we do to work together and serve the soldier better?”**

- Communicate early and often
- Bring all of these “best” practices from both government and industry together
- Foster a truly collaborative environment
- Training with Industry programs/Training with government programs
- Cooperative Research and Development Agreements
- Expand and reinforce Public Private Partnerships



# Industry Overview

Jeff Johnson  
Boeing Company



23 April 09

# International Environment

## Integrated Defense Systems

Environment	Customer Reaction	Implications to Industry
<ul style="list-style-type: none"><li>• Global Financial Crisis</li></ul>	<ul style="list-style-type: none"><li>• Program delays/cancellations</li><li>• Purchase of 'pre-owned' systems</li><li>• More risk averse</li></ul>	<ul style="list-style-type: none"><li>• Increased opportunities for legacy platforms</li><li>• Opportunities delayed</li></ul>
<ul style="list-style-type: none"><li>• Rise of Hybrid Warfare</li></ul>	<ul style="list-style-type: none"><li>• Increased special Ops, UAS and border security</li></ul>	<ul style="list-style-type: none"><li>• Need for intelligent security solutions</li><li>• ISR opportunities</li></ul>
<ul style="list-style-type: none"><li>• Struggle for natural resources; use of energy as a 'weapon'</li></ul>	<ul style="list-style-type: none"><li>• Increased regional conflicts</li><li>• Emphasis on energy security, efficiency, and alternative sources</li></ul>	<ul style="list-style-type: none"><li>• Increase customer demand for multi-mission maritime aircraft</li><li>• Opportunity for energy services</li></ul>
<ul style="list-style-type: none"><li>• Greater US reliance on allies &amp; coalition partners</li></ul>	<ul style="list-style-type: none"><li>• Need for increased interoperable systems</li></ul>	<ul style="list-style-type: none"><li>• Training and Support opportunities</li></ul>
<ul style="list-style-type: none"><li>• Increased Global Competition</li></ul>	<ul style="list-style-type: none"><li>• Growing commercial and security relations with China and Russia</li><li>• Purchase from countries that don't have US technology release restrictions</li></ul>	<ul style="list-style-type: none"><li>• Need to work releasability issues to ensure a level playing field</li></ul>



# Competitor Landscape

## Integrated Defense Systems



- Commercial airplanes and services
- A320, A330, A350, A380
- Presence – **UAE** (ME HQ), KSA, Qatar
- Mkt share - 47% current fleet; 62% backlog

### THALES

- Aircraft and land systems, warships, Control & Communications' and ISR, security, IT services
- C4I
- Presence – KSA, **UAE**, Qatar



- Space, satellite communications
- Eurocopter (maintenance center - UAE)
- A330 Tanker; Derivative Aircraft
- Presence – High level relationships – EADS International (**UAE**, KSA, Qatar)

### BAE SYSTEMS

- Design and manufacture of aircraft, warships, integrated system technologies, support services
- 3<sup>rd</sup> largest global defense company
- Typhoon



- Design and manufacture of helicopters, sensors, airborne systems, communications systems
- C27J

## Emerging



- Fighters; Trainers; Upgrades; Mods; R&D
- Presence – No offices but developing strong industry cooperation within the region; 10 10 (Top ten aircraft maker)

### Russia (Almaz-Antei; MiG)

- Anti aircraft Missiles; Fighters; Rotorcraft; Weapons
- Presence – No offices internationally but becoming a strong competitor.

## Intense Competition

# FMS Process Achievements

## Integrated Defense Systems

- Total Package Approach
  - Material Fielding, Maintenance and Training
- Government to Government Support
  - Military and Operational Planning
  - Deployment Concepts
- Contract Administration
  - USG to Industry
- Access to Depot Level Repair Facilities



*Full Support of U.S. Government*

# FMS Process Challenges

Integrated Defense Systems



- Adapting to Ever-Changing Customer Requirements
- Meeting Customer Expectations
  - Processing Time of Request
  - Schedule Flexibility
  - Customization
- Cooperative Strategy for Hybrid Cases
  - Industry and Government Alignment

*Timeliness of Completion*

# Working Together

## Integrated Defense Systems



- “One Team” Approach Critical
  - Common Messaging
- Relationships Key to Success
  - Industry-U.S. Government IPTs
- U.S. Government Advocacy Key
  - Technology Release
  - US Advocacy & Hill Support
- Industrial Participation
  - Industry-U.S. Government Cooperation
  - Use of US supply base “Team Approach”
- Support of Existing International Customer Fleets

***Working Together to Achieve Customer Satisfaction***





# *Headquarters Air Mobility Command*



**General Arthur J. Lichte**  
Commander, Air Mobility Command



# What Is Power



- When I say “Ground Power” ...
  - There is more than patrols, artillery and tanks
- When I say “Air Power” ...
  - There is more than fighters, bombers and drones





# Total Force Integration



The Total Force Team



53,648

36,439

42,084



**132,171**  
Total Force Partners

- Active Duty AMC (Host)
- Active Duty Associate
- Guard Host
- Guard Associate
- Reserve Host
- Reserve Associate





# From Garrison to AOR



- AMC Charged to Certify Regulatory Compliance
- Commercial Charters Carry the Majority of Servicemen
  - 90% by Chartered Airlift
  - 10% by Organic Airlift





# AMC Snapshot



## Airlift Since OEF

12.03M Passengers  
4.46M Tons of Cargo



## Air Refueling Since OEF

10.09B Lbs of Fuel  
(1.51B Gallons of Fuel)



## Aeromedical Evacuation Since OIF

26,473 Sorties  
120,997 Patient Movements



237,337 Departures Every 90 Seconds  
365 Days a Year 2008  
One Departure Every Day  
Sorties and 716,040 Hours

## NORTHCOM AOR

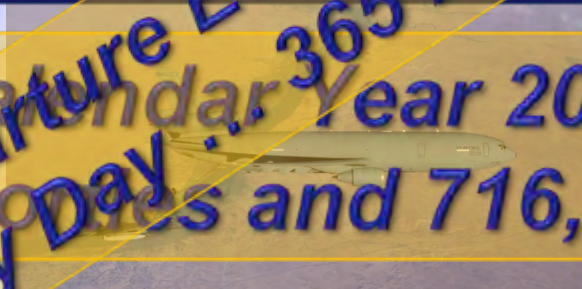
89,010 Sorties  
252,609 Hours  
862,974 Passengers  
129,653 Tons  
301.66M Lbs of Fuel

## CENTCOM AOR

96,863 Sorties  
245,093 Hours  
1.68M Passengers  
491,580 Tons  
1.04B Lbs of Fuel

## EUCOM AOR

26,668 Sorties  
128,419 Hours  
103,362 Passengers  
95,611 Tons  
1.29M Lbs of Fuel





# Boots Off the Ground



- **The Last Tactical Mile ... Moving Soldiers in the AOR**
- **Theater Direct Delivery**
  - **Convoys off of the Road Since OEF:**
    - ◆ **79,000 Trucks**
    - ◆ **38,000 Busses**





# Soldiers and Airmen in Theater



- **Joint Expeditionary Tasking (JET)**
  - 8,100 AMC Airmen in Last Deployment Cycle
  - 14% of them Fill JETs
- **Mail Call**
  - All US Mail Spends Time on AMC Aircraft
  - 50,000 Lbs Per Month ... 600,000 Lbs Per Year





# Tankers are Global



- **Global Reach, Vigilance, and Power**
- **Persistent Support to Coalition War Fighters**
- **Over the Horizon Communications**
  - **Roll On/Off Beyond Line-of-Sight Enhancement**





# Tanker Imperative



The Numbers

- #1 Acquisition Priority
- Current Tanker Fleet (474)
  - 59 KC-10s
  - 415 KC-135s
    - ◆ 88% of Tanker Fleet
    - ◆ 32% of MAF Fleet
- Nuclear Deterrence





# Risks for Aging Aircraft



- Demonstrated grounding of entire fleet (C-130E and F-15C)



**Average age 46 years**



**Average age 27 years**



# Tanker Age



... Unprecedented

- Demonstrated grounding of entire fleet (C-130E and F-15C)
- MAF operates 415 KC-135's (military variant of Boeing 707)
- US Air Force operates the oldest "heavy" airframes in the US

<u>Operator</u>	<u>Avg Age</u>
<i>Southwest</i>	10.6
<i>Continental</i>	10.8
<i>United</i>	14.3
<i>Delta</i>	14.9
<i>American</i>	16.5
<i>UPS</i>	18.0
<i>Atlas Air</i>	22.5
<i>FedEx</i>	23.8
<i>MAF KC-135s</i>	49



Aloha Flight 243

49 ...and  
projected for  
40+ more years!

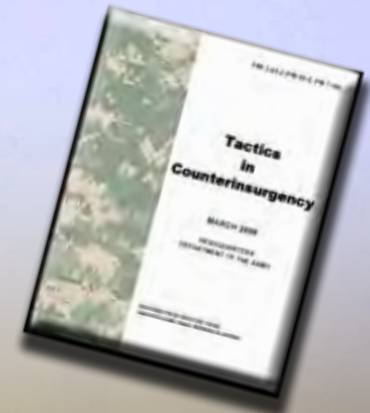




# Irregular Warfare



- Mobility lends itself to Irregular Warfare
- Supplying Strategic Counter-Insurgencies
- 3 of 4 CENTCOM Sorties are Mobility Missions
- Provide Rapid Response and Mobility
- Enable Kinetic and Soft Operations





# New Delivery Systems



- Adapt to Insure US Power Projection
- Improved Container Delivery System
  - 15M Pounds in Last 3 Years
- Joint Precision Aerial Delivery System
  - 500K Pounds in Last 3 Years





# Aeromedical Evacuation



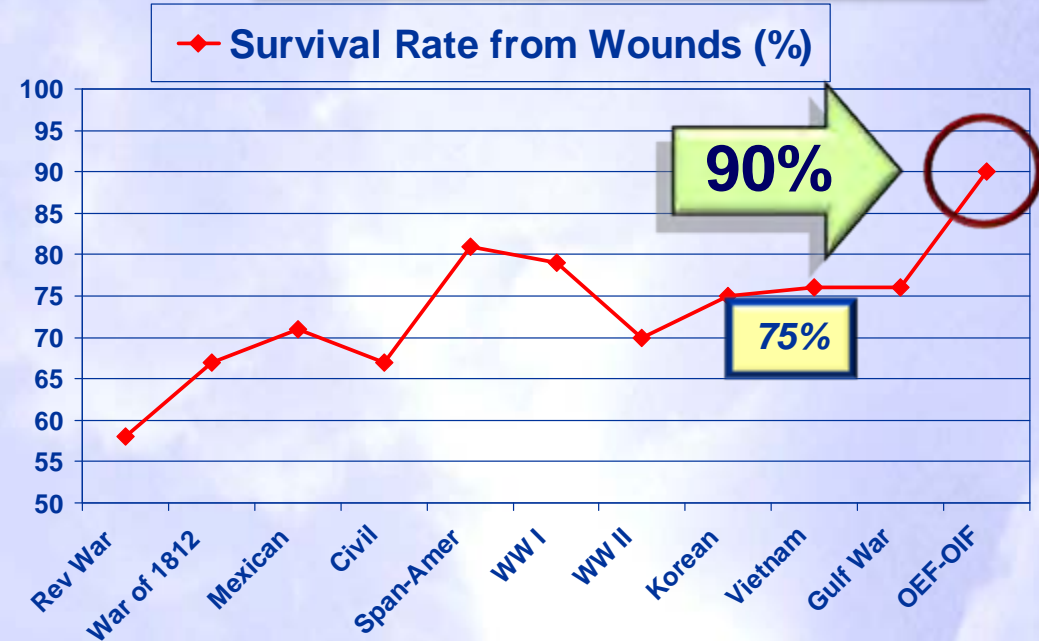
## From 10 Days

## To 3 Days



- Desert Storm – 10 days to CONUS
- Robust Theater Footprint
  - Large Bed/Holding Capability
  - Heavy Lift Requirement
- Stable Patient Care
- Scheduled Stable Patients
- Dedicated Airlift
- “TAC/STRAT” Crews
- Separate AE Routes

- OIF/OEF – 3 days to CONUS
- Light, Capable, Lifesaving
  - Limited Hospital Beds
  - First in for Early Casualties
- Critical Patient Care—CCATTs (Critical Care Air Transport Teams)
- Stabilized Rapid Evacuation
- Designated/Multi-mission Airlift
- Universal AE Crews
- AE Tied To “Best Fit” Airlift





# Return With Honor



- Dignified Transfer for Fallen Warriors
- Dover is DoD's Port of Mortuary Affairs
- Transport From Front Line to Home Town





# Full Joint Partners



## ■ From Home to the Frontline...and Back Again!



Questions?

# AMC

AIR MOBILITY COMMAND



General Arthur J. Lichte  
Commander, Air Mobility Command

# Increasing Challenges to DoD Funding & Program Priorities, under both 2010 base budget & pending 2009 Supplemental

By:

**James McAleese, Esq.**  
**Principal**  
**McAleese & Associates, P.C.**

To:

**NDIA**  
**Atlanta Executive Seminar**

**April 22, 2009**  
**Atlanta, GA**

**McAleese & Associates, P.C.**  
7918 Jones Branch Drive  
Suite 430  
McLean, Virginia 22102  
Tel: (703) 917-8900/Fax: (703) 917-8911  
[jmcaleese@mcaleese.com](mailto:jmcaleese@mcaleese.com)

# Primary Conclusions

- Secretary Gates targeted “Over-programmed” RDT&E Accounts, driven by modest 2% real-growth in 2010 DoD Funding; with primary exception of USAF.
- Secretary Gates’ proposed “cuts” to Army were limited to FCS’ MGV, while OSD adopted majority of Navy’s Shipbuilding Plan. Proposed “cuts” to USAF were the most severe; coupled with shifting of “DoD-wide” funding to SOF-expansion, “Human Capital” & “Soft Power” Initiatives.
- Emerging Themes from New Administration, strongly suggest that: (1) Army is not receiving sufficient Procurement Funding; and (2) that OSD will also evaluate additional “changes” to USAF & Navy Programs during QDR.
- Administration proposed major funding reductions in 2009 Supplemental Request, targeted at both Army “Tracked Combat Vehicles” & “Communications”; plus both Navy & USAF “Aircraft” Procurement.
- Contrary to “OIF Draw-down” expectations, Service Contractors are fully funded for CENTCOM Operations through 2009, and presumably 2010.
- Administration is generating Savings in 2009 Supplemental, by effectively extending “O&M” Funding on “flat-line” basis, while disproportionately cutting “Procurement”, to even well-below 2007 OPTEMPO Requirements.
- Vast majority of the ~\$42B in 2009 Supplemental “Draw-down”, is driven by: (1) natural reduction of ~\$10B in “Force Protection”; plus (2) additional \$27B targeted cuts in Procurement, (primarily Army, and secondarily Navy & USAF).

## Back-up Chart

- Severe “Draw-down” in “OIF Funding” in 2009 Supplemental is primarily driven by contraction in Procurement, and not O&M; which directly threatens Army & USMC “Reconstitution” requirements for both immediate Readiness & OEF Campaign.



## **Secretary Gates targeted “Over-programmed” RDT&E Accounts, driven by modest 2% real-growth in 2010 DoD Funding; with primary exception of USAF.**

(Excerpts from Secretary Gates’ Briefing at the Pentagon on April 6, 2009).

- ***“First, we will increase intelligence, surveillance and reconnaissance support for the warfighter in the base budget by some \$2 billion. This will include fielding and sustaining 50 Predator and Reaper class unmanned aerial vehicle orbits by FY '11 and maximizing their production.”***
- ***“Second, we will also spend \$500 million more in the base budget than last year to increase our capacity to field and sustain more helicopters, a capability that is in urgent demand in Afghanistan. Today the primary limitation on helicopter capacity is not airframes but shortages of maintenance crews and pilots, so our focus will be on recruiting and training more Army helicopter crews.”***
- ***“Third, to boost global-partnership-capacity efforts, we will increase funding by \$500 million. These initiatives include training and equipping foreign militaries to undertake counterterrorism and stability operations.”***
- ***“Fourth, to grow our special operations capabilities, we will increase personnel by more than 2,800, or 5 percent, and will buy more special-forces-optimized lift, mobility and refueling aircraft.”***
- ***“Fifth, we will increase the buy of littoral combat ships -- a key capability for presence, stability and counterinsurgency operations in coastal regions -- from two to three ships in FY '10. Our goal is eventually to acquire 55 of these ships.”***
- ***“Seventh, we will stop the growth of Army brigade combat teams, BCTs, at 45 versus 48, while maintaining the planned increase in end strength of 547,000. This will ensure that we have better-manned units ready to deploy, and help put an end to the routine use of stop-loss.”***
- ***“[T]o sustain U.S. air superiority, I am committed to building a fifth-generation tactical fighter capability that can be produced in quantity at sustainable cost. Therefore, I will recommend increasing the buy of the F-35 Joint Strike Fighter from the 14 aircraft bought in '09, to 30 in FY '10, with a corresponding funding increase from \$6.8 billion to \$11.2 billion. We would plan to buy 513 F-35s over the five-year defense plan, and ultimately plan to buy 2,443. For naval aviation, we will buy 31 F/A-18s in FY '10.”***

- **“[W]e will end production of the F-22 fighter at 187, representing 183 planes in the current program, plus four recommended for inclusion in the FY 2009 supplemental.”**
- **“Fourth, to better protect our forces and those of our allies in theater from ballistic missile attack, we will add \$700 million to field more of our most capable theater missile defense systems; specifically, the Terminal High Altitude Area Defense, THAAD, and the Standard Missile-3 programs.”**
- **“Fifth, we will add \$200 million to fund the conversion of six additional Aegis ships to provide ballistic-missile-defense capabilities.”**
- **“Seventh, to replace the Air Force's aging tanker fleet, we will maintain the KC-X aerial refueling tanker schedule and funding, with the intent to solicit bids this summer.”**
- **“Eighth, with regard to our nuclear and strategic forces, in FY '10 we will begin the replacement program for the Ohio-class ballistic-missile submarine program.”**
- **“We will not pursue a development program for a follow-on Air Force bomber until we have a better understanding of the need, the requirement and the technology. We will examine all of our strategic requirements during the Quadrennial Defense Review, the Nuclear Posture Review, and in light of post-START arms control negotiations.”**
- **“Ninth, the healthy margin of dominance at sea provided by America's existing battle fleet makes it prudent to slow production of several major surface combatants and other maritime programs. We will shift the Navy aircraft carrier program to a five-year build cycle, placing it on a more fiscally sustainable path. This will result in 10 carriers after 2040.”**
- **“We will delay the Navy's CG(X) next-generation cruiser program to revisit both the requirements and acquisition strategy. We will delay amphibious-ship and sea-basing programs, such as the 11th landing platform dock ship and the mobile landing platform ship, to FY '11...”**
- **“Tenth, with regard to airlift, we will complete the production of the C-17 airlifter program this fiscal year. Our analysis concludes that we have enough C-17s, with the 205 already in the force and currently in production.”**
- **“This budget will support these goals by increasing the size of -- defense acquisition workforce, converting 11,000 contractors to full-time government employees and hiring 9,000 more government acquisition professionals by 2015, beginning with 4,100 -- in FY '10.”**
- **“I recommend that we terminate the VH-71 presidential helicopter.... Today, the program is estimated to cost over \$13 billion, has fallen six years behind schedule and runs the risk of not delivering the requested capability. Some have suggested that we should adjust the program by buying only the lower-capability Increment 1 option.... **We will promptly develop options for an FY '11 follow-on program.**”**

- **“[W]e will terminate the Air Force Combat Search and Rescue X helicopter program. This program has a troubled acquisition history and raises the fundamental question of whether this important mission can only be accomplished by yet another single-service solution with a single-purpose aircraft. We will take a fresh look at the requirement behind this program and develop a more sustainable approach.”**
- **“Third, we will terminate the \$26 billion transformational satellite program, TSAT, and instead will purchase two more advanced-extremely-high-frequency satellites as alternatives.”**
- **“Fourth, in the area of missile defense, we will restructure the program to focus on the rogue state and theater missile threat. We will not increase the number of current ground-based interceptors in Alaska...but we will continue to robustly fund research and development to improve the capability we already have to defend against long-range rogue missile threats, a threat North Korea's missile launch this past weekend reminds us is real.”**
- **“We will cancel the second Airborne Laser Prototype Aircraft. We'll keep the existing aircraft and shift the program to an R&D effort. The ABL program has significant affordability and technology problems, and the program's proposed operational role is highly questionable.”**
- **“[W]e will include funds to complete the buy of two Navy destroyers in FY '10. These plans depend on being able to work out contracts to allow the Navy to efficiently build all three DDG-1000 class ships at the Bath Iron Works in Maine and to smoothly restart the DDG-51 Aegis destroyer program at Northrop Grumman's Ingalls shipyard in Mississippi.”**
- **“Sixth and finally, we will significantly restructure the Army's Future Combat Systems program. We will retain and accelerate the initial increment of the program to spin out technology enhancements to all combat brigades. However, I have concluded that there are significant unanswered questions concerning the FCS vehicle design strategy. I'm also concerned that, despite some adjustments, the FCS vehicles -- where lower weight, higher fuel efficiency and greater information awareness are expected to compensate for less armor -- do not adequately reflect the lessons of counterinsurgency and close-quarters combat in Iraq and Afghanistan. The current vehicle program developed nine years ago does not include a role for our recent \$25-billion investment in the MRAP vehicles being used to good effect in today's conflicts...Accordingly, I will recommend that we cancel the vehicle component of the current FCS program, reevaluate the requirements, technology and approach and then re-launch the Army's vehicle modernization program, including a competitive bidding process.”**
- **“Under this budget request, we will reduce the number of support-service contractors from our current 39 percent of the Pentagon workforce, to the pre-2001 level of 26 percent, and replace them with full-time government employees. Our goal is to hire as many as 13,000 new civil servants in FY '10 to replace contractors, and up to 30,000 new civil servants in place of contractors over the next five years.”**

**Secretary Gates' proposed "cuts" to Army were limited to FCS' MGV, and OSD adopted majority of Navy's Shipbuilding Plan. Proposed "cuts" to USAF were the most severe; coupled with shifting of "DoD-wide" funding to SOF expansion, "Human Capital" & "Soft Power" Initiatives.**

(Paraphrased from Secretary Gates' April 6, 2009 announcement. Only includes Primary Programs).

Army	Navy	USAF	"DoD-wide"/Other
<p>•Proceed with funding of <u>FCS Network</u>, and accelerate "<u>Spin-outs</u>" of <u>Sensors &amp; Munitions to Infantry Brigades</u>. But cancel <u>FCS Manned Ground Vehicles</u>, re-evaluate <u>Requirements</u>, and <u>recompete (MGV)</u>. (MGV only receives ~\$750M/year of \$3.5B FCS funding. Expect Congress to seek to support Army, by adding funding for <u>Abrams Upgrades (GD)</u>; <u>Bradley Upgrades (BAE)</u>; and mixture of <u>Stryker/Bradley</u> fresh production to begin replacing Vietnam-era M113. Also expect Congress to prioritize <u>NLOS-C</u> for accelerated production). (GD/BAE, BA/SAIC).</p>	<p>•Fund remainder of 3<sup>rd</sup> <u>DDG-1000</u> order from 2009. Order initial <u>DDG-51</u> Ship in 2010 as well. (Agreement-in-principle among Navy/GD/NOC, for GD to build all 3 <u>DDG-1000</u> orders, while NOC will "re-start" <u>DDG-51</u> production. Also benefit to RTN as "CSI" for DDG-1000, and benefit to LMT as CSI for DDG-51).</p>	<p>•Cancel <u>F-22</u> production in 2009, plus 4 final orders in pending Supplemental. Instead, proceed with procurement of 513 <u>F-35</u> orders by USAF/Navy/USMC from 2010-2015, with planned "doubling of production orders" in 2010. (Be alert to strong Congressional reaction). (\$11.2B expected in 2010, should include current \$6.8B funding; plus ~\$500M RDT&amp;E acceleration; plus ~\$3.2B for 16 more orders; plus ~\$700M for additional test aircraft &amp; Management Reserve). (LMT).</p>	<p>•Reduction of \$1.4B from ~\$9.6B annual <u>MDA</u> Account. (Primarily BA).</p>
<p>•Freezing "stand-up" of Brigade Combat Teams at 45 (48 planned), to fully-man immediate BCTs. Intended to minimize "Stop-loss". (Could defer Procurement of both Trucks &amp; Communications. Impact TBD).</p>	<p>•Purchase at least 31 <u>F/A-18 E/F</u> in 2010. (Be alert to potential for separate <u>Growler</u> orders in 2010 base request. Plus, watch for potential Congressional Super Hornet "plus-up" &amp; MYP. OSD also eliminated expected 8-9 <u>Super Hornet/Growler</u> orders from pending Supplemental Request). (BA).</p>	<p>•Abstain from re-adding <u>C-17</u> into base USAF "<u>Airlift Procurement Account</u>". (Expect Congress to fund ~15 <u>C-17</u> aircraft at ~\$3.6B in imminent Supplemental as "plus-up"). (BA). (Be alert that adding <u>C-17</u> back into USAF Airlift Procurement Account would become "zero-sum" competitor to <u>KC-X</u> Program).</p>	<p>•Deferral of ~14 additional <u>GMD Interceptors</u> in Alaska (~26-30 now), but increase or continue of RDT&amp;E to improve capability. (BA).</p>
<p>•\$500M to expand <u>Training of Army Helicopter Pilots/Air Crews/Ground Crews</u>. (<u>Not</u> targeted at expansion of Army Aviation Procurement Account).</p>	<p>•Order <u>CVN-79</u> in 2013, instead of current plan of 2012. (Should drive need to protect \$3.8B "<u>RCOH</u>" Overhauls in 2009 &amp; 2013). (NOC).</p>	<p>•Re-assessment of <u>NGS/Bomber Program</u>. (Requirements/Schedule/Funding during QDR). (NOC v. LMT/BA).</p>	<p>•Cancellation of eventual <u>ABL</u> production aircraft, with focus on continued Technology Development (BA).</p>
<p>•\$700M increase to Army for <u>THAAD</u> &amp; Navy for SM-3 Programs. (LMT &amp; RTN). (THAAD funded primarily in "DoD-wide" MDA Account).</p>	<p>•Proceed with planned procurement of 513 <u>F-35</u> orders by USAF/Navy/USMC from 2010-2015, with planned "doubling of production orders" in 2010.</p>	<p>•Cancel <u>CSAR-X</u> competition. Re-evaluate during QDR as Joint Mission. (BA, LMT, UTX).</p>	<p>•Terminate <u>MKV</u> competition. (LMT v. RTN).</p>

Army	Navy	USAF	"DoD-wide"/Other
<ul style="list-style-type: none"> <li>•Expand &amp; accelerate training of <u>Cyber-Security Experts</u> to guard against "Hybrid Warfare" threats of peer competitors (e.g. China, Russia, Iran).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Cancel <u>VH-71</u> at end of current "Increment I"</b>. (Presumably recomplete of 18 Aircraft in "Increment II"; with potential parallel Upgrades to legacy VH-3/VH-60 Fleet).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>\$2B/year increase in <u>ISR</u></b>, particularly <u>Predator/Reaper</u> Orbits. (Also expect expansion of experimental ISR sensors, as well as ground-fusion capabilities).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Expand <u>SOF</u> end-strength by 2.8K (5%)</b>. (Will increase "DoD-wide" Procurement to equip. Will also increase USAF Aircraft Procurement Account, because USAF buys Airframes for SOCOM).</li> </ul>
	<ul style="list-style-type: none"> <li>•<b>Proposed delay in funding the remainder of <u>LPD-17</u> order already funded in 2009, out until 2011.</b> (Congress likely to fund unilaterally). (NOC).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Proposed retirement of <u>250 F-16/A-10/F-15</u> in 2010; while adopting <u>Armed-UAS</u> as formal part of future USAF TACAIR Force Structure.</b> (Be alert to potential Congressional concerns).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Strengthening USD(AT&amp;L), DCMA, and Program Offices, by "converting" 11K support contractors to government employees; plus hire 9K additional Acquisition Staff by 2015. (~20K total).</b> (SETA Contractors).</li> </ul>
	<ul style="list-style-type: none"> <li>•<b>\$200M for Upgrade of <u>6 additional Aegis</u> (DDG-51/CG-47) to <u>BMD</u> capability.</b> (Also strong indication of continued annual funding of <u>Aegis Sea-based MD</u> from MDA. Also see separate OSD endorsement of "re-start" of <u>DDG-51</u> fresh-production). (LMT).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Cancel imminent <u>TSAT</u> down-select.</b> (BA vs. LMT). <b>Order 2 additional <u>AEHF</u> Spacecraft from LMT/NOC.</b> (Be alert for potential Congressional support for <u>WGF</u> Spacecraft from BA).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Curtail/reverse 2001-2008 growth in <u>Service contracting</u>.</b> Hire 13K government FTE in 2010, with <b>30K total</b> in 2010-2015. (SETA Contractors).</li> </ul>
	<ul style="list-style-type: none"> <li>•<b>Initial 2010 funding for <u>SSBN "follow-on"</u> for <u>Sea-based Strategic Deterrent (SSBN(X))</u>.</b> (GD).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Accelerate "<u>SOF-optimized</u>" <u>lift mobility &amp; refueling aircraft</u>.</b> (Presumably <u>C-130J</u>, <u>V-22</u>, and possibly <u>C-27</u>. Airframes funded by USAF, with "Mission-Equipment" funding from "DoD-wide" Account).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>\$500M increase in "<u>Global Partnership</u>" <u>Stability Operations</u>.</b> ("Soft Power" Initiatives expected to be funded primarily through "DoD-wide", and possibly Army Accounts).</li> </ul>
	<ul style="list-style-type: none"> <li>•<b>Proposed delay of <u>MLP</u> order to 2011, from 2010 plan.</b> (Congress likely to fund unilaterally). (GD).</li> </ul>	<ul style="list-style-type: none"> <li>•<b>~\$700M increase for "<u>Nuclear Surety</u>".</b> (Presumably USAF is primary beneficiary).</li> </ul>	
	<ul style="list-style-type: none"> <li>•<b>Adopts planned <u>LCS</u> production ramp-up.</b> (55 Ship-class). (LMT, GD, plus NOC for Mission Modules).</li> </ul>	<ul style="list-style-type: none"> <li>•Expand and accelerate training of <u>Cyber-Security Experts</u> to guard against "Hybrid Warfare" threats of peer competitors (e.g. China, Russia, Iran).</li> </ul>	
	<ul style="list-style-type: none"> <li>•<b>\$700M increase to Army for THAAD &amp; Navy for <u>SM-3</u> Programs.</b> (LMT &amp; RTN).</li> </ul>		
	<ul style="list-style-type: none"> <li>•<b>Continue to delay <u>CG(X)</u>, as <u>Requirements &amp; Acquisition Strategy</u> are re-evaluated.</b> (~\$500M/yr RDT&amp;E to RTN).</li> </ul>		
	<ul style="list-style-type: none"> <li>•Increase charter of <u>JHSV</u> Ships to 4. (Navy/Army).</li> </ul>		

**Emerging Themes from New Administration, strongly suggest that: (1) Army is not receiving sufficient Procurement Funding; and (2) that OSD will also evaluate additional “changes” to USAF & Navy Programs during QDR.**

- Administration is already contracting Supplemental funding, by:
  - (1) “Flat-lining” O&M, (from 2008 into 2009);
  - (2) Benefiting from falling “Force Protection” funding, (primarily MRAP-driven); and
  - (3) Delaying/reducing “Equipment Reconstitution”, (primarily targeted at Procurement). This directly-threatens Army’s clear need for 2 full-years of Reset/Upgrade Funding, after eventual OIF/OEF re-deployment occurs.
- Immediate trends in pending 2009 Supplemental, suggest that contraction in OIF funding will likely fall at significantly greater rate & magnitude, than OEF funding increases, even though short-term end-strength deployment remains constant at ~185K Troops. (Immediate Supplemental Request suggests eventual contraction of up to ~\$5 in OIF funding, for each ~\$1 growth in OEF funding). Limited duration of remainder of FY2009 masks “full Resourcing” that will be required for Army & USMC in OEF Campaign during 2010-2011, (particularly O&M and Procurement).
- “Mini-surge” in Afghanistan will require major expansion of agricultural, infrastructure & economic aid as well. (Driven by mountainous-topography; lack of transportation infrastructure; severe poverty; massive illiteracy; lack of public communications infrastructure; “narco-terrorism”; lack of unbiased law enforcement & courts; and tribal perception of endemic corruption in National Government).
- Recent OSD “cuts” to 2010 base budget were primarily targeted at DoD’s RDT&E Account (not Procurement), because of “over-programmed” result under ~2% real-growth funding increase, (~4% total 2010 base growth, from \$515B in 2009, to \$534B in 2010). (Primary exception was USAF, where OSD also targeted F-22 “hot production”).
- While DoD is still committed to “two-nearly-simultaneous-Major-Regional-Conflicts”, evolving Force Structure construct anticipates that only one of those conflicts will be a platform-intensive “Major Combat Operation”, while the other conflict will be a “long-duration-irregular-Warfare-Campaign”. This distinction between “Capability” (for Major-Combat-Operations), versus “Capacity” (to provide “rotational-forward-presence”), has direct impact of:
  - For Army, “Capacity” requirement drives end-strength, with “must-pay-bills” for Operations & Support, which inherently-competes against future Army Procurement. (OMB/OSD must provide Army with both adequate Top-line funding growth in 2010-2012 base budgets; plus sufficient Supplemental Procurement funding for vital “OPA” and “W&TCV” Accounts, particularly given OSD-directed delay in FCS-MGV).

- For **Navy**, this weakens requirement for “**high-end**” **Surface Combatants (DDG-1000)**; favoring **Littoral Combat Ships**, expansion of **DDG-51** fleet, plus **Virginia-Class Submarines (NSSN)** & **MMA/P-8** Programs to counter China diesel-electric Submarine threat.
- For **USAF**, this increases both **Airlift & Aerial Refueling requirements**, while directly-reducing significant portion of previous “**high-end**” **TACAIR** requirements, (due to reduction to only one “Major Combat Operation”, against regional or near-peer competitor).
- **Recapitalization is now directly constrained by “Affordability” limitations.** New Administration is focused on:
  - “**Cost Predictability**”;
  - “**Program Affordability**”, (targeting of “**Exquisite Programs**”);
  - “**Multi-Mission Platforms**”, (“**Portfolio Mix**” review will now continue in QDR);
  - **Compressed-Development-Schedule** for “**Minimalist Platforms**”;
  - “**Elimination of Duplicative Programs**”;
  - **There appears to be strong potential of second round of “additional cuts” during QDR, which will then appear in 2011 Budget.**
  - **Services should take pro-active measures now, to propose “Alternate Options” for Requirements, Schedule, Acquisition Strategy, and Cost, to demonstrate “Affordability”, with equal priority as Lethality, Combat Capability, and Survivability.**
- **OSD-directed recompetition of FCS’ Manned Ground Vehicles will likely trigger additional/interim Abrams & Bradley Upgrades; plus increasing potential of Congressional direction for replacement of Vietnam-era M113 fleet, (e.g., through potential mixture of Stryker/Bradley fresh-production, driven by specific mission requirements). Direction for MGV recompetition creates potential for ~2-5 year slip in Recapitalization of Army’s Tracked Combat Vehicle Fleet. (“W&TCV” Account).**
- **Separately, Wheeled Tactical Vehicle orders (“OPA” funded), should peak by 2010, as Army completes growth of the 6 new Infantry Brigade Combat Teams.** (Be alert to potential impact from OSD direction to delay “stand-up” of all 48 planned BCTs). **Expected contraction in DoD Supplementals by 2011-2012, will impact fresh production of HMMWV; FMTV; and FHTV.** But “**Reset**” requirements should also surge over next two-years, as degraded-vehicles return from OIF; coupled with “fresh production” & “Reset” for Troop-strength surge in Afghanistan.
- **Regarding Army/USMC Joint Light Tactical Vehicle (JLTV) Program, new Administration will likely scrutinize both “Capability v. Capacity”, and “Affordability-constraints”.** (Two variables of “Unit-Cost”, plus technical maturity to commence initial production by 2011-2012, could decide eventual outcome). **Anticipate “MGV-like” review of JLTV Program by OMB/OSD, focusing on competing “Payload/Protection/Performance”; Procurement Unit-Cost; and “Affordability” of large-volume eventual production of ~144K vehicles.**

**Administration proposed major funding reductions in 2009 Supplemental Request, targeted at both Army “Tracked Combat Vehicles” & “Communications”; plus both Navy & USAF “Aircraft” Procurement.**

(Only Primary Programs have been included).

Service	Program (only Primary Programs are shown below).	Total FY2009 Funding (in thousands)	FY2009 Bridge Funding (in thousands)	Pending FY2009 Funding Request (in thousands) (April 2009)	OSD-proposed Reprogramming of 2008-2009 Funding for “Milper”
<b><u>I. Army Procurement</u></b>					
<b>(1) Aircraft</b>					
	•CH-47 Helicopter (MYP)	(4) \$120,000	\$0	(4) \$120,000	
	•AH-64 MODS	(12) \$354,360	\$0	(12) \$354,360	
	•ASE Infrared CM	(72) \$152,800	\$20,000	(72) \$132,800	
	<b>Total Aircraft</b>	<b>\$846,604</b>	<b>\$84,000</b>	<b>\$8,121,572</b>	<b>-\$36,200</b>
<b>(2) Missiles (TOW &amp; Hellfire)</b>					
	<b>Total Missiles</b>	<b>\$767,141</b>	<b>0</b>	<b>\$767,141</b>	
<b>(3) Weapons &amp; Tracked Combat Vehicles (W&amp;TCV) (~\$5.5B in 2008 GWOT)</b>					
	•Bradley Program	(94) \$394,800	(94) \$394,800	\$0	
	•Stryker Vehicle	(6) \$360,787	\$248,053	(6) \$112,734	
	•Bradley Program Mod	\$541,000	\$0	\$541,000	
	•M1 Abrams Tank Mod	\$425,900	\$47,900	\$378,000	
	•Abrams Upgrade Program	(54) \$230,400	(30) \$130,400	(24) \$100,000	
	<b>Total W&amp;TCV</b>	<b>\$2,506,045</b>	<b>\$822,674</b>	<b>\$1,683,371</b>	
<b>(4) Ammunition</b>					
	•Ammunition Production Base Support	\$9,800	\$0	\$9,800	
	<b>Total Ammunition</b>	<b>\$276,575</b>	<b>\$46,500</b>	<b>\$230,075</b>	<b>-\$210,400</b>
<b>(5) Other Procurement (~\$16.3B in 2008 GWOT)</b>					
<b>(a) Tactical &amp; Support Vehicles</b>					



Service	Program (only Primary Programs are shown below).	Total FY2009 Funding (in thousands)	FY2009 Bridge Funding (in thousands)	Pending FY2009 Funding Request (in thousands) (April 2009)	OSD-proposed Reprogramming of 2008-2009 Funding for "Milper"
<b>Army Procurement (continued)</b>					
	•HMMWV	(5296) \$842,456	\$0	(5296) \$842,456	
	•FMTV	(1918) \$574,121	\$0	(1918) \$574,121	
	•FHTV	(30310) \$1,057,221	(797) \$90,000	(29513) \$967,221	
	•Mine Protection Vehicle Family	(268) \$704,956	\$0	(268) \$704,956	
	•HVY Expanded Mobile Tactical Truck	(1206) \$366,296	(49) \$15,000	(1157) \$351,296	
	•HMMWV Recapitalization Program	(7083) \$510,000	(5420) \$390,219	(1663) \$119,781	
	<b>Total Tactical &amp; Support Vehicles</b>	<b>\$5,067,348</b>	<b>\$745,174</b>	<b>\$4,322,174</b>	
<b>(b) Communications &amp; Electronics Equipment</b>					
	•WIN-T	(19) \$400,590	\$0	(19) \$400,590	
	•SINCGARS-Ground	\$100,000	\$0	\$100,000	
	•Radio, Improved HF (COTS) Family	\$175,555	\$4,855	\$170,700	
	•Warlock	\$354,500	\$0	\$354,500	
	•Night Vision Devices	\$122,500	\$40,000	\$82,500	
	<b>Total Communications &amp; Electronics</b>	<b>\$3,046,239</b>	<b>\$78,876</b>	<b>\$2,967,363</b>	
	<b>Total Other Procurement</b>	<b>\$9,130,622</b>	<b>\$1,009,050</b>	<b>\$8,121,572</b>	<b>-\$224,300</b>
<b>(6) Joint Improvised Explosive Dev Defeat Fund</b>					
		\$3,466,746	\$2,000,000	\$1,466,746	
	<b>Total Army Procurement</b>	<b>\$16,993,733</b>	<b>\$3,962,224</b>	<b>\$13,031,509</b>	
<b>II. Navy Procurement</b>					
<b>(1) Aircraft (Missing 8-9 expected Super Hornet/Growler orders). (~\$3.6B in 2008 GWOT)</b>					
	•UH-1Y/AH-1Z	(4) \$102,400	\$0	(4) \$102,400	
	•MH-60S (MYP)	(2) \$46,100	\$0	(2) \$46,100	

Service	Program (only Primary Programs are shown below).	Total FY2009 Funding (in thousands)	FY2009 Bridge Funding (in thousands)	Pending FY2009 Funding Request (in thousands) (April 2009)	OSD-proposed Reprogramming of 2008-2009 Funding for "Milper"
<b><u>Navy Procurement (continued)</u></b>					
	•Common ECM Equipment	\$163,390	\$0	\$163,390	
	<b>Total Aircraft</b>	<b>\$600,999</b>	<b>\$0</b>	<b>\$600,999</b>	
<b>(2) Procurement, Marine Corps</b>					
	<b>Total Procurement, Marine Corps</b>	<b>\$2,203,811</b>	<b>\$565,425</b>	<b>\$1,638,386</b>	
	<b>Total Navy Procurement</b>	<b>\$3,546,043</b>	<b>\$593,373</b>	<b>\$2,952,670</b>	
<b><u>III. USAF Procurement</u></b>					
<b>(1) Aircraft (~\$7.1B in 2008 GWOT, with C-130J &amp; C-17 "plus-ups")</b>					
	•F-22	(4) \$600,000	\$0	<b>(4) \$600,000</b>	
	•MQ-9 UAV	(15) \$283,500	(5) \$87,642	<b>(10) \$195,858</b>	
	•C-5 Mods	\$104,800	\$0	\$104,800	
	•C-17A Mods	\$247,200	\$17,000	\$230,200	
	•C-130 Mods	\$198,910	\$9,000	\$189,910	
	•Other Production Charges/Support Equipment	\$641,000	\$0	\$641,000	
	<b>Total Aircraft</b>	<b>\$2,580,660</b>	<b>\$201,842</b>	<b>\$2,378,818</b>	
	<b>Total USAF Procurement</b>	<b>\$6,157,357</b>	<b>\$1,702,486</b>	<b>\$4,454,871</b>	
<b><u>IV. "Defense-wide" Procurement</u></b>					
	<b>(1) Mine Resistant Ambush Protected Vehicle Fund</b>	<b>\$4,393,000</b>	<b>\$1,700,000</b>	<b>\$2,693,000</b>	
	<b>Total Defense-wide Procurement</b>	<b>\$4,767,305</b>	<b>\$1,877,237</b>	<b>\$2,890,068</b>	

**Contrary to "OIF Draw-down" expectations, Service Contractors are fully funded for CENTCOM Operations through 2009, and presumably 2010.**

(Only Primary Accounts or Programs have been included)

Service	Program	Total FY2009 Funding (in thousands)	FY2009 Bridge Funding (in thousands)	Pending FY2009 Funding Request (in thousands) (April 2009)
<b>I. Army Operation &amp; Maintenance, Total</b>		<b>\$59,157,587</b>	<b>\$40,712,831</b>	<b>\$18,444,756</b>
<b>(a) "O&amp;M, Army"</b>		<b>\$51,419,401</b>	<b>\$37,300,000</b>	<b>\$14,119,401</b>
	•Reset	\$7,886,730	\$7,886,730	\$0
<b>(b) "Afghanistan Forces Fund" (usually "DoD-wide")</b>		<b>\$5,606,939</b>	<b>\$2,000,000</b>	<b>\$3,606,939</b>
	•Equipment and Transportation	\$1,667,784	\$234,558	\$1,443,226
	•Sustainment	\$1,337,698	\$480,340	\$857,358
<b>(d) "Pakistan Counterinsurgency Capability Fund"</b>		<b>\$400,000</b>	<b>\$0</b>	<b>\$400,000</b>
<b>II. Navy/USMC Operation &amp; Maintenance, Total</b>		<b>\$10,026,868</b>	<b>\$6,489,566</b>	<b>\$3,357,302</b>
<b>III. USAF Operation &amp; Maintenance, Total</b>		<b>\$11,393,673</b>	<b>\$5,065,043</b>	<b>\$6,328,630</b>
<b>IV. "Defense-wide" Operation &amp; Maintenance, Total</b>		<b>\$8,316,052</b>	<b>\$2,648,569</b>	<b>\$5,667,483</b>
	•Special Operations Command	\$2,402,425	\$954,024	\$1,448,401
	•Defense Security Cooperation Agency	\$1,730,000	\$300,000	\$1,430,000
	•"Other Programs"	\$2,521,675	\$1,144,421	\$1,377,254
<b>V. Total DoD Military Construction Funding ("Milcon")</b>		<b>\$2,113,032</b>	<b>\$0</b>	<b>\$2,113,032</b>
	•Army: Bagram Air Base, OEF	\$82,300	\$0	\$82,300
	•Army: Kandahar, OEF	\$126,150	\$0	\$126,150
	•Army: Sharana, OEF	\$79,200	\$0	\$79,200
	•Army: Tombstone/Bastion, OEF	\$94,100	\$0	\$94,100
	•USAF: Kandahar, OEF	\$84,000	\$0	\$84,000
	•USAF: Tombstone/Bastion, OEF	\$96,250	\$0	\$96,250

**Administration is generating Savings in Supplementals, by effectively extending “O&M” Funding on “flat-line” basis, while disproportionately cutting “Procurement”, to even well-below 2007 OPTEMPO Requirements.**

Funding by Appropriation Title (\$ in billions)	FY2007 Enacted	FY2008 Enacted	FY2009 Supplemental			[Growth or Contraction of 2009 v. 2008]
			Bridge Enacted	Request	Total	
Military Personnel	17.7	19.1	1.2	16.7	17.9	-\$1.2 (-6.5%)
<b>Operation and Maintenance</b>	<b>87.3</b>	<b>89.3</b>	55.2	34.2	<b>89.4</b>	<b>+\$0.1 (+0.1%)</b>
<b>Procurement</b>	<b>46.7</b>	<b>64.2</b>	6.6	21.8	<b>28.4</b>	<b>-\$35.8 (-55.8%)</b>
<b>RDT&amp;E</b>	<b>0.6</b>	<b>0.9</b>	<0.1	0.4	<b>0.4</b>	-\$0.5 (-56.8%)
Military Construction	1.7	4.2	---	2.1	2.1	-\$2.1 (-50.5%)
Revolving and Management Funds	1.1	2.7	---	0.8	0.8	-\$1.9 (68.6%)
<b>Subtotal</b>	<b>155.3</b>	<b>180.5</b>	<b>63.0</b>	<b>76</b>	<b>139.0</b>	<b>-\$41.5 (-23%)</b>
Additional Request and Non- DoD Classified <sup>1</sup>	14.2	6.6	2.9	3.1	6.1	-\$0.5 (-7.4%)
<b>Total</b>	<b>169.5</b>	<b>187.1</b>	<b>65.9</b>	<b>79.2</b>	<b>145.1</b>	<b>-\$42 (22.4%)</b>

<sup>1</sup> FY2007 enacted total includes \$5.9B of Non-DoD Classified appropriations and \$8.4B of Additional Request (e.g. BCTs/RCTs, Grow the Force, Wounded Warrior); FY 2008 and FY2009 columns include Non-DoD classified funding only.

**Vast majority of the ~\$42B in 2009 Supplemental “Draw-down”, is driven by: (1) natural reduction of ~\$10B in “Force Protection”; plus (2) additional \$27B targeted cuts in Procurement, (primarily Army, and secondarily Navy & USAF).**

Total DoD Funding by Functional Category (\$ in billions)	FY2007 Enacted	FY2008 Enacted	FY 2009 Supplemental			[Growth or Contraction of 2009 v. 2008]
			Bridge Enacted	Request	Total	
<b>“Continuing the Fight”</b>						
“Operations”	76.6	77.5	38.2	38.0	76.2	-\$1.3 (-1.7%)
“Force Protection” (MRAP-driven)	12.4	23.9	4.5	9.8	14.3	-\$9.6 (-40%)
“IED Defeat”	4.4	4.2	2.0	1.5	3.5	-\$0.7 (-17.5%)
“Military Intelligence Program”	3.4	4.9	1.4	3.8	5.1	+\$0.2 (+4.1%)
“Iraq Security Forces”	5.5	3.0	1.0	0	1.0	-\$2.0 (-66.7%)
“Afghan National Security Forces”	7.4	2.7	2.0	3.6	5.6	+\$2.9 (+107.7%)
“Pakistan Counterinsurgency Capability”	---	---	---	0.4	0.4	---
“Coalition Support”	1.4	1.4	0.3	1.4	1.7	+\$0.3 (+23.6%)
“CERP”	1.0	1.7	1.0	0.5	1.4	-\$0.3 (-17.6%)
“Military Construction” (Only includes OEF/Europe. Excludes remaining \$1.2B Milcon elsewhere).	0.9	1.3	---	0.9	0.9	-\$0.4 (-30.8%)
<b>“Reconstitution” (Reset/Procurement)</b>						
	36.3	50.5	11.6	11.6	23.2	-\$27.3 (-54.1%)
<b>Additional Requests (Secondary Accounts)</b>						
	20.2	16.1	3.9	7.8	10.9	-\$5.2 (-32.3%)
<b>Total</b>	<b>169.5</b>	<b>187.1</b>	<b>65.9</b>	<b>79.2</b>	<b>145.1</b>	<b>-\$42 (-22.4%)</b>

Source: Fiscal Year 2009 Supplemental Request, April 2009, available at:

[http://www.defenselink.mil/comptroller/defbudget/fy2009/Supplemental/FY2009\\_Supplemental\\_Request/pdfs/FY\\_2009\\_Supplemental\\_Request\\_04-08-09.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2009/Supplemental/FY2009_Supplemental_Request/pdfs/FY_2009_Supplemental_Request_04-08-09.pdf)

"Reconstitution" (\$ in billions)	FY2007 Enacted	FY2008 Enacted	FY 2009 Supplemental		
			Bridge Enacted	Request	Total
<b>I. Replenishment/Consumables (largely Procurement)</b>					
Army	1.0	1.1	0.1	1.0	1.1
Navy	0.5	0.4	---	0.1	0.1
Marine Corps	0.4	0.4	---	0.3	0.3
Air Force	0.1	0.3	---	0.2	0.2
<b>Total Replenishment</b>	<b>2.0</b>	<b>2.2</b>	<b>0.1</b>	<b>1.6</b>	<b>1.7</b>
<b>II. Repair (O&amp;M-driven/Depots)</b>					
Army	8.5	8.5	7.9	0	7.9
Navy	0.6	0.8	0.4	0.2	0.6
Marine Corps	0.6	0.5	0.5	0.2	0.7
Air Force	0.6	1.4	0.7	0.7	1.4
<b>Total Repair</b>	<b>10.3</b>	<b>11.2</b>	<b>9.5</b>	<b>1.1</b>	<b>10.6</b>
<b>III. Replacement (Procurement/Combat Losses)</b>					
Army	15.0	19.4	1.6	5.8	7.4 [-12 (-62%)]
Navy	1.1	5.7	---	0.5	0.5 [-5.2 (-91%)]
Marine Corps	5.9	2.9	0.2	1.0	1.2 [-1.7 (-59%)]
Air Force	1.4	7.6	0.2	1.1	1.3 [-6.3 (-83%)]
Defense-wide	0.6	1.5	---	0.4	0.4 [-1.1 (-73%)]
<b>Total Replacement</b>	<b>24.0</b>	<b>37.1</b>	<b>2.0</b>	<b>8.8</b>	<b>10.8 [-26.3 (-71%)]</b>
<b>Total Reconstitution</b>	<b>36.3</b>	<b>50.5</b>	<b>11.6</b>	<b>11.6</b>	<b>23.2 [-27.3 (-74%)]</b>

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## (Continued from Reconstitution Chart)

- “Reconstitution” encompasses maintenance and procurement activities to restore and enhance combat capability to units and pre-positioned equipment that were destroyed, damaged, stressed, or worn beyond economic repair due to combat operations. Reconstitution is funded through a variety of appropriations, and includes the replenishment, replacement, and repair of equipment:
  - (1) “Replenishment” includes conventional ammunition items for all services, such as bombs, artillery rounds, small and medium caliber mortars, shoulder-launched rockets, aircraft launched rockets and flares, demolition materials, grenades, propellant charges, simulators, cartridges and non-lethal munitions. The request also funds precision guided ammunition items such as the Army’s Excalibur artillery round and the Air Force’s Joint Direct Attack Munition (JDAM). The request also funds tactical missiles to replace those expended in combat, such as Hellfire, Javelin, Tube-Launched Optically Tracked Wire Guided (TOW), and Guided Multiple Launched Rockets.
  - (2) “Repair” activities involve the necessary depot and intermediate level maintenance required to restore equipment returning from Iraq and Afghanistan to pre-deployment conditions.
  - (3) “Replacement” is equipment lost in battle or stressed beyond economic repair. This ranges from major platforms such as four F-22A Air Force aircraft and various Army helicopters (e.g., 12 AH-64 and 4 CH-47) to support equipment such as radios, power equipment, and construction equipment.

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# Back-up Chart

**Severe “Draw-down” in “OIF Funding” in 2009 Supplemental is primarily driven by contraction in Procurement, and not O&M; which directly threatens Army & USMC “Reconstitution” requirements for both immediate Readiness & OEF Campaign.**

Funding by Military Operation (\$ in billions)	FY2007 Enacted	FY2008 Enacted	FY 2009 Supplemental			[Percentage Change ('08-'09)]
			Bridge Enacted	Request	Total	
Operation Iraqi Freedom (OIF)	122.7	135.1	46.2	40.4	86.6	-\$48.5 (-35.9%)
Operation Enduring Freedom (OEF)	32.6	35.9	15.8	31.1	46.9	+\$11 (+30.6%)
Additional Requests <sup>2</sup>	8.4	9.5	1.0	4.7	5.6	-\$3.9 (-41.1%)
Non-DoD Classified	5.9	6.6	2.9	3.1	6.1	-\$0.5 (-7.4%)
<b>Total</b>	<b>169.5</b>	<b>187.1</b>	<b>65.9</b>	<b>79.2</b>	<b>145.1</b>	<b>-\$42 (-22.4%)</b>

<sup>2</sup> Additional Request amounts include \$3.4B of funds to be cancelled from the Base budget to offset the cost of Additional Requests in the FY2009 Supplemental Request (\$2.2B for Accelerate/Grow the Force; \$0.4B for Family Support; \$0.3B for NCR Acceleration; \$0.5B for Military Personnel).

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**AMERICA'S ARMY:  
THE STRENGTH OF THE NATION™**



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**22 April 2009**

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# National Defense Industry Association Conference

III Corps and FT Hood  
Deputy Commanding General

Brigadier General Mark McDonald

April 22nd, 2009

# Outline

- Example of how industry answered our urgent needs: C-RAM
- Examples of what is still needed
  - Autonomous Robots
  - Capacity Building Training Tools

# III Corps Robotics Initiative

## III Corps CG Intent

Establish a Robotic Systems Center of Excellence at Fort Hood, Texas by merging industry, DOD, and Fort Hood capabilities and resources to develop and employ autonomous robotic systems using spiral development – ultimately increasing the combat capability of deployed forces while saving Soldiers' lives.

# Top Four (Autonomous) Robotic Priorities

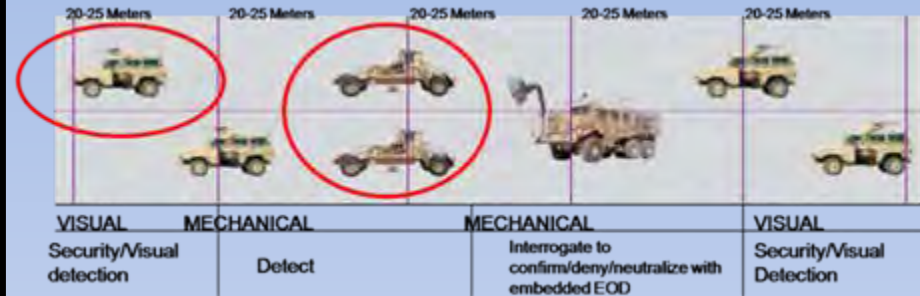
- Route Clearance – To detect, defeat, and neutralize the effect of roadside Improvised Explosive Devices (IEDs).
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- Robotic Wingman – To add a combat system that autonomously follows, maneuvers parallel, and can lead a manned wingman at a prescribed distance and position while detecting and avoiding obstacles .



# Movement & Maneuver Applications

## Route Clearance

- 4 times a day mission
- High Risk/Labor intensive
- Maintain manned security elements and mechanical integration capabilities



### Robot Capabilities Required:

- Autonomous Route navigation
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- Reacts to changes in road conditions, obstacles
- Obeys traffic rules
- Does not increase risk to humans

### Current Assessment:

Can be done with technology demonstrated in Demo 3 and the DARPA Urban Challenge (November 2007)

- ✓ Autonomous Navigation
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- ✓ Leader-Follower

– Aided Target Recognition (ATR) not ready (need human in loop to enable target recognition)

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– Current Safety release requires:

– constant manual monitoring

– immediate override capability

# Surveillance Persistent Stare

- Persistent Stare - Sensors don't get bored/fall asleep
- High risk to Soldiers
- Sustainment = Power Source (battery)



## Robot Capabilities Required:

- Autonomous Route navigation to observation posts
- Ride in or keep up with current vehicles
- Tele-operation (sensors and/or weapons) within range of Bradley 25mm
- Sufficient mobility to get to key terrain

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- ✓ Autonomous Navigation
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# III Corps Capacity Building

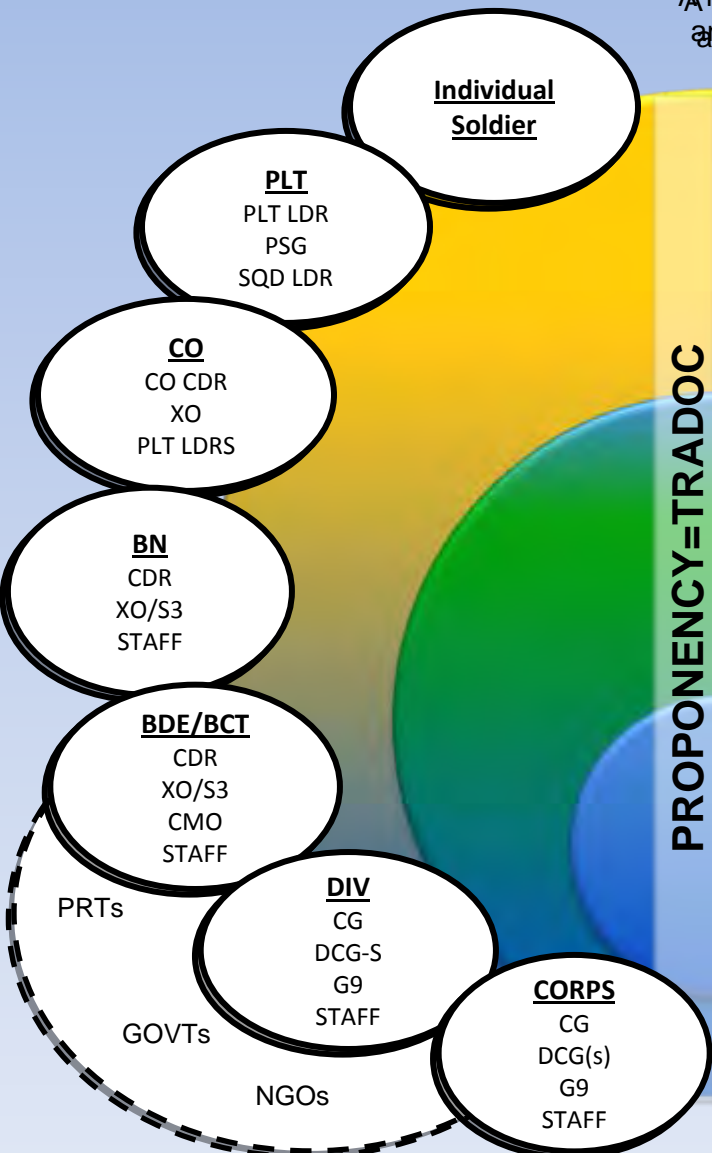
## Defining the Problem

In a period of global persistent conflict and Full Spectrum Operations (FSO), the Department of Defense (specifically the U.S. Army and U.S. Marine Corps) lacks a holistic training strategy, knowledge base, and individual - collective skill sets to execute Capacity Building to transition to civil authorities.



# Capacity Building Training Strategy

A holistic approach to educating, training and sustaining individual Soldiers, leaders, staffs, and units from platoon through Corps to effectively support non-lethal "Capacity Building" operations in an austere environment.



<b>PROPENSITY=TRADOC</b>	<p><b>Tools:</b> Partnerships Distance Learning (DL)/Online Courses LFDs/WFDs Correspondence Courses Site Visits Formal Assessment Training</p> <p>A continual process intended to increase knowledge and expertise at the individual and collective levels from platoon through Corps levels to capitalize on a holistic leader development approach based on DMETL, availability of leaders/staffs, and focus their timeline on validation during their MRE.</p>	<p><b>Education</b></p> <p><i>Lead: CAC</i></p> <p><i>Crawl-Walk-Run</i></p>
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# Supporting the Warfighter End-to-End

Experiences from SWA and Stateside

# SD

Military Surface  
Deployment and

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# DC

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End-to-End Support



Afghanistan/Pakistan



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**“Human Capital”**

**United States Army  
Accessions Command**



**ARMY STRONG.**

# The Facts

**Did you know annually,.....**

- **The Army Enlists 80,000+ Active Duty Soldiers**
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- **Army ROTC has 30,000+ Cadets and commissions  
5,000+ Lieutenants at 273 Host and 1,100  
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- **Army OCS commissions nearly 2,000 Lieutenants**
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# Strategic Partnership for America's Success

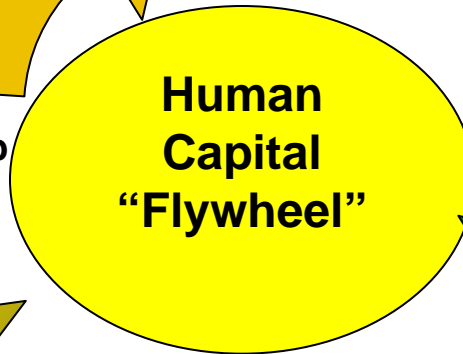


3. Partnership for Youth Success

1. US Army Recruits the Talented and Fully Qualified



Agile  
Adaptive  
Smart  
Energetic  
Talented  
Tech Savvy



2. 21st Century Training



By The Way...

National Defense Cadet Corps ... A Way To Give Back



ARMY STRONG.



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# QUESTIONS?



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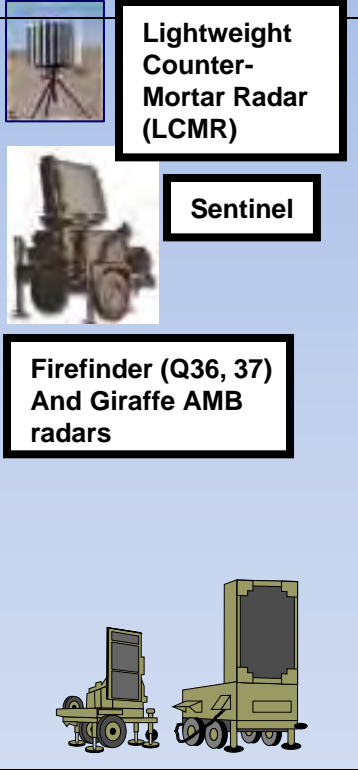
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# C-RAM System of Systems

## FOB SENSORS



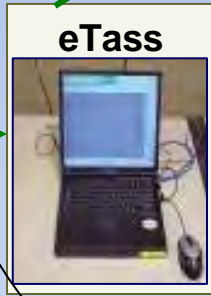
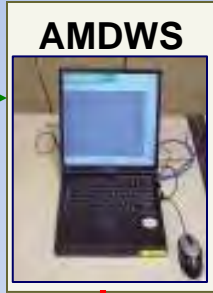
Land-Based Phalanx (LPWS)  
(Number scalable for size of defended area)



C2



INTERCEPT



RAID

C-RAM can connect with Integrated Base Defense System of Systems (IBDSS) Cameras

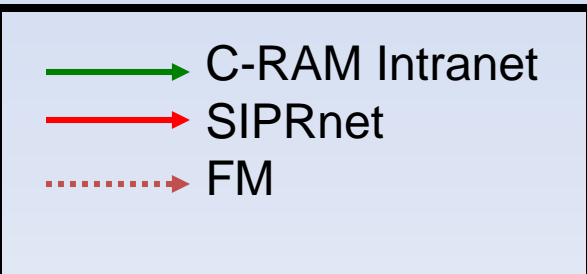
WARN



RESPOND



- TOC CLEARANCE OF FIRES**
- Airspace
  - Positive Identification of enemy at Point of Origin/Point of Impact
  - Friendly Force location
  - Collateral Damage Estimate



FAAD = Forward Area Air Defense System  
AMDWS = Air and Missile Defense Work Station  
AFATDS = Army Field Artillery Tactical Data System

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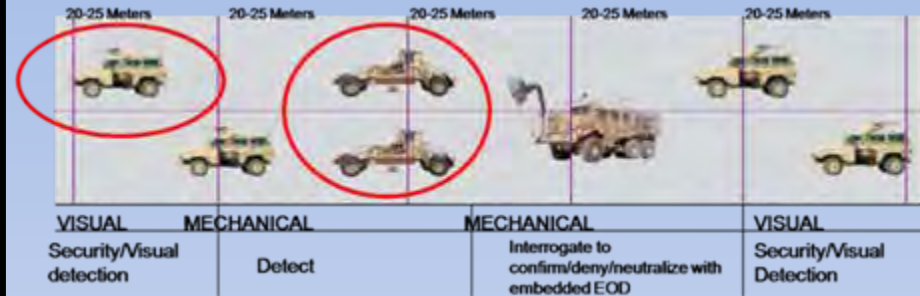
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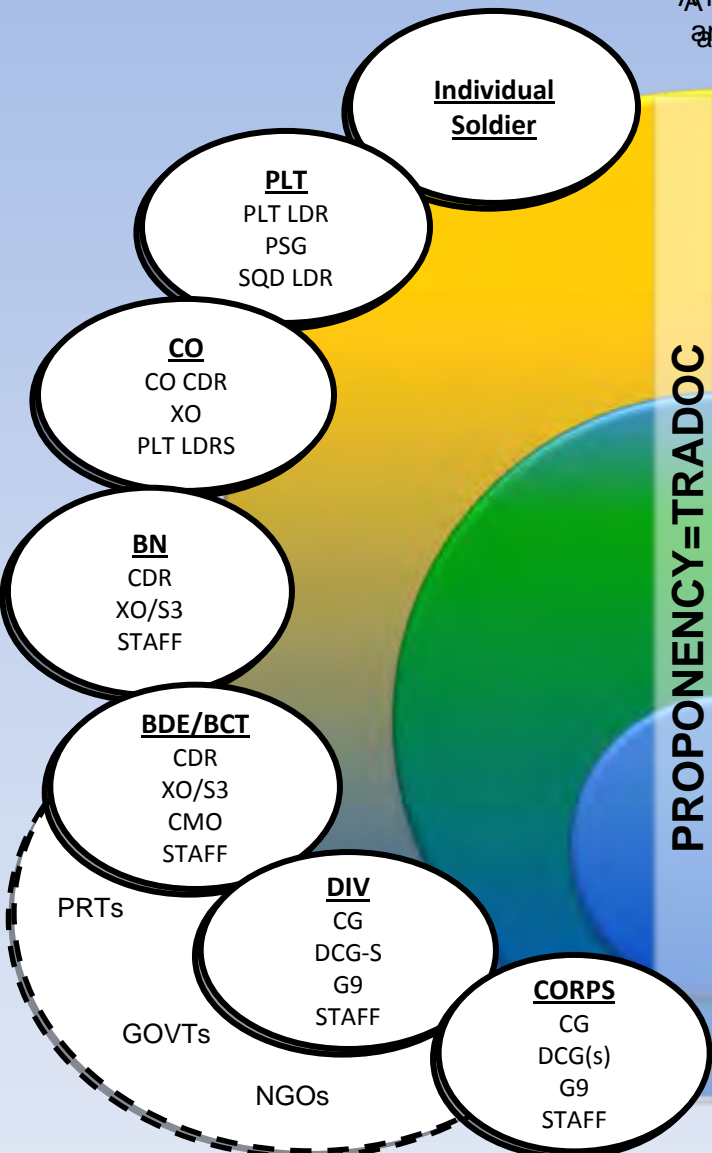
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# QUESTIONS?





# Partnership Challenges



*22 April 2009*



# Partnerships

## Benefits/Opportunities/Challenges

### BENEFITS

- 4 Partnerships, Sikorsky, Boeing, GE, Honeywell – Performance Based comprised of Materials and Services ( Technical Engineering & Logistics Support Services (TELSS))
- Technical Engineering & Logistics Support Services (TELSS)
  - Contract vehicle to purchase needed parts from OEM directly
  - CDRL provides written input / suggestions on process improvements and changes
  - On the ground OEM engineers actively supporting work in process and planning
  - Receives/stores and Issues OEM parts on hand at the depot
  - Generates basis for efficiencies/cost savings as described below
- Efficiencies achieved
  - Repair Turn Around Time (RTAT) Reductions – FY 2003 - 2008
    - Sikorsky – 34%
    - Boeing – 45%
    - Honeywell – 45%
    - GE – 70%
  - Component Output
    - Sikorsky – Increased by 70% (03 – 08)
    - Boeing – Increased by 25% increase (03-08)
  - Cost Savings





# Partnerships

## Benefits/Opportunities/Challenges

### BENEFITS (continued)

- Boeing
  - » CCAD Manhours - \$17M since Nov 2005
  - » Parts - \$59.3M since Nov 2006
  - » Storage, Analysis Failure Evaluation & Reclamation (SAFR) - \$24.9M in parts
  - » Cost Savings - \$56M
- Sikorsky
  - » A to L Recap RTAT reduction from 426 to 299 days
  - » A to A airframe RTAT reduction – 34.1%
  - » Cost Savings - \$56M
- Honeywell – Unit Funded Cost reduced by 50% in FY 08
- Reliability Improvements
  - GE – increased time on wing between overhaul from avg 300 to 1,450 hours
  - Review of 23 parts indicates that a minimum of 15 reflect increase in reliability –projecting an approximately 50% improvement for all NSNs. Projects to ~\$53M cost avoidance over 10 year period







# Partnerships

## Benefits/Opportunities/Challenges

### OPPORTUNITIES

#### ■ Cost Reduction Initiatives

- Boeing
  - Follow-On Contract plan to reduce parts costs by an estimated \$95M over 5 year contract
  - Follow-On Contract plan to reduce Engineering/Logistics costs by 37%
- Sikorsky
  - Current contract has goal to reduced RTAT by 27% and decrease material costs by a minimum of 10% over life of contract





# Partnerships

## Benefits/Opportunities/Challenges

### CHALLENGES

- AMC/DA G-8 – notes from Ms Gerton's visit to CCAD
  - Not convinced we're as fiscally responsible as we can be
  - Perception is Partnerships very expensive
  - Where is the tradeoff between readiness and cost
  - What are we (LCMC) doing to drive down costs
  - Should be financial input into contracts – current contracts drive high ULO / inventory accountability challenges, don't interface with standard financial systems
  - Very concerned about LMP transition of Partnerships

AMCOM is working on all of these



**NDIA Atlanta Symposium**  
**Government – Industry Partnering**  
**PEO PERSPECTIVE**

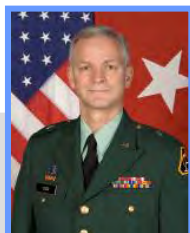


**BG David Ogg**  
**Program Executive Officer,**  
**Ground Combat Systems**  
**23 April 2009**



# Organizational Structure

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



**PEO BG David Ogg**  
**DPEO Mr. Mike Viggato**



**APEO Business Management**

Mr. Art White

**Acting APEO Logistics**

Mr. Ken Seibel

**APEO Operations Management**

Ms. Kristi Sharp

**PEO XO**

MAJ Cory Berg

**APEO Systems Engineering/  
Chief Systems Engineer**

Mr. Peter Haniak

**USMC LNO**

Maj Stefan Sneden

**ATEC LNO**

Ms. Gretchen McCoy

**APEO Corporate Information**

Mr. Don Papke

**Robotic  
Systems JPO**

PM COL J. Braden (USMC)  
DPM Mr. J. Jaczkowski



**Heavy Brigade  
Combat Team**

PM COL P. Lepine  
DPM Mr. M. Asada



**Lightweight  
155MM Howitzer**

PM Mr. J. Shields  
DPM Mr. K. Gooding



**Stryker Brigade  
Combat Team**

PM COL R. Schumitz  
DPM Ms. C. Tucker



KEY

Warren

Picatiny

OUR MISSION IS OUR WARFIGHTERS' FUTURE

# GCS Programs



## Stryker Brigade Combat Team

9 Infantry Carrier Vehicle Configurations

Mobile Gun System

## Heavy Brigade Combat Team

Abrams Tank  
M88 Recovery Vehicle  
Bradley Fighting Vehicle  
Paladin / FAASV

M113  
Knight

## Joint Robotic Systems (Army & Marine)

MULE  
TALON  
SUGV

## Joint Lightweight Howitzer 155mm (Army & Marine)

M119A2  
M777A2



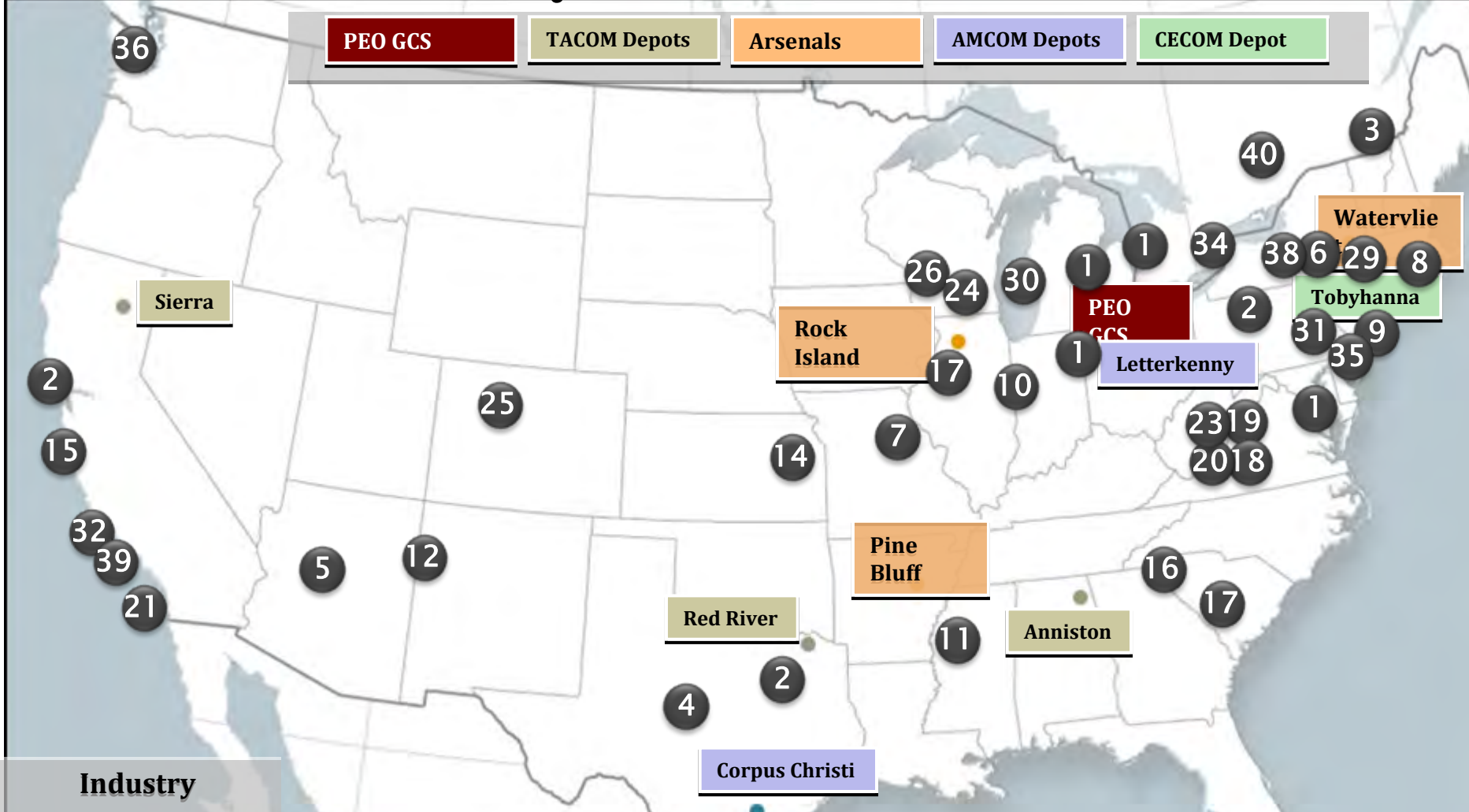
### PEO GCS MISSION:

*"Lead the Army's Ground Combat System Programs by providing the Joint Warfighter with mission capable systems as part of a full-spectrum force, through sound life cycle management"*

OUR MISSION IS OUR WARFIGHTERS' FUTURE

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS

# Government - Industry Teams



## Industry

<ul style="list-style-type: none"> <li>1. General Dynamics Land Systems</li> <li>2. BAE Systems (US &amp; UK)</li> <li>3. iRobot</li> <li>4. Raytheon</li> <li>5. Honeywell</li> <li>6. Foster Miller</li> <li>7. DRS Technologies</li> </ul>	<ul style="list-style-type: none"> <li>1. Textron</li> <li>2. L3</li> <li>3. Allison Transmission</li> <li>4. AGT</li> <li>5. ARA</li> <li>13. Dok-ing (Croatia)</li> <li>14. Lockheed Martin</li> <li>15. Northrop Grumman</li> </ul>	<ul style="list-style-type: none"> <li>13. Michelin</li> <li>14. Caterpillar</li> <li>15. Kidde</li> <li>16. Booz Allen Hamilton</li> <li>17. LSI</li> <li>18. SAIC</li> <li>19. Kongsberg (Norway)</li> <li>20. QinetiQ</li> <li>21. C. E. Niehoff &amp; Co.</li> </ul>	<ul style="list-style-type: none"> <li>13. Air Methods</li> <li>25. Rexroth</li> <li>26. VMW</li> <li>27. Meggitt (UK)</li> <li>28. Hamilton Sundstrand</li> <li>30. Borisch</li> <li>31. Curtiss Wright</li> <li>32. Advanced EO</li> <li>33. Metalcastello (Italy)</li> </ul>	<ul style="list-style-type: none"> <li>34. MOOG</li> <li>35. Hutchinson</li> <li>36. GSA Auburn National Warehouse</li> <li>37. Arcelor Mittal (UK)</li> <li>38. Kollmorgen</li> <li>39. Marvin Land Systems</li> <li>40. ALCAN</li> </ul>
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# PM Heavy Brigade Combat Team

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS

**6,118  
Abrams FoV**

TEAM  
ABRAMS

**3,962  
Fire Support  
Platforms**

**13,441 M113  
6,452 Bradley**

TEAM  
BRADLEY/M113



**29,400 in  
Active Use**

OUR MISSION IS OUR WARFIGHTERS' FUTURE



# PM Heavy Brigade Combat Team

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



Booz | Allen | Hamilton



communications  
Combat Propulsion Systems



KONGSBERG



OUR MISSION IS OUR WARFIGHTERS' FUTURE





# HBCT Public - Private Partnerships

## PROS

- Meet intent of “50/50” Statute while leveraging best-of-class improvements in quality, Lean-Six Sigma, & Material procurement from OEMs
- Streamlines process, improves efficiency, provides economic stability to our vital National industrial base
- Incorporates ‘Just-in-Time’(JIT) inventories – reduces o/h inventory costs
- Leverages OEM to enforce cost management over Depots

## CONS

- Managing cost, schedule and performance is a challenge.
- Potential for OEM to over reach when directing Depots
- Risk to OEMs for Depot - provided assemblies – priced as risk in contracts
- Impeded USG from doing a complete FFP contract with OEMs



# PM Stryker Brigade Combat Team

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



Infantry Carrier Vehicle



NBC Reconnaissance Vehicle



Anti Tank Guided Missile



Reconnaissance Vehicle



Medical Evacuation Vehicle



Mobile Gun System



Engineer Squad Vehicle



120mm Mounted  
Mortar Carrier



Commander's Vehicle



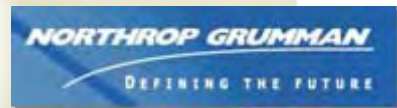
Fire Support Vehicle

OUR MISSION IS OUR WARFIGHTERS' FUTURE



# PM Stryker Brigade Combat Team

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



OUR MISSION IS OUR WARFIGHTERS' FUTURE



# SBCT Public - Private Partnerships

## PROS

- **Labor Force Is Flexible And Adapting- Adjust Easily To Ramp Ups**
- **Incorporates Earned Value Management Implementation**
- **Technologically Advanced Software Systems Available**
- **Responsive To High Priorities**
- **Allow Use Of Contract Incentives**
- **Increase Program Knowledge By Pooling Resources**
- **Savings In Capital Investments**

## CONS

- **Overpromise Of Performance/Schedule**
- **Partnering Process Can Be Time Consuming**
- **Communication Among Multiple Partners Adds Complexity**
- **Balancing Of Workload (Share Ratio) Between The Partners**
- **Dealing With Intellectual Property**
- **Identification Of The Ultimate Responsible Party**

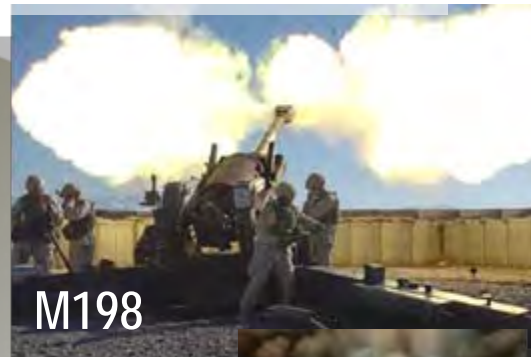


# PM Joint Lightweight 155

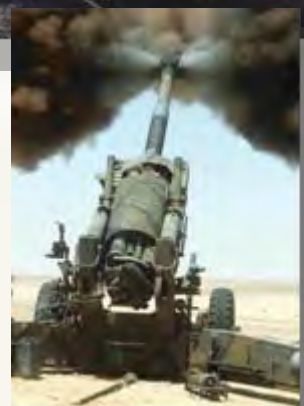
PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



M119



M198



Towed Artillery for the 21<sup>st</sup> Century



M777



OUR MISSION IS OUR WARFIGHTERS' FUTURE



# PM Joint Lightweight 155



**Watervliet  
Arsenal**

**BAE SYSTEMS**

OUR MISSION IS OUR WARFIGHTERS' FUTURE

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



# JLW 155 Public - Private Partnerships

## PROS

- **Incorporate best business practices into Defense Depot operations**
- **Increase Depot throughput**
  - **Work share**
  - **Sub-system/component overhaul**
- **Maintain critical skill sets in Public and Private sectors**

## CONS

- **Depot Infrastructure (Facilities & Equipment) Investments Limited - Risk For ROI Too High**
- **Partnerships could be affected by competitive procurement requirements**
- **Small Inventory May Not Lend To A Partnering Program**



# PM Robotic Systems JPO

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



Abrams Panther



Mini-Andros



Matilda



Small Unmanned Ground Vehicle



Multifunction Utility /  
Logistics &  
Equipment



Assault Breaching Vehicle



PackBot



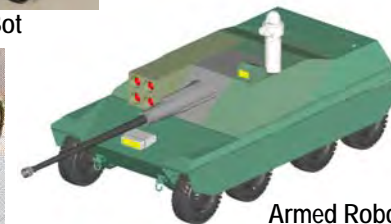
xBot



DOK-ING MV-4



Urbot



Armed Robotic  
Vehicle



Vanguard



Gladiator



Mini-Flail



Autonomous Navigation System

OUR MISSION IS OUR WARFIGHTERS' FUTURE





# PM Robotic Systems JPO

# iRobot®

# BAE SYSTEMS



# GENERAL DYNAMICS

Land Systems



OUR MISSION IS OUR WARFIGHTERS' FUTURE

PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT SYSTEMS



# RSJPO Public - Private Partnerships

## PROS

~~Relatively Small Community That~~

**Allows For Open And Frequent Communication**

- **OEMs Have Proven To Be Able To Quickly React To ONS And JUONS**
- **Have Successfully Integrated Subsystems And technologies From Government Labs And Other Contractors Into Fieldable, Sustainable Solutions**
- **Working Together Through Quality and Acceptance Testing Has Made Significant Improvements**

## CONS

- **Partnerships need to be deliberately investigated when supporting COTS products when supporting OCOs.**
- **COTS Equipment Room For Improvement – Configuration Management, Interoperability And Commonality**
- **Time Consuming Process For Both USG and Industry**



# Government – Industry Partnerships



## Leveraging the Best of the Best

OUR MISSION IS OUR WARFIGHTERS' FUTURE

**NDIA Atlanta Symposium**  
**Government – Industry Partnering**  
**PEO PERSPECTIVE**



**BG David Ogg**  
**Program Executive Officer,**  
**Ground Combat Systems**  
**23 April 2009**



# Army Contracting Command

## Contracting Support to the Warfighter

Expeditionary · Responsive · Innovative



# Army Contracting Command Mission & Vision Statement

## Mission

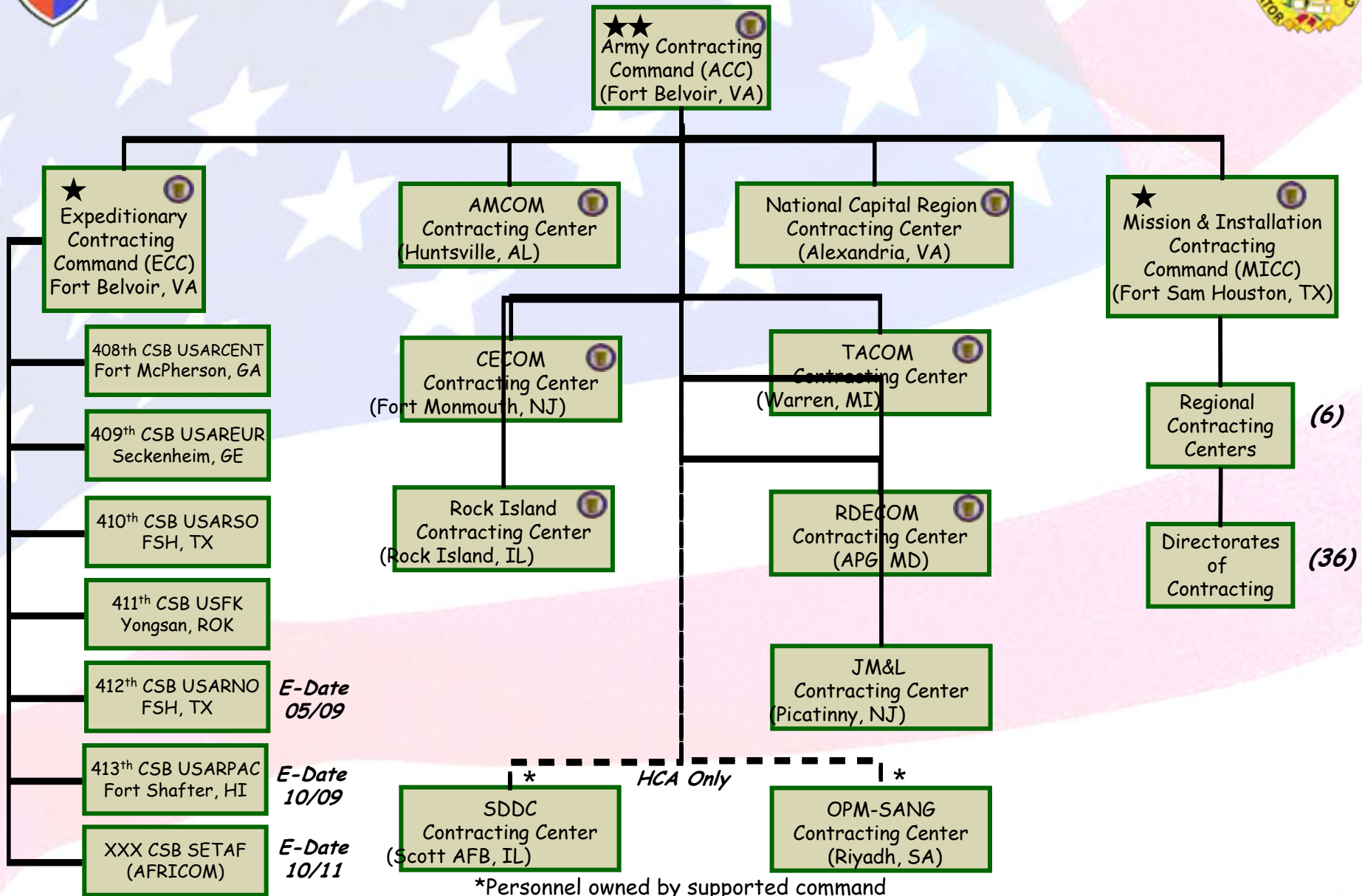
Provide global contracting support to warfighters through the full spectrum of military operations.

## Vision

A professional workforce providing quality contracting solutions in support of our warfighters



# Army Contracting Command Organization



\*Personnel owned by supported command

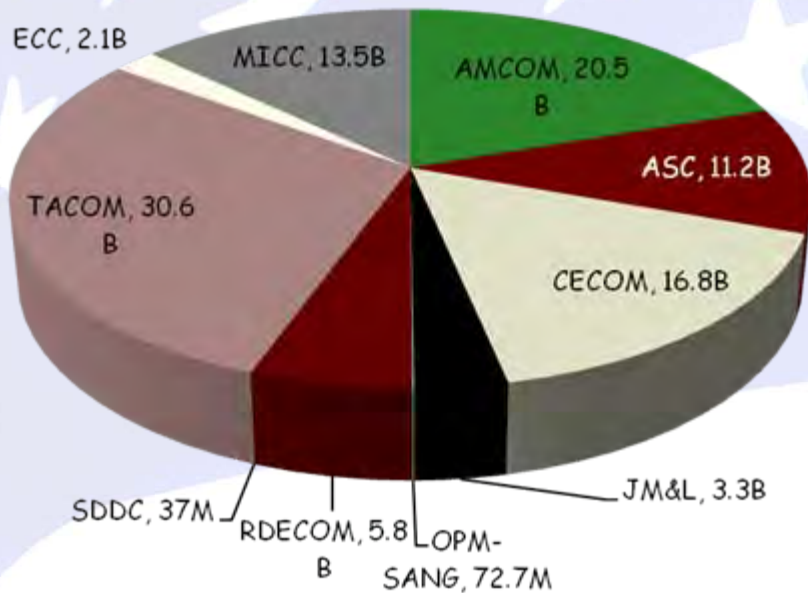




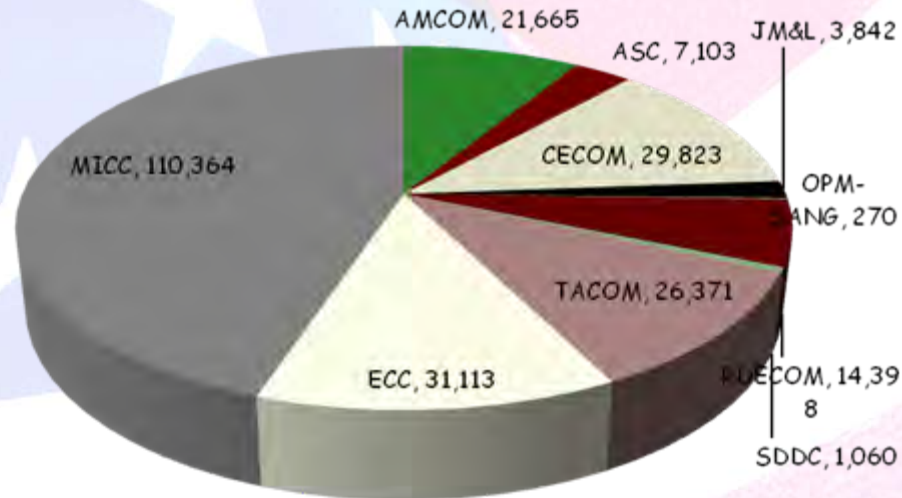


# How much the ACC Obligates

**Dollars**



**Actions**

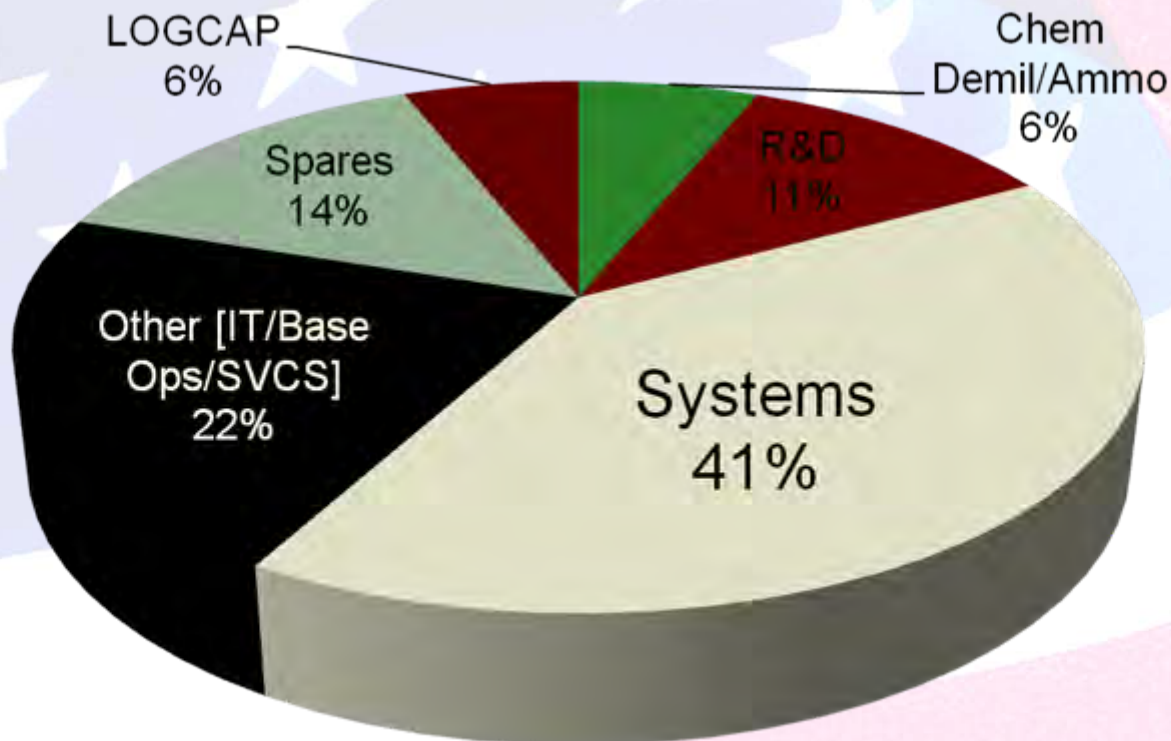


***FY 08 246,000 Actions \$104 B  
18% > in \$ from FY 07***

**4700+  
Personnel**



# What the ACC Procures



## Major Customers

- *PEO's/PM's*
- *ASCC's*
- *IMCOM*
- *NETCOM*
- *AMC*
- *USAR*
- *ATEC*
- *TRADOC*
- *FORSCOM*

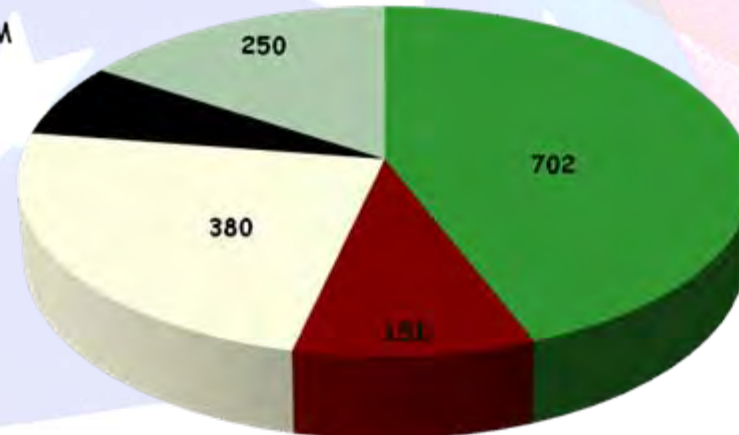
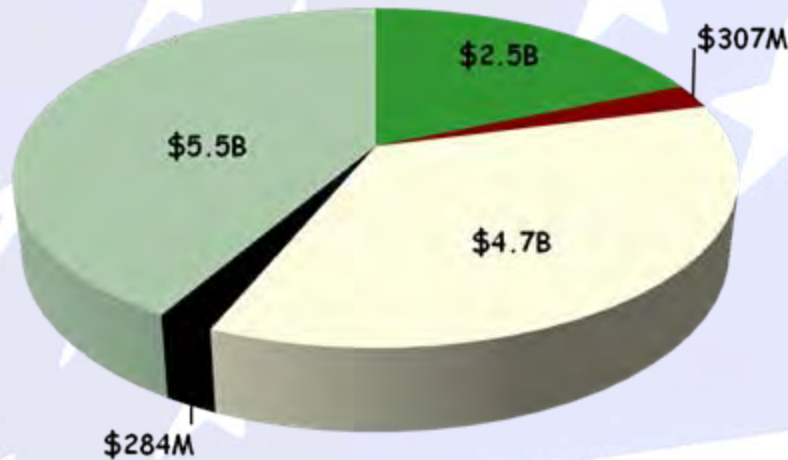


# ACC Support to OIF/OEF



**\$13.23B**

**1,592 Actions**



■ Supply Operations  
■ Field Services  
■ Combat Support  
■ Other  
■ LOGCAP

*8% Total Dollars in Direct Support to OIF/OEF*

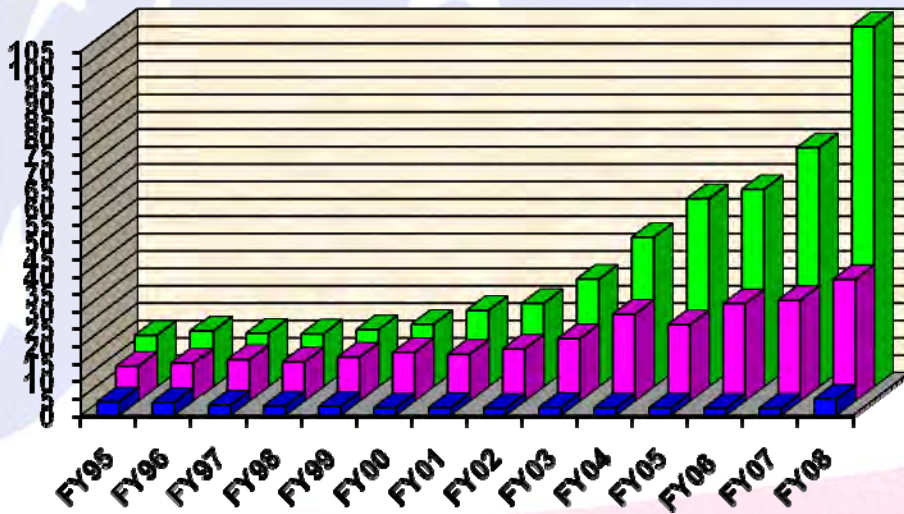
## EXAMPLES:

- Rock Island Arsenal Contracting Center - LOGCAP (\$5.5B/Year)
- TACOM Contracting Center - Afghanistan Security Assistance Program, \$1.7B
  - 27,000 vehicles & 104,000 weapons delivered



# ACC Trends & Impacts

■ People   ■ Actions > \$100K   ■ Total Dollars in Billions



## Increased Dollars

- Up 463% since '95

## Increased Actions

- Up 359% since '95

## Decreased Workforce

- Down 53% since '95

## Process Efficiencies Used to the Max!

- Partnering
- Credit Cards
- E-Commerce/Paperless Contracting
- ALPHA Contracting
- Alternative Disputes Resolution
- Use of Ordering Officers
- Long Term IDIQ Contracts
- Best Value

*Former AMC Command Contracting*



*New ACC*





# ACC Strategic Priorities

- Grow and develop a professional civilian and military workforce
- Establish & develop an expeditionary contracting capability
- Maintain superior customer focus
- Standardize, improve and assure quality business processes and policies across the organization
- Obtain and maintain needed resources



# *Questions*



accenture

*High performance. Delivered.*

Accenture and the United States Army

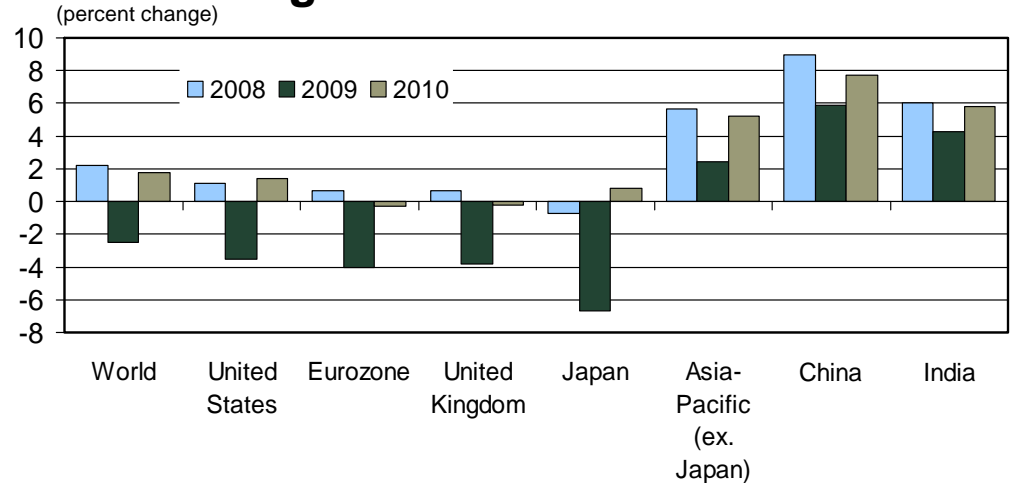
# Global Business Challenges, Trends and Emerging Solutions

# Global Economic Challenges Continue – But Forces of Recovery are at Work

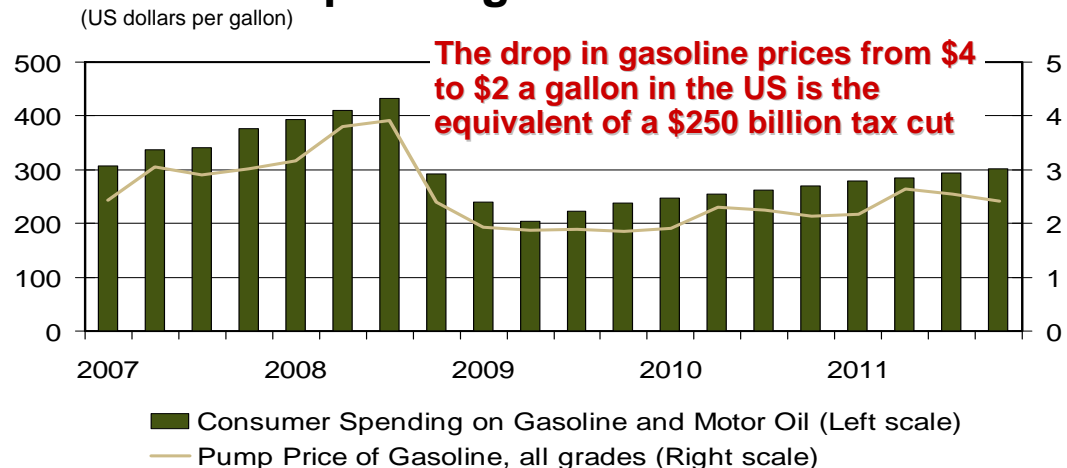
- World GDP expected to contract by over 2% in 2009.
- Global synchronized recession in advanced economies.
- Emerging markets not immune but affected in different ways.

- Forces supporting recovery:
  - Lower commodity prices
  - Fiscal stimulus programs
  - Low or near zero interest rates
  - Bail-out of troubled banks
  - Pent-up demand
- US and China likely to lead recovery

## Real GDP growth



## Gasoline spending: less of a burden





# Economic Trends and Challenges are Impacting Business Priorities

- Shortened outlook and timescales
- Cutting costs beyond the normal
- Focus on customer impact
- Retaining and motivating employees
- Marketplace opportunities and competitive advantage

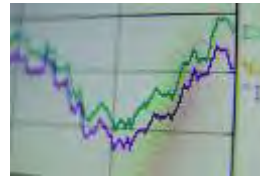


# Four Key Imperatives Today

1. Rapid and Sustained Cost Management
2. Operational Excellence
3. Customer Acquisition and Retention
4. Effective Merger and Acquisition



# Accenture Technology Vision: Four Trends Will Define Technology Landscape



**Data & Decisions**



**Internet  
Computing**

**Influencers**



**Millennials      Security      Sustainability**



**Mobility**



**Collaboration**

# 34th NDIA Executive Seminar

“Supporting the War Fighter In An Era Of New Changes”



## Army Security Assistance Overview

21-23 April 2009

Presented by BG Michael Terry the Commanding General, USASAC



# U.S. Army Organization for Security Assistance

**U.S. ARMY**

**Deputy Assistant Secretary of the Army  
for Defense Exports & Cooperation  
Rosslyn, VA**

POLICY

**- MATERIEL -  
Army Materiel  
Command  
Ft. Belvoir, VA**

**- MEDICAL -  
Office of the  
Surgeon General  
Washington, DC**

**- ENGINEER -  
Corps of  
Engineers  
Washington, DC**

**- TRAINING -  
Training & Doctrine  
Command  
Ft. Monroe, VA**

EXECUTION

**Security Assistance  
Command  
Ft. Belvoir, VA**

**- CONUS TRAINING -  
Security Assistance  
Training Field Activity  
Ft. Monroe, VA**

**- OCONUS TRAINING -  
Security Assistance  
Training Management  
Organization  
Ft. Bragg, NC**

**LCMCs  
PEO/PMs  
SAMD  
IMMC  
Acquisition Centers**

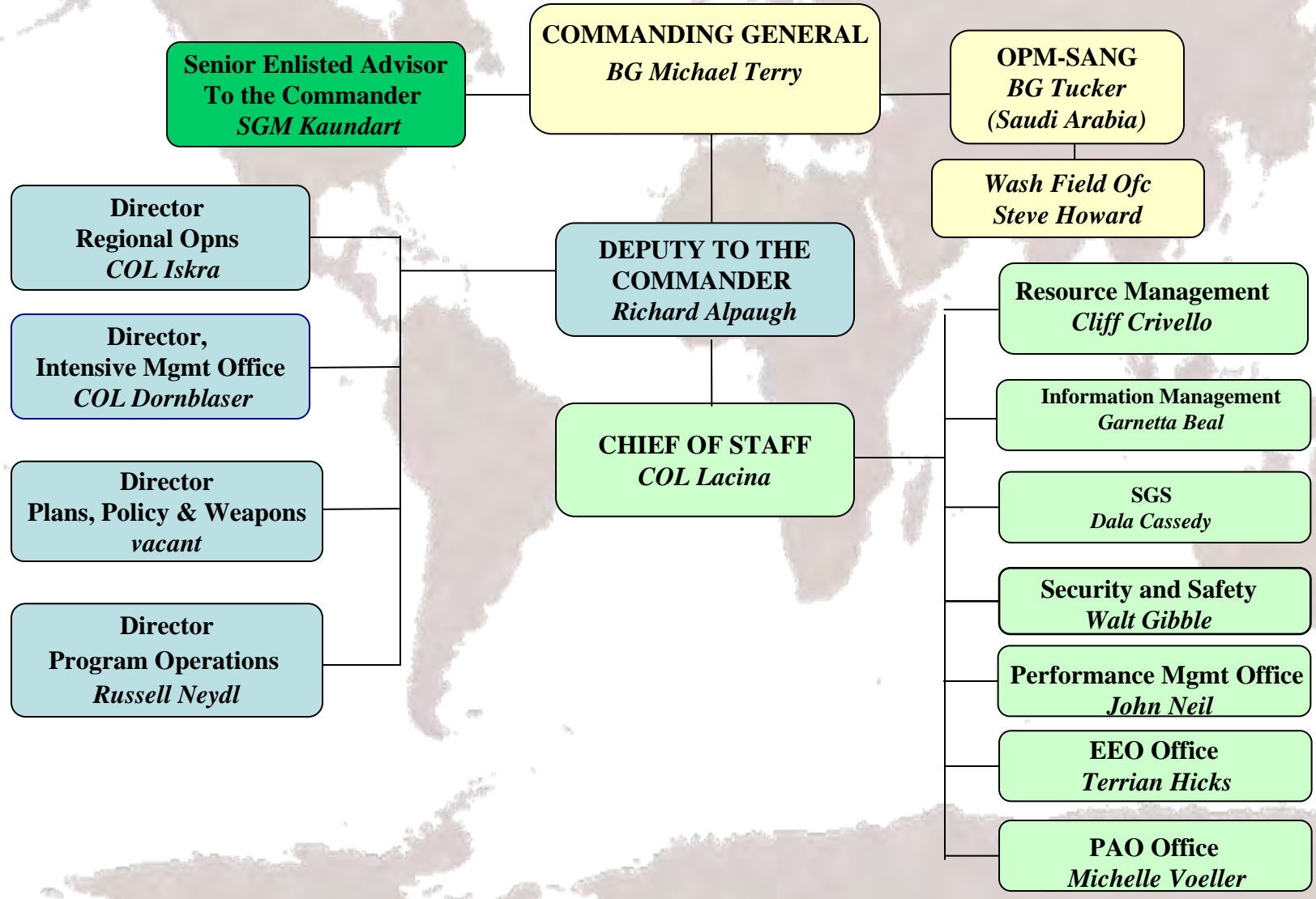
**Medical  
Management  
Activity**

**Legend:**

- Command
- - - Coordination / LOA Tasking



# United States Army Security Assistance Command





# AMC Security Cooperation *USASAC-Army's Face To The World*

***Managing 4362 cases valued at \$96B with an undelivered value of \$29.3B***

**FY 94-04 \$3.6B average annual sales; FY 05/06 >\$5B; FY 07 >\$9B;  
FY 08 sales >\$14.5B (\$5.4 in support of Iraq/Afghanistan)**

- **FY09 Sales \$15.7B (as of 1 Apr 09)**
- **Interface with 119 Security Assistance Offices World Wide**
- **USASAC LNOs embedded with COCOM HQs**

**Army FMS is a link to 140 different Armies,  
47 Air Forces, 26 Navies and 26 other country entities.**



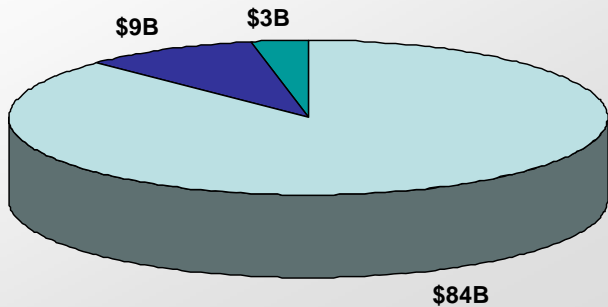
***Strength in Cooperation***



# ARMY Security Assistance

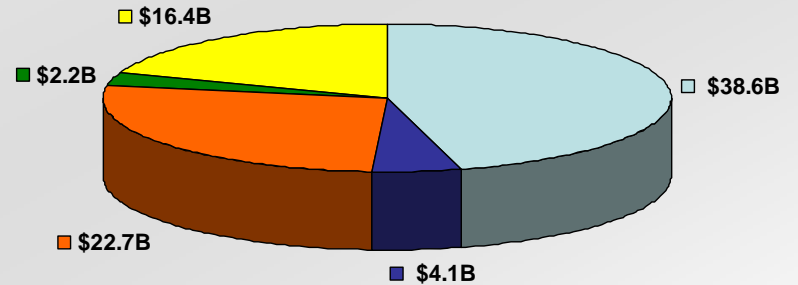
## 4362 ACTIVE FMS CASES

### (WHAT'S IN THE \$96B ?)



■ AMC 3725 Cases   
 ■ CORPS of ENG 137 Cases   
 ■ TRADOC 425 Cases

### AMC BREAKOUT \$84B



■ AMCOM   
 ■ CECOM   
 ■ TACOM   
 ■ JMC   
 ■ USASAC

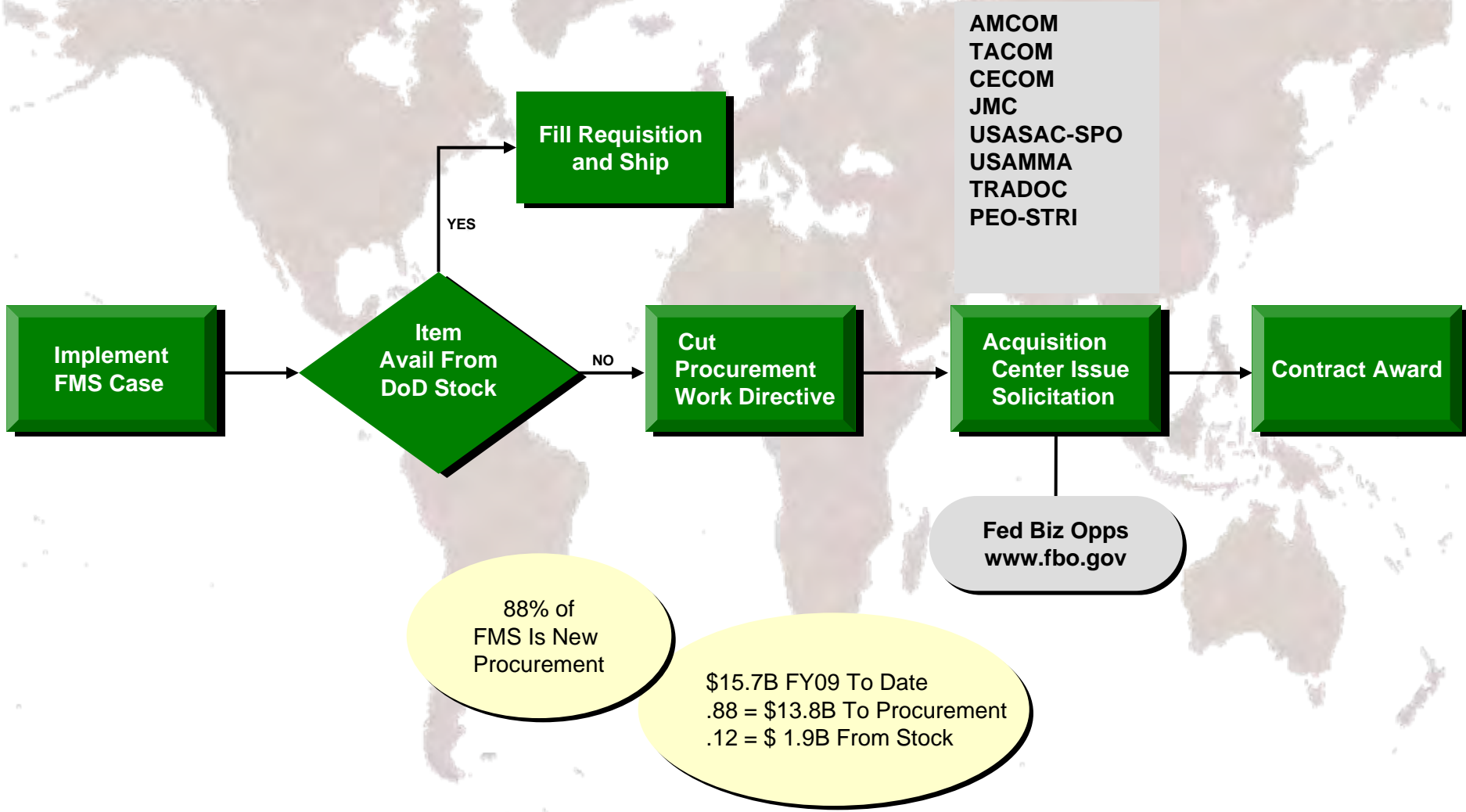
Total Cases and Values Constantly Changing

88% New Procurement





# FMS Case Execution



88% of FMS Is New Procurement

\$15.7B FY09 To Date  
.88 = \$13.8B To Procurement  
.12 = \$ 1.9B From Stock



# **Simplified Nonstandard Item Acquisition Program (SNAP)**

- **SNAP is the US ARMY FMS program that provides logistics support for items not available in the standard US supply system.**
- **SNAP is administered by TACOM in Warren Michigan.**
- **Requirements are posted for open bid on the World Wide Web (SNAP Database).**
- **Potential bidders must have a USG Cage Code and must register with SNAP.**
- **For more information contact Jane Elliott at 586 574-7098 or [Jane.elliott@us.army.mil](mailto:Jane.elliott@us.army.mil).**



# USASAC - PACOM Regional Operations

## PACOM ACTIVITIES

**Taiwan: Politically High Visibility**  
**PAC-3 – 4 Firing Units and 245 Missiles**  
**30 - AH-64, Apache**  
**UH-60M Blackhawk-Congressional Notification**

**Singapore:**  
**HIMARS – 16 Firing Units**  
**8 - CH-47 stateside basing**  
**20 - AH-64 Apache**

**India:**  
**12 - FF Radar and Mini-Depot**  
**224 – M4 Carbine Rifles**

**Philippines: Coalition Support**  
**2,200 - Harris radios**

**Australia: Coalition Support**  
**59 - M1 Abrams Tank**  
**CH-47F - Congressional Notification**  
**M777A2 - Congressional Notification**  
**54 - Excalibur and AFATDS**



## PACOM AREA OF OPERATIONS

- **33 Countries (18 with active Cases)**
- **907 open cases**
- **\$11.2B total program value**
- **\$5B undelivered value (M&S)**
- **24,500+ requisitions proc. 1Q-2Q FY09**



# USASAC – SOUTHCOM Regional Operations



## SOUTHCOM AREA OF OPERATIONS

- 38 Countries (28 with active Cases)
- 496 open cases
- \$2.1B total program value
- \$1.1B undelivered value

## SOUTHCOM ACTIVITIES

- Brazil:**  
30 - UH-60L, Blackhawk
- Colombia:**  
15 - UH-60L, Blackhawks  
360 - Assorted small arms (Numerous Cases)  
39 – Armored Security Vehicles  
214 - NVDs
- Chile:**  
Avenger  
M109A5 Howitzers  
Firefinder radar  
Cases are in development and require Congressional Notification
- Mexico: (Merida Initiative)**  
Bell 412 Helicopters



# USASAC – EUCOM Regional Operations

## EUCOM REGIONAL ACTIVITIES

### Netherlands: Coalition Support

- 240 - Hellfire Missiles
- 30 – AH-64D Apache
- 11 - CH-47D
- 32 Fire Units - Patriot

### United Kingdom: Coalition Support

- 423 – Javelin

### Canada: Coalition Support

- 6 – CH-47D

### Israel:

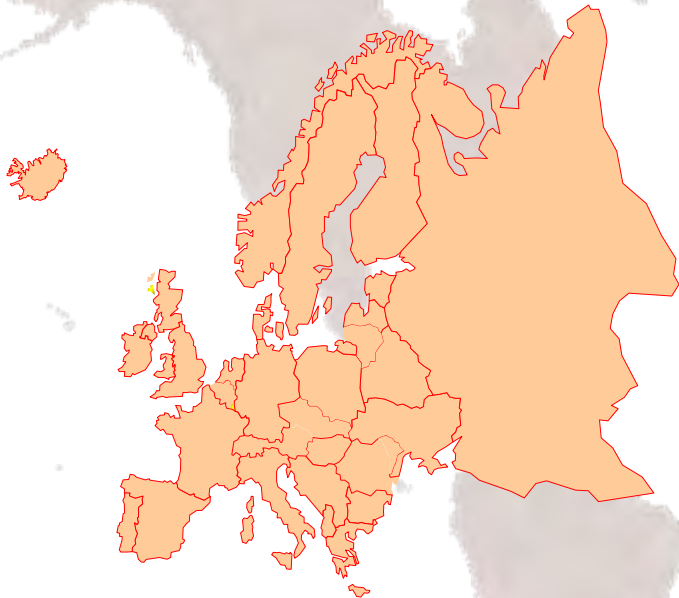
- 29 – AH-64A Apache
- 10 – Ah-64D Apache
- 500 - Hellfire Missiles

### Greece:

- 20 – AH-64A Apache
- 15 - CH-47D
- 36 - MLRS
- 6 Fire Units - Patriot
- 750 - Hellfire Missiles

### Germany:

- 19 Fire Units - Patriot
- 2429 – Stinger (Block I)



## EUCOM AREA OF OPERATIONS

- 52 Countries (40 with Active Cases)
- 6 International Organizations
- 1439 Active Cases
- \$12.71B Total Program Value
- \$3.4B Undeliverable Value
- 54K Requisitions Processed FY08



# USASAC – AFRICOM Regional Operations

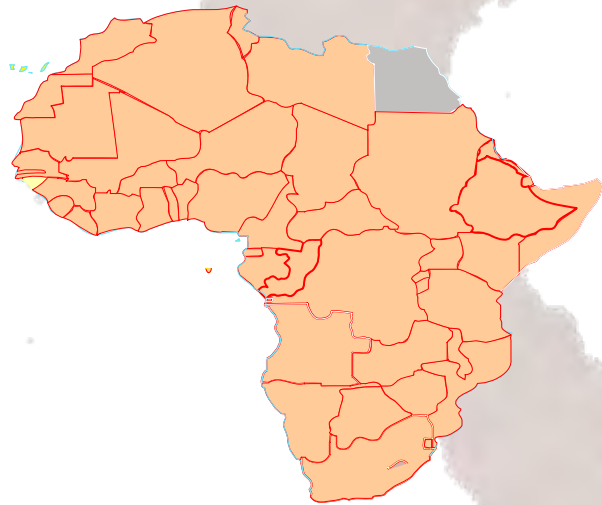
## AFRICOM ACTIVITIES

**Morocco:**  
60 - M109A5 Howitzers  
Track Vehicle Rebuild Facility

**Tunisia:**  
10 – UH-1H HUEY

**Djibouti:**  
45 - HMMWVs

**Kenya:**  
22 - HMMWVs  
6964 – M4A1 Carbine Rifles



## AFRICOM AREA OF OPERATIONS

- 56 Countries (33 with Active Cases)
- 183 Active Cases
- \$390.72M Total Program Value
- \$181.1M Undelivered Value
- 2K Requisitions Processed in FY08



# USASAC – CENTCOM Regional Operations

## CENTCOM ACTIVITIES

- Lebanon:**
- FY09 FMF Supplemental**
- Saudi Arabia:**
- OPM FSF**
- LAV**
- 22 – UH-60 Blackhawk**
- 12 - AH-64D**
- 315 - M1A2S Upgrade**
- Egypt:**
- AH-64D Apache**
- 250 - M1A1- CoPro ( Increments 11 & 12)**
- Kuwait:**
- 16 - AH-64D Apache**
- 6 - Patriot Configuration III Radar Upgrade**
- Patriot Live Fire Exercise**
- UAE:**
- SOC Aviation Deployment**
- THAAD**
- 30 - AH-64A (A to D) Upgrade**
- 20 Launchers - HIMARS/ATACMS**
- 40 - UH-60M**
- 9 Fire Units – Patriot**
- Kazakhstan:**
- HUEY II – New procurement and sustainment**



## CENTCOM AREA OF OPERATIONS

- 17 Countries (All with Active Cases)**
- 905 Open Cases**
- \$50.8B Total Program Value**
- \$18.2B Undelivered Value**
- 48K Requisitions Processed FY08**



# USASAC - Intensive Management Office



## DIRECTORATE ACTIVITIES

- **Regional Assessment: Program Fielding, Force Modernization and Sustainment**
- **Actual/Projected FMS: FY08 \$6.4B/FY09 Projected \$7B - \$2.835B Mid year.**
- **Iraq: Force Generation, Force Modernization, Sustainment and Logistics Capacity Building for both Ministry of Defense and Ministry of Interior**
- **Afghanistan: Force Generation for expansion of Army and Police Forces, Force Modernization of Army Air Corps; training and logistical support**
- **Pakistan: Support for Ministry of Defense in modernization of conventional capabilities: provision of materiel to Ministry of Defense and Ministry of Interior for counterterrorism capabilities.**

- **3 Countries**
- **489 Active Cases**
- **\$14.149B Total Program Value**
- **109 Cases Under Development (\$4.7B)**
- **1,326± New Requisitions Monthly (Avg)**





# Major Programs



## Major Weapons Systems

- M1A1 Abrams Tank: 140 Active; 140 Proposed: \$667M - \$2.5B
- Armed Scout Helicopter (Bell 407): 27 Active; 26 proposed: \$450M - \$1B
- Stryker Infantry Carriers: 244 Active; 166 Proposed: \$605M - \$1B
- Armored Security Vehicle: 80: \$115M
- M16A4: 140K
- Mi-17 Helicopters: 22
- M1114 HMMWV: 8500



## Major Weapons Systems

- M109A5 Howitzers: 115
- AH-1F Attack Helicopters: 8
- M113A2 Armored Personnel Carriers: 550
- Frontier Corps Equipment; \$100M
  - Command & Control : \$48M
  - Troop Equipment: \$35M
  - Support Vehicles: \$17M
- TOW II Missiles: 121



## Major FMS Support

- M1151/M1152 HMMWV: 6500
- Small Arms: 15K Machine Guns, 50 Mortars, 3K Grenade Launchers (Former Eastern Bloc), 33K M16A2
- 23K Ford Ranger Pick Ups, 4K Medium Tactical Vehicles (Navistar 5T), 1,200 Heavy Trucks
- Ammunition (220K standard rounds & 310K non-standard rounds).
- Training Support Contract: \$800M over 5 years
- Mi-17 Helicopters: 10



# USASAC Weapons Division

Mr. Doug Leach

e-mail: [douglas.leach@us.army.mil](mailto:douglas.leach@us.army.mil)

Phone: 703.806.2291

## INDUSTRY ENTRY POINT FOR:

- **Industry Dialogue – Meetings With USASAC**
- **Pre-LOR Engagement with Industry & Acquisition Communities**
- **LCMC/PEO Interface on Weapons Systems**
- **Interface with Army International Affairs**
- **Coproduction Programs**
- **Air and Trade Shows**



# Contact Us

<b>BG Michael Terry</b>	<b>Commander USASAC</b>	<b>703-806-2210</b>
<b>Mr. Rick Alpaugh</b>	<b>Deputy</b>	<b>703-806-2211</b>
<b>COL Catherine Lacina</b>	<b>Chief of Staff</b>	<b>703-806-2213</b>
<b>COL Christopher Iskra</b>	<b>Director Reg Ops (RO)</b>	<b>703-806-2217</b>
<b>COL David Dornblaser</b>	<b>Director IMO</b>	<b>703-806-2214</b>
<b>Mr. Philip Roman</b>	<b>Dep Dir, CENTCOM RO</b>	<b>703-806-2218</b>
<b>Ms. Jacqueline Williams</b>	<b>Dep Dir, EUCOM, AFRICOM RO</b>	<b>256-450-5662</b>
<b>Mr. Alfred Thomas</b>	<b>Dep Dir, PACOM, SOUTHCOM RO</b>	<b>256-450-5601</b>
<b>Mr. Douglas Leach</b>	<b>Chief, Weapons Division</b>	<b>703-806-2291</b>



# BACK UPS

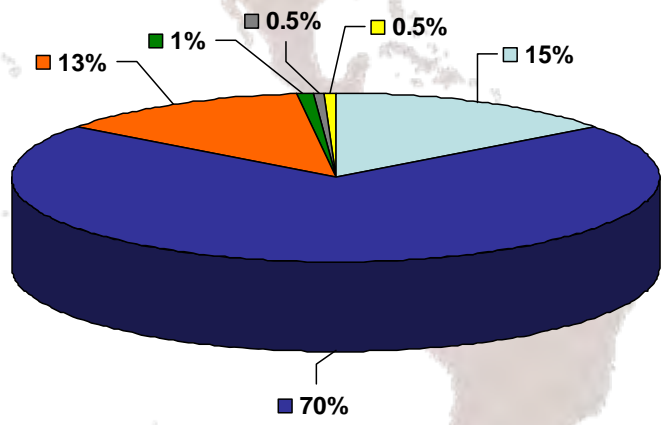


# ARMY SECURITY ASSISTANCE ENTERPRISE

## AMCOM \$38.6B

% of Total Package Case Value

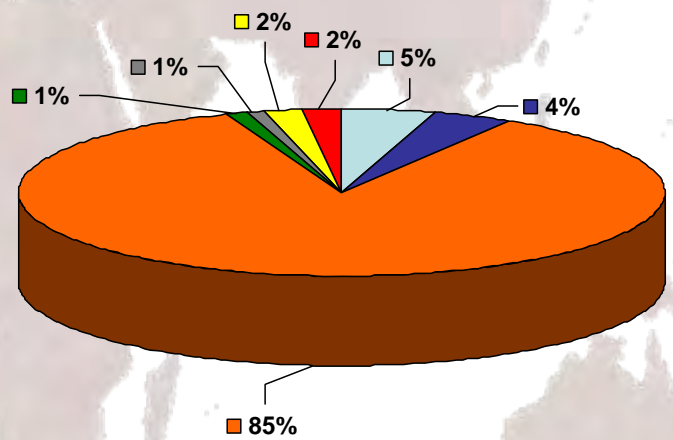
### HELICOPTERS \$7.7B



BLACKHAWK	APACHE	CHINOOK	COBRA	HUEY	MISC EQUIP/SVCS
92 ea	180 ea	75 ea	14 ea	92 ea	

Quantity of End Items On Open Cases

### MISSILES \$30.9B



JAVELIN	TOW	PATRIOT	STINGER	HELLFIRE	HAWK	MISC
2968 ea	10,459 ea	1,545 ea	683 ea	2,339 ea	200 ea	

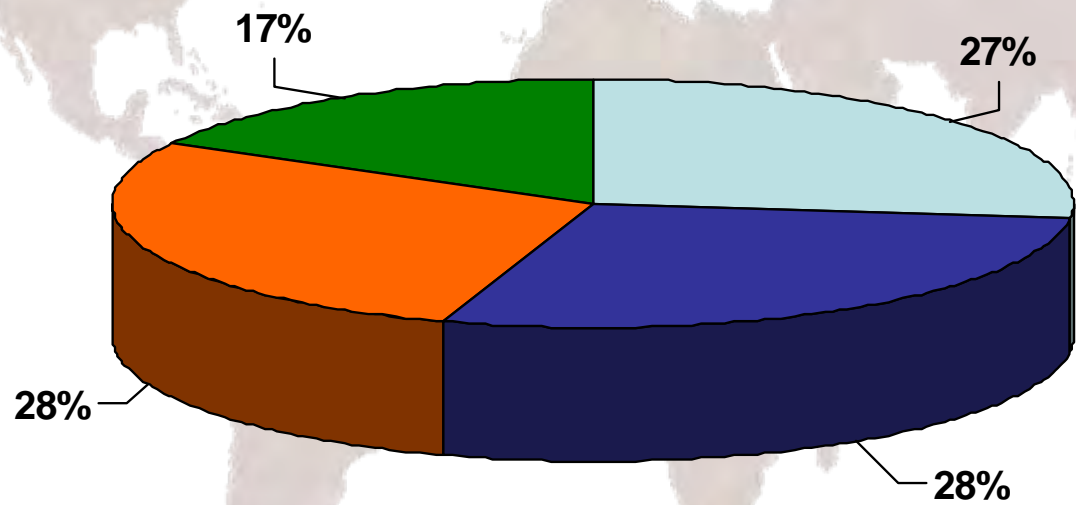
Quantity of End Items On Open Cases (Does Not Include Launchers)



# ARMY SECURITY ASSISTANCE ENTERPRISE

## CECOM \$4.1B

% of Total Package Case Value



■ RADARS ■ COMMO ■ NVD ■ Misc Equip/SVCS

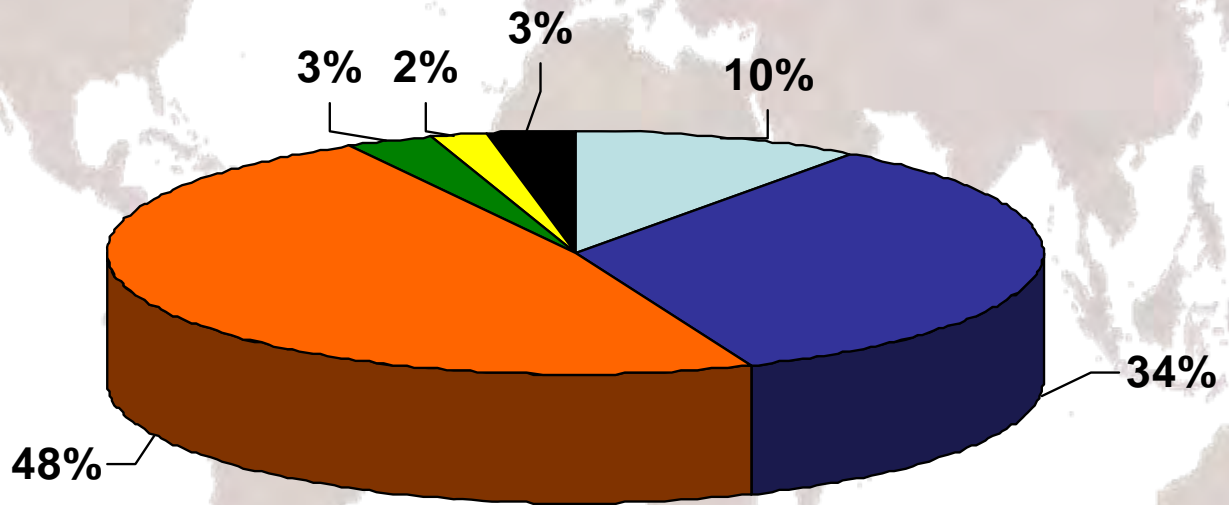
167 ea      13,851 ea      31,732 ea  
Quantity of End Items On Open Cases



# ARMY SECURITY ASSISTANCE ENTERPRISE

## TACOM \$22.7B

% of Total Package Case Value



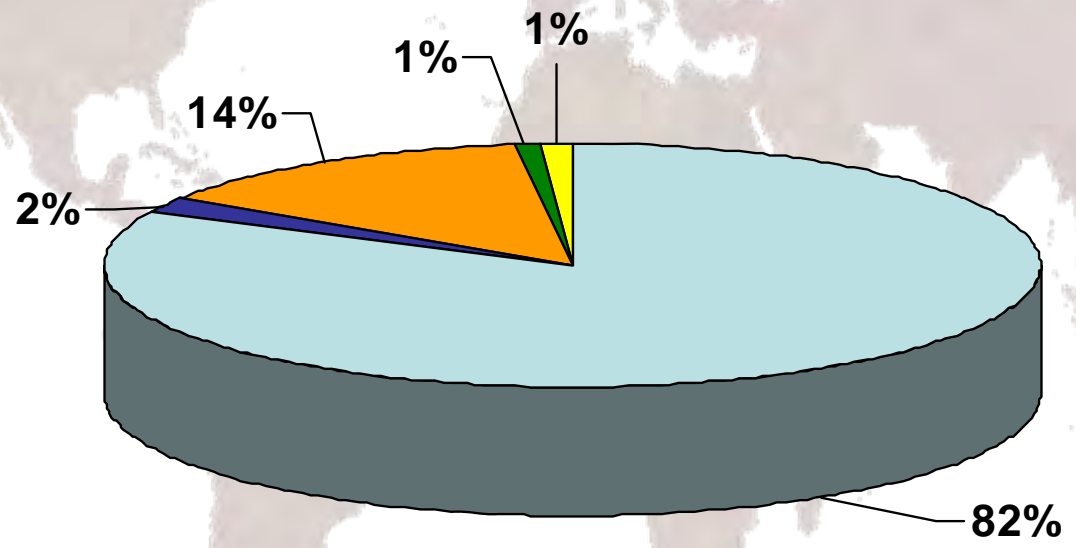
HMMWVS	VEHICLES	TANKS	SMALL ARMS	ARTILLERY	MISC EQUIP/SVCS
13,485 ea	5,972 ea	1,685 ea M1A1/2s & M60s	158,503 ea	536 ea	
Quantity of End Items On Open Cases					



# ARMY SECURITY ASSISTANCE ENTERPRISE

## JMC \$2.2B

% of Total Package Case Value



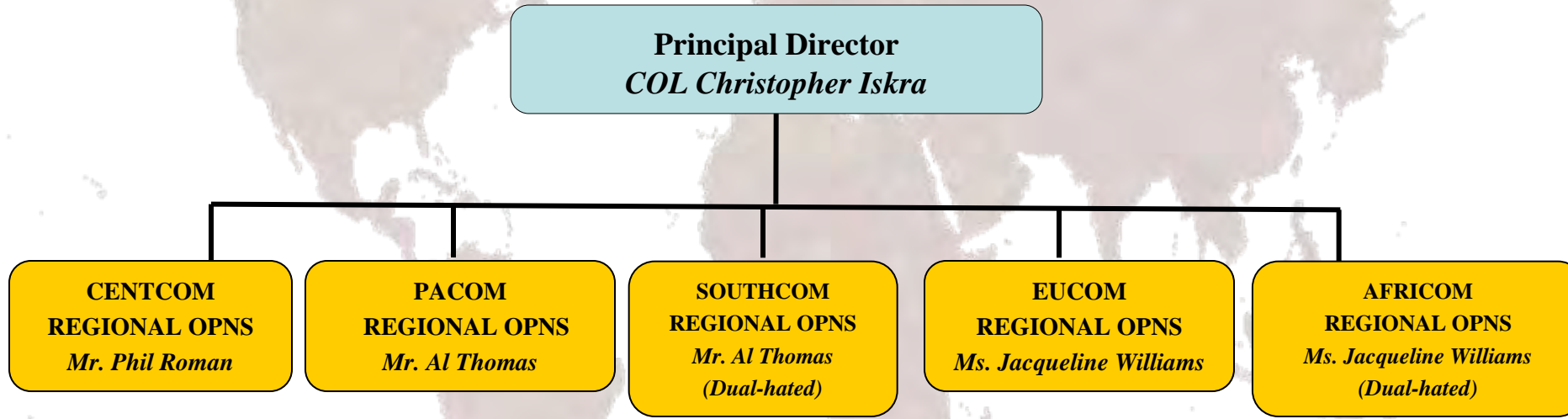
SMALL CALIBER	LARGE CALIBER	NON-STD	ROCKETS	MISC EQUIP/SVCS
613,530,000 ea	437,952 ea	206,843,000 ea		101,224 ea
Quantity of Ammo Items On Open Cases				

35% Of The Army's FY08 Ammo Buy Was For FMS



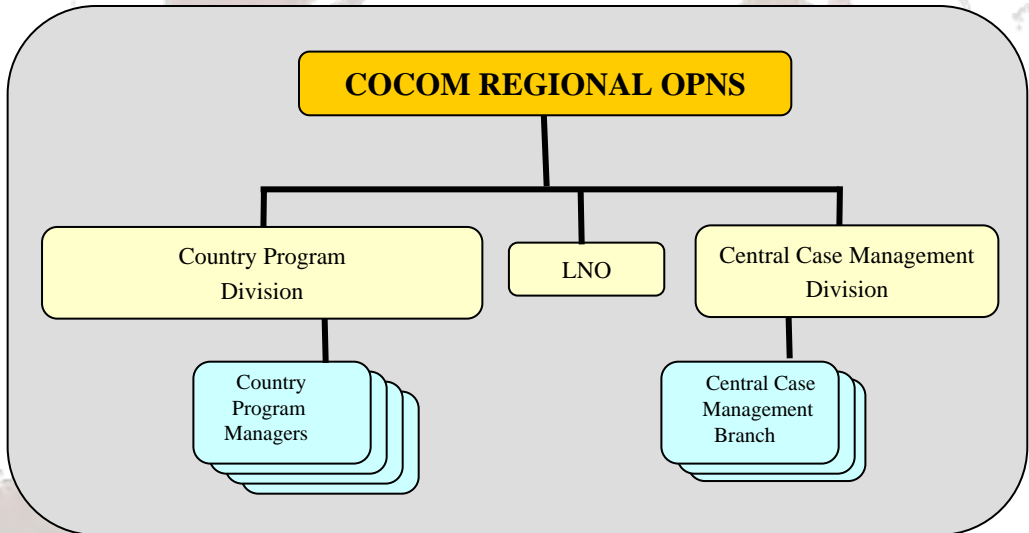


# Regional Operations Directorate



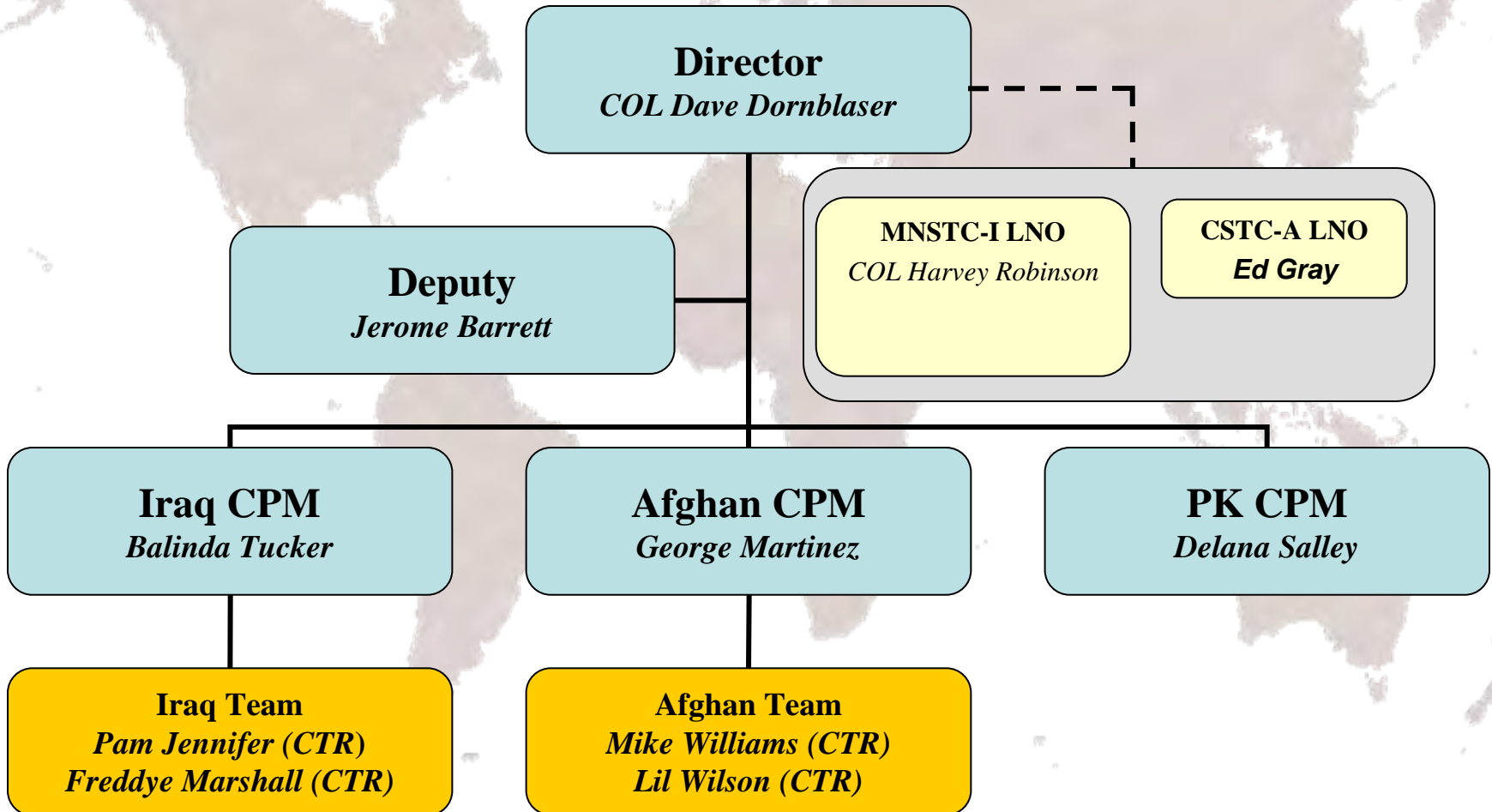
## Core Competency of USASAC executed here...

- Case Development
- Case Execution
- Case Closure





# Intensive Management Office



## Overview

- Introduction to Honeywell
- Environment
- Honeywell's Public-Private Partnerships
- Partnership Challenges
- Performance-Based Logistics Challenges
- Opportunities

## Honeywell Technology Solutions Inc. Overview



### Space, Networks & Communications

### Logistics Services

### Technical Services

#### PROFILE

- Wholly-owned subsidiary headquartered in the Washington-Baltimore Corridor
- Approximately 5,000 employees
- Over 100 locations: 22 countries, 33 states, the District of Columbia
- More than 100 active contracts

#### HERITAGE

- Bendix Radio (1950)
- Bendix Field Engineering Corporation (1961)
- AlliedSignal Technical Services Corporation (1993)
- Honeywell Technology Solutions Inc. (2000)
- Dimensions International Acquired (2007)

*Primarily Government Technology-Oriented Solutions*

# Challenging Environment

## Combat Operations

- Warfighting operation tempo 5 to 10 times greater than peacetime
- Deployed equipment “aging” faster than it can be replaced
- Continued combat and logistics mission in Iraq and Afghanistan

## Budget

- Procurement programs appear at risk – deferred or cancelled
- Requirement to “sustain” legacy systems
- Defense budgets appear to be leveling off or declining

*How do we do more with less?*

## Public Private Partnering

Leverage depot resources

Improve performance



**ANNISTON ARMY DEPOT**  
WEAPONS COMBAT VEHICLES AMMUNITION

A photograph showing a large military tank being lifted by a crane at an outdoor depot.



Share best practices  
Improve product reliability



# Honeywell



**TOBYHANNA**  
ARMY DEPOT  
EXCELLENCE IN ELECTRONICS



Strengthen Industrial Base Core Capabilities



Best Value for Government

## Army Total InteGrated Engine Revitalization (TIGER)

### Army Maintenance Support

- Partnership with Anniston AD – depot artisans provide touch labor
- Increased life of the M1 Abrams tank engine to 1,000 hours (2X over baseline)

### Logistics Management

- Supply chain management and reclamation of repairable parts
- Condition-Based Maintenance
- Field Service Engineering and Support

### Exceeding Award Fee Requirements

- 2006 SECARMY Award for Excellence in Contracting
- \$32 million in cost avoidance at field repair locations
- First pass yield increased from 60% to 93%



*Proven Performance, Quantifiable Results*

## Other Key Public-Private Partnerships

- **Army T-55 Engine at CCAD (Corpus Christi, Texas)**
  - Life-cycle management on CH-47 Chinook engine and improved component reliability
  - 90% availability and decreased maintenance interval by 50%
- **Navy Total Logistics Support (TLS) at Fleet Readiness Center – East (Cherry Point, NC) and Fleet Readiness Center – Southeast (Jacksonville, FL)**
  - Deliver repairables for auxiliary power units and main fuel controls
  - 99% acceptance rate; and \$70M+ in savings over the contract period
- **Air Force Support Equipment Corporate Contract (Warner-Robins, Georgia)**
  - Integrated contract on F-15 Test Equipment to improve availability / obsolescence
  - 82% reduction in customer wait time (500 days to 90 days )
  - 93% reduction in acquisition lead time (417 days to 50 days)
- **Air Force Secondary Power Logistics Solutions at Ogden Air Logistics Center (Hill AFB, UT)**
  - Reliability improvements on C-130 and B-2 auxiliary power units; manage distribution center and supply chain
  - Started last year with 90% availability target

*Proven Performance, Quantifiable Results*



## Partnering Challenges

### Process Ambiguity Limits Partnerships

- Partnerships can take 2-4 years to establish – this needs to be cut in half
- Early collaboration between contracting, finance and maintenance enable partnership success
- No standard playbook and best practices/lessons learned for public-private partnerships
- Partnerships can leverage excess government capacity (labor, facilities, etc.) to provide best value – need to be able to quantify these savings in BCAs
- Lengthy approval process in inventory and component management slows durability and reliability improvements

*Partnership Standardization is Critical*

# Performance-Based Contracting Challenges

- Lack of long-term agreements and Business Case Analyses (BCAs) that do not accurately reflect benefits are limiting factors in more widespread use of PBL contracts
- Allowing commercial, off-the-shelf items for component maintenance is an aspect of PBL contracting that can quickly incorporate reliability enhancements
  - Maintain form, fit and function of component
  - Army Product Improvement Program Pilot is tailor-made for Depot –Private PBL contracts
  - The requirement for subcontractors to comply with government cost accounting standards eliminates many preferred sources for parts

*Focus on Outcome Metrics – Prove Success*

# Opportunities

Given continued combat operations and an uncertain procurement environment, Industry and Government can and should leverage our core capabilities using performance-based partnerships to:

- Improve reliability, durability and availability of legacy systems
- Leverage industry expertise and expand depot operations
- Drive performance by partnering for outcomes based on metrics
- Apply product improvement to insert technology during reset
- Rebuild our military for future missions

*Leverage Industry and Government Capabilities*

## A Wall St Perspective on the Defense Industry



Myles Walton, Ph.D., CFA  
617.556.3707  
[myles.walton@opco.com](mailto:myles.walton@opco.com)

# Defense Industry Investment Summary

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## 2009 Defense Investing Themes

It's Still Cyclical

“Defensive” Qualities/Underperforms in Market Rally

New Admin/Iraq Overhang

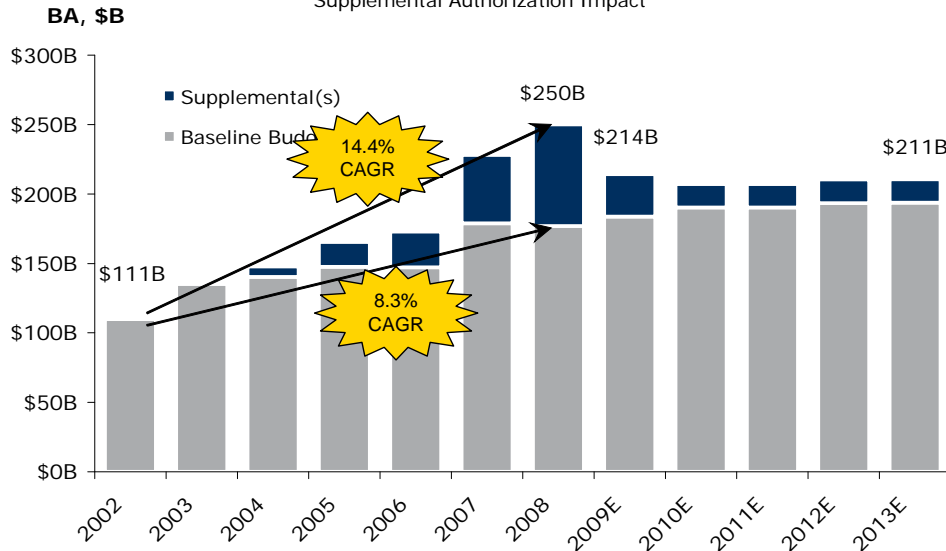
Budget Pressure

## Valuation on Defense Stocks Reflects:

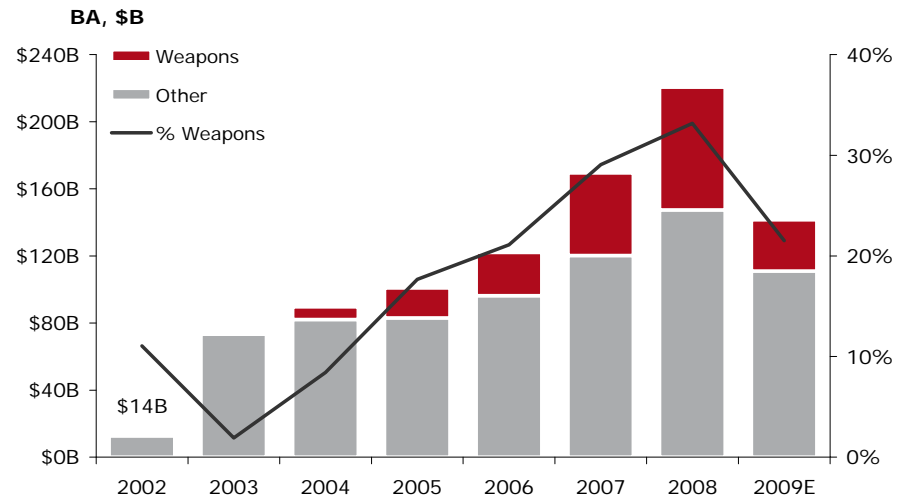
- Decelerating/declining growth environment
- Better than market EPS growth through 2009/10
- Long-term visibility from backlogs/budgets
- Free cash flow after dividends of ~\$15B over 2009/10 leaves plenty to deploy in acquisitions, dividend increases and share repurchase
- Growth opportunities (acquisitions and organic) beyond typical weapons spending include homeland security, federal IT, and MRO

# Defense Budget Dynamics

**Weapons Spending Budget Authority (BA)**  
Supplemental Authorization Impact



**Supplemental Appropriations (BA)**  
Weapons Spending Allocation



Source: Department of Defense and Oppenheimer & Co. Inc.

*Supplemental Appropriations have protected baseline budgets, providing a boost to budget authority above and beyond those seen during past conflicts...*

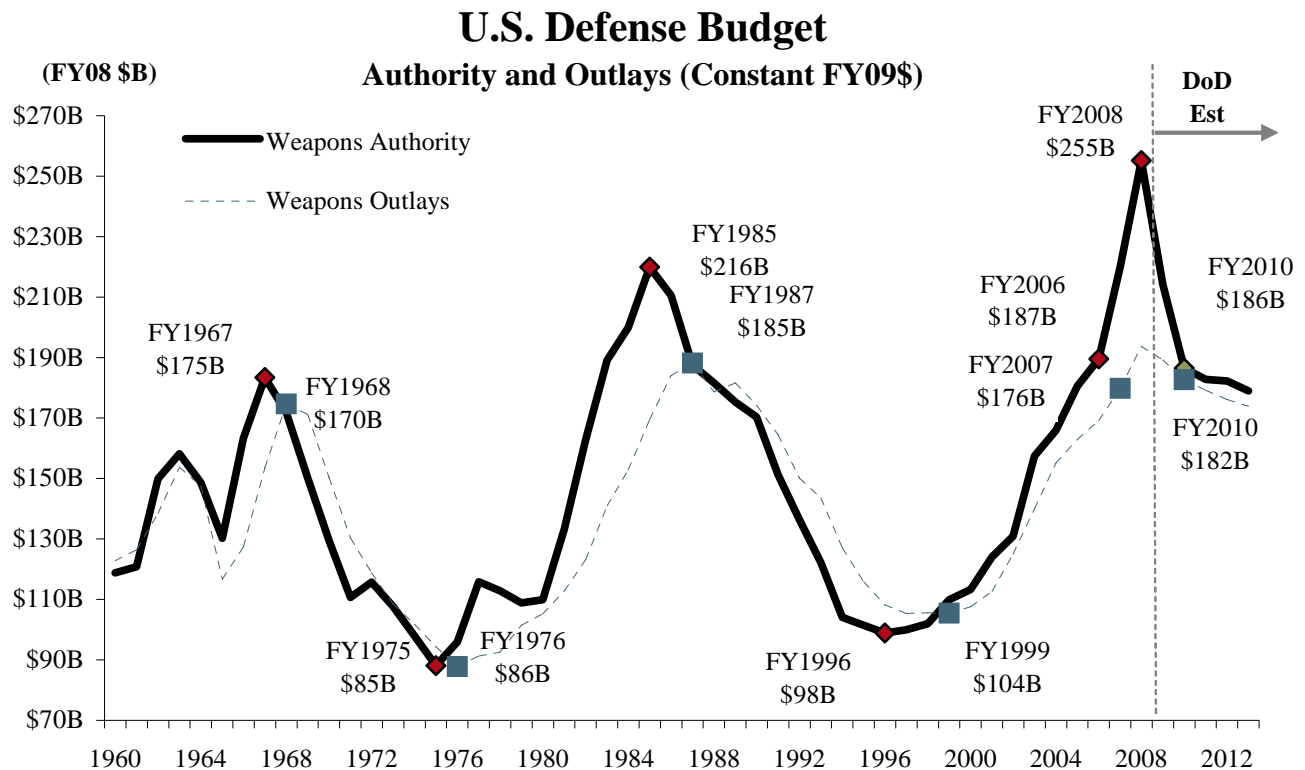
*...while weapons Spending has garnered an increasing share of them, in stark contrast with past history, when the focus was on Operations & Maintenance*

***Supplementals protect baseline programs and bolster budgets of war-torn equipment***

# Our Thinking on Defense Spending Cycles

## Drivers to Defense Spending

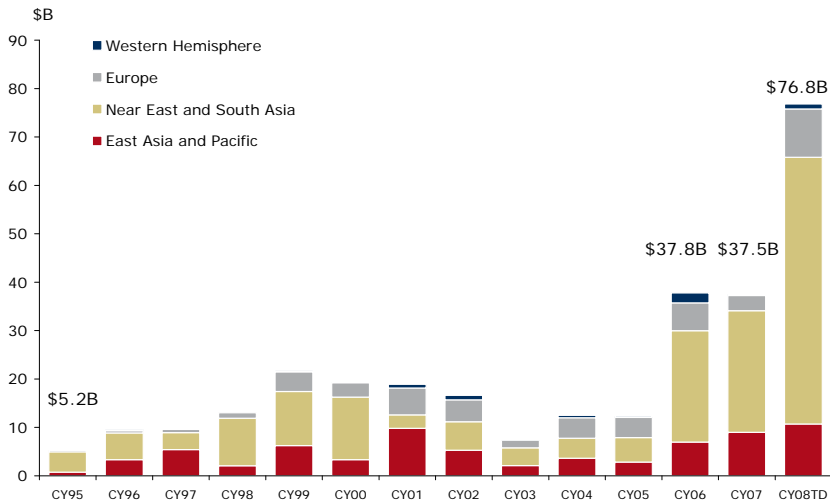
1. Threat: Domestic Fears Take Center Stage
2. Available Funds: Scarcity Builds
3. Washington World View: Unknown



*Cycle Drivers Have Turned Negative*

# Diplomacy Through Arms

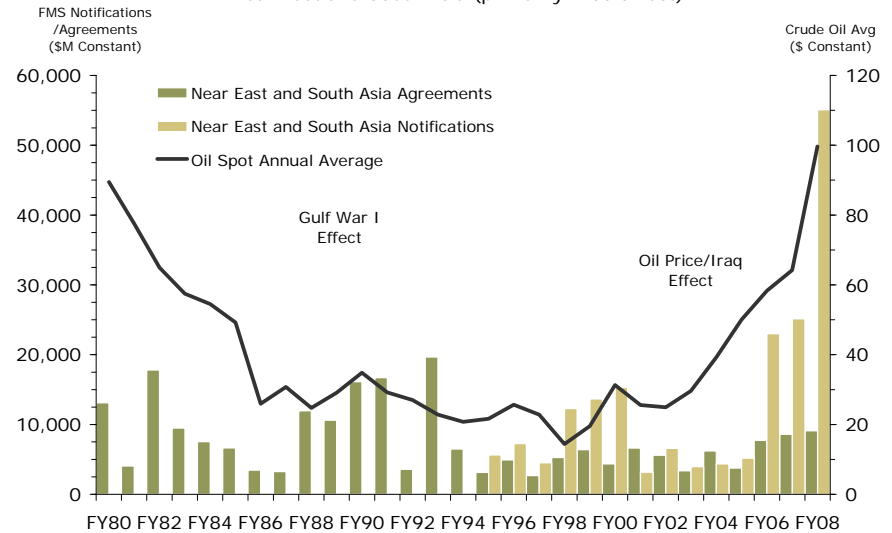
**Foreign Military Sales (FMS) Notifications**  
by Region 1995-2008YTD



Source: Department of State and Oppenheimer & Co. Inc.

*FY06 & FY07 FMS notifications exceeded the previous three years combined, doubled again in 2008.*

**Oil Prices vs. FMS Notifications/Agreements**  
Near East and South Asia (primarily Middle East)



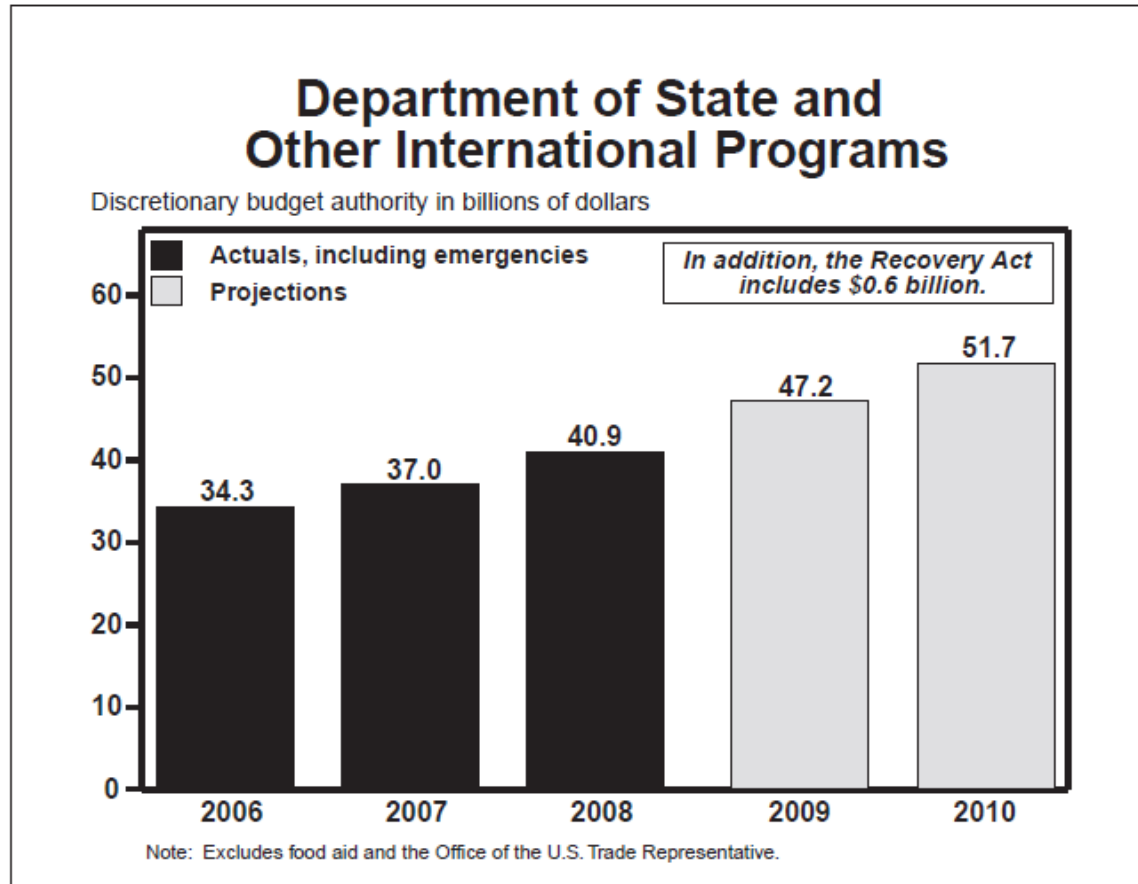
Source: DoD DSCA FY89-05 Fact Books, Congressional Notifications (FY06 estimate), and Oppenheimer & Co. Inc.

*Buoyed by surging oil revenue, Middle Eastern countries are leading the pack.*

***International acceleration should dampen downturn***



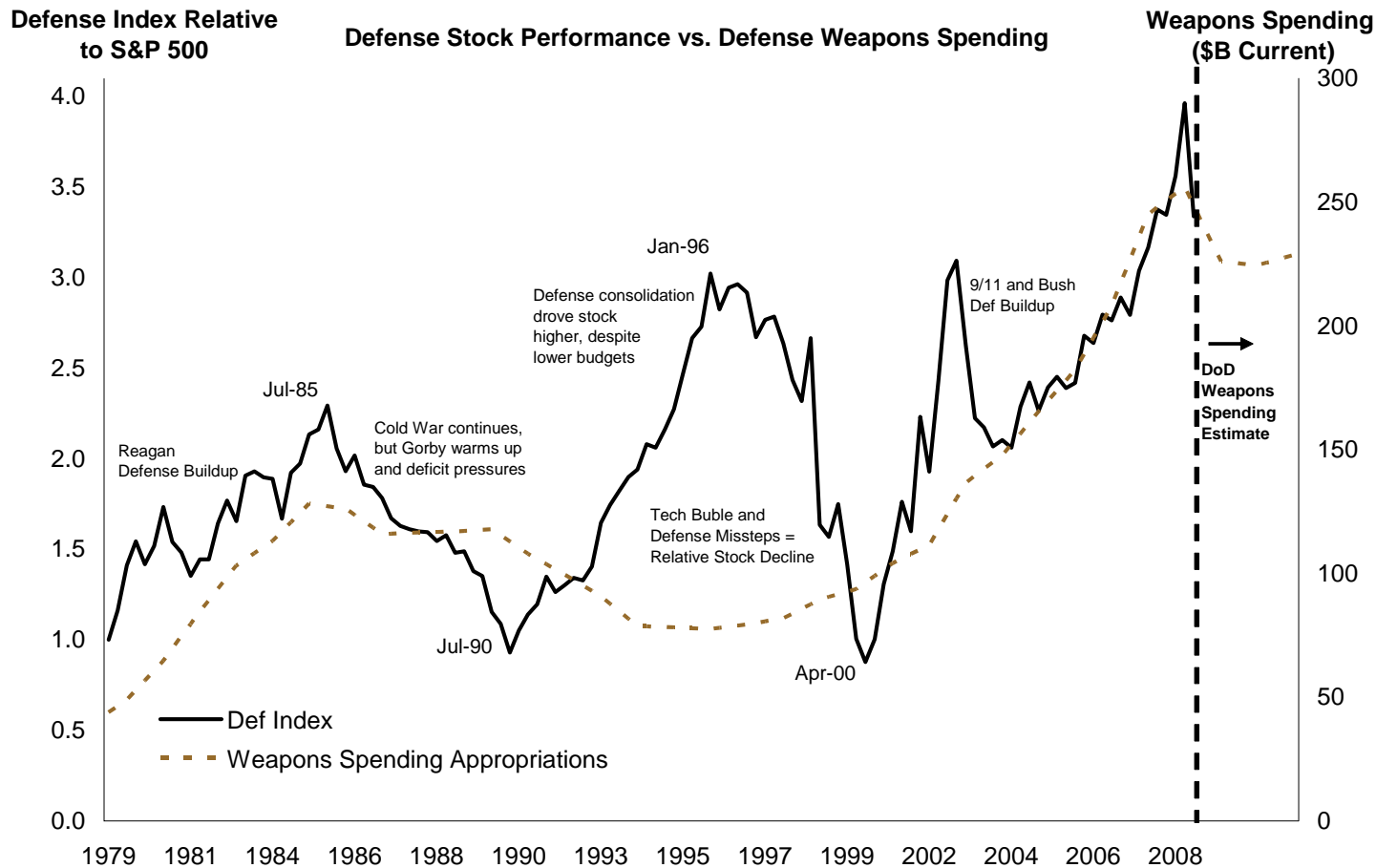
# Soft Power Flowing to State's Empowerment



Source: FY09 President's Budget

*Increasing Role of The State Department  
In Both Policy and Budget*

# Budgets and Stocks



Stocks include: NOC, GD, LMT, RTN, LLL, ATK, McDonnell Douglas, E-Systems, Martin Marietta, Grumman  
Source: Department of Defense and Oppenheimer & Co. Inc.

*Defense Stocks Poised to Be Source of Funds On Any Economic/Market Rebound*

# Investment Positives: Multi-year Visibility

## Backlog Analysis

<i>(\$MM)</i>	<b>2003A</b>	<b>2004A</b>	<b>2005A</b>	<b>2006A</b>	<b>2007A</b>	<b>2008A</b>
General Dynamics Total*	34,332	34,905	34,136	35,974	34,576	51,648
Lockheed Martin Total	76,899	73,986	84,188	75,900	76,700	80,900
Northrop Grumman Total	58,154	58,080	55,983	61,021	63,665	78,052
Raytheon Total*	25,087	29,611	31,248	33,595	36,614	38,884
<i>(% Growth)</i>	<b>2003A</b>	<b>2004A</b>	<b>2005A</b>	<b>2006A</b>	<b>2007A</b>	<b>2008A</b>
General Dynamics Total*	57%	2%	(2%)	5%	(4%)	49%
Lockheed Martin Total	9%	(4%)	14%	(10%)	1%	5%
Northrop Grumman Total	NA	(0%)	(4%)	9%	4%	23%
Raytheon Total*	19%	18%	6%	8%	9%	6%
<i>Yrs B/L on Next Year's Sale</i>	<b>2003A</b>	<b>2004A</b>	<b>2005A</b>	<b>2006A</b>	<b>2007A</b>	<b>2008A</b>
General Dynamics Total*	2.2	2.0	1.7	1.6	1.5	1.9
Lockheed Martin Total	2.2	2.0	2.1	1.8	1.8	1.8
Northrop Grumman Total	1.9	1.9	1.9	1.9	1.9	2.3
Raytheon Total	1.5	1.6	1.6	1.6	1.6	1.6

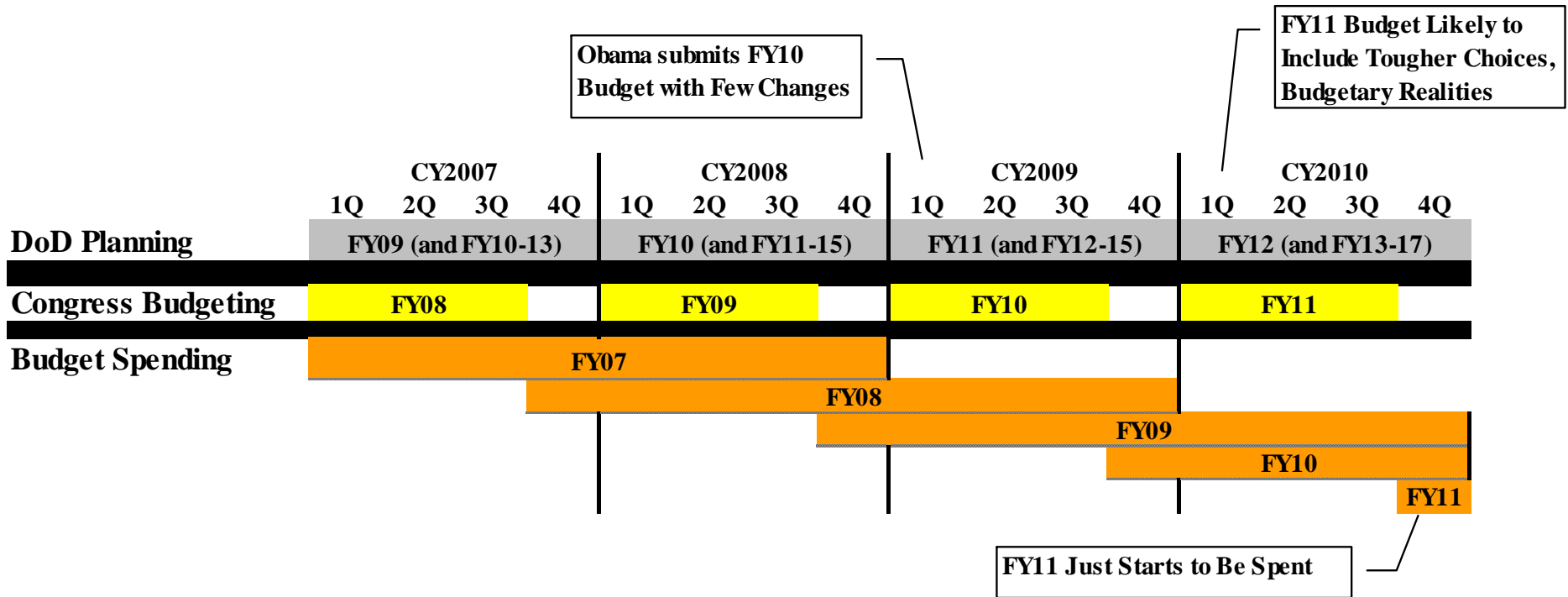
\* Defense Business Only

Source: Oppenheimer & Co. Inc. estimates and company reports.

*Solid and rising backlogs add to out-year visibility*  
*Cash generation remains strong and deployment comes into focus*

# Long Tails Extend into Next Admin

## Long Tails of Defense Budget



*Stretch of Backlogs Provides Some Relief From Near-Term Uncertainty*

# The Benefit Of Stable/Growing Budgets

## Large-Cap Defense Margin Picture

Segment Margins	1999A	2000A	2001A	2002A	2003A	2004A	2005A	2006A	2007A	2008E	Change 1999-2008
General Dynamics	13.4%	12.9%	12.3%	11.4%	8.8%	10.1%	10.3%	10.9%	11.4%	12.2%	(121) bps
Lockheed Martin	6.9%	7.0%	7.1%	7.6%	7.8%	8.4%	9.2%	10.2%	11.2%	11.5%	458 bps
Northrop Grumman	8.7%	8.9%	7.7%	6.0%	7.3%	7.7%	8.0%	9.3%	9.8%	8.6%	(10) bps
Raytheon	10.0%	10.6%	7.8%	9.6%	8.5%	11.3%	11.4%	12.9%	13.2%	12.9%	288 bps

## Large-Cap Defense ROIC Picture

ROIC*	1999A	2000A	2001A	2002A	2003A	2004A	2005A	2006A	2007A	2008E	Change 1999-2008
General Dynamics	18.2%	19.9%	18.2%	16.1%	11.8%	12.7%	13.5%	14.8%	15.5%	16.6%	(162) bps
Lockheed Martin	11.5%	6.4%	7.5%	10.2%	12.8%	15.7%	19.3%	22.9%	25.1%	22.8%	1,131 bps
Northrop Grumman	6.9%	7.4%	6.2%	2.7%	5.3%	6.4%	6.7%	8.3%	9.4%	8.1%	117 bps
Raytheon	4.4%	4.3%	3.1%	5.9%	5.9%	8.0%	8.3%	10.1%	11.5%	12.3%	787 bps

*The key to success by defense contractors this cycle has not been a operating margin story as much as it has been a return on invested capital*

\*ROIC corrected for pension and unusual items

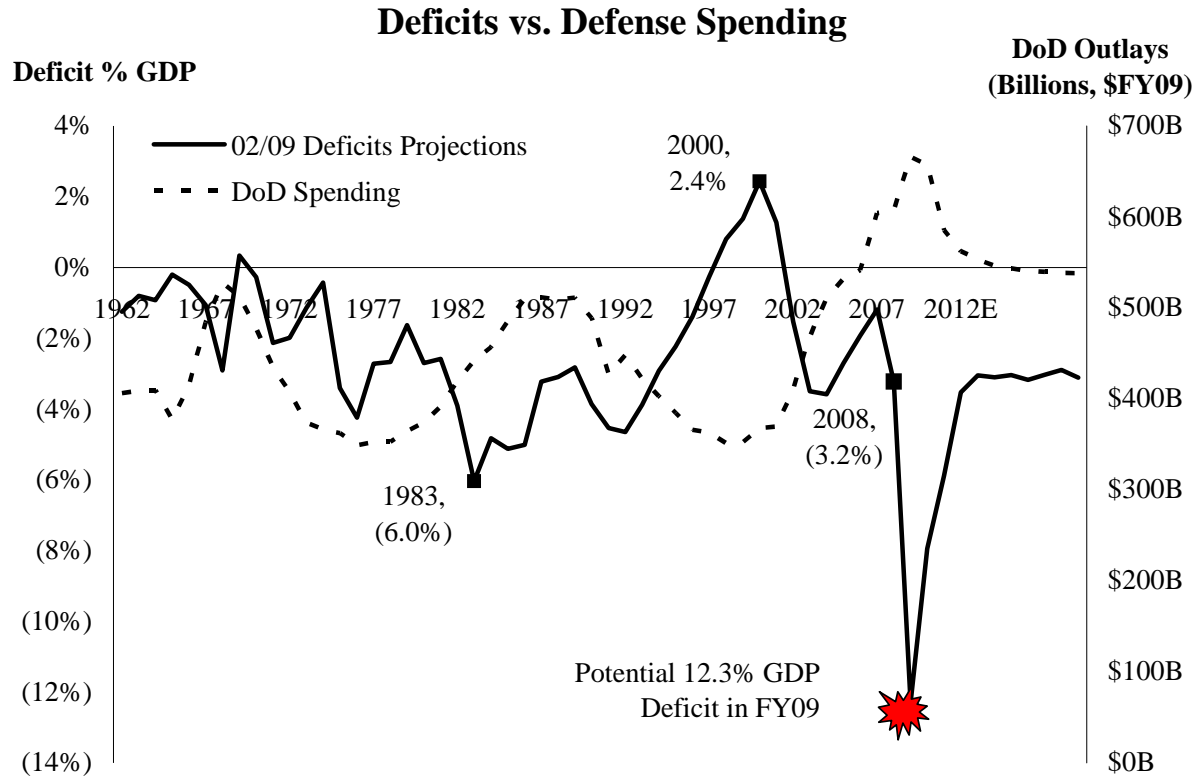
# Doth Protest?

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	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Cases filed	1204	1352	1485	1356	1327	1411
Cases closed	1133	1244	1405	1341	1274	1393
Merit	256	290	365	306	249	335
<i>% Cases Closed</i>	23%	23%	26%	23%	20%	24%
Sustains	41	50	75	71	72	91
<i>% of Merit</i>	16%	17%	21%	23%	29%	27%
<i>% of Case Closed</i>	4%	4%	5%	5%	6%	7%

- Protests are up 25%, but sustain decisions are up 120% since '02
- When there's no downside to protest, why not?
- \$1,000/hr lawyers likely have the upper hand poking holes
- If we can't have it, no one can is sometimes the best strategy

# How the Credit Crisis Will Affect Defense



Source: OMB, Department of Defense and Oppenheimer & Co. Inc. estimates.

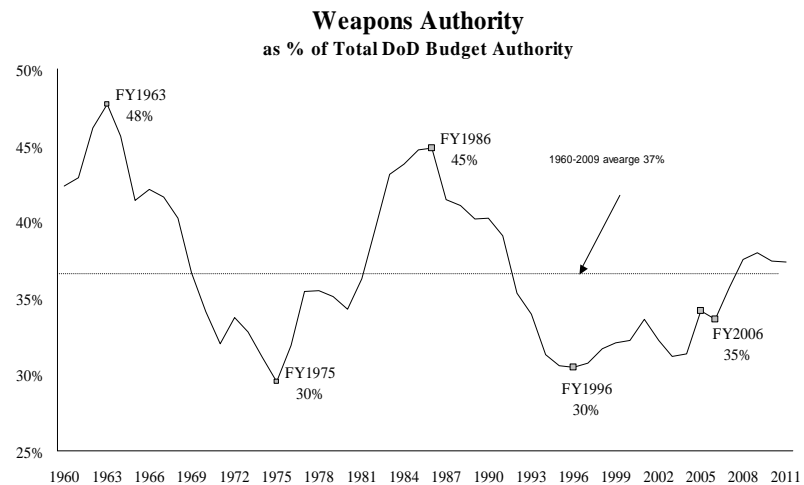
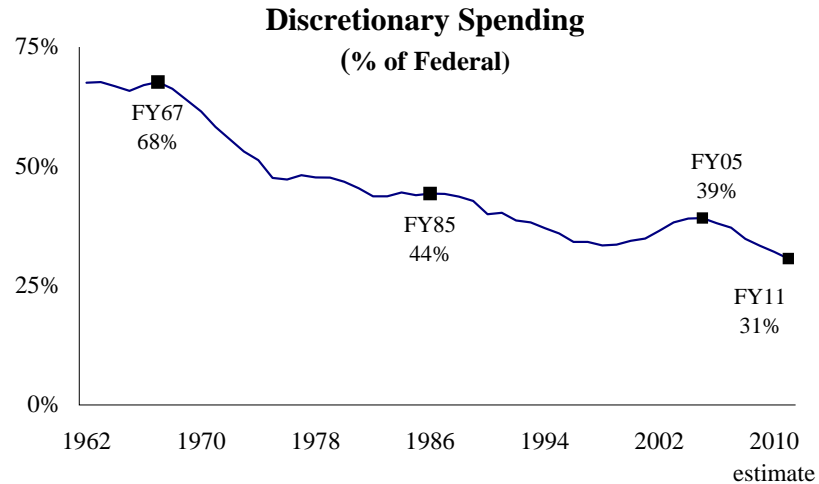
*Deficits were the last defense upcycle killer –  
History looks like it could repeat itself*

# Case Against Higher Defense Spending

■ *Social Security effect is cutting into overall discretionary spending*

■ *Deficits are rising and could potentially go higher*

■ *O&M costs from ongoing operations and aging equipment could funnel money away from weapons, ex-supplementals*

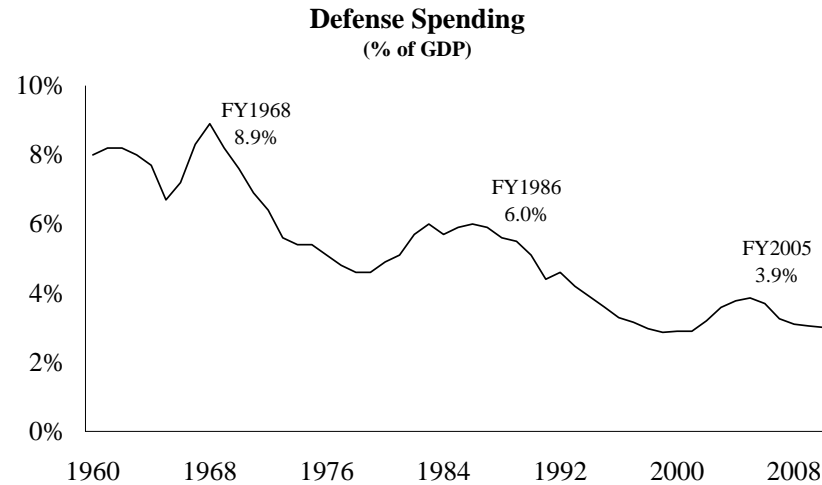


Source: OMB, Department of Defense and Oppenheimer & Co. Inc.

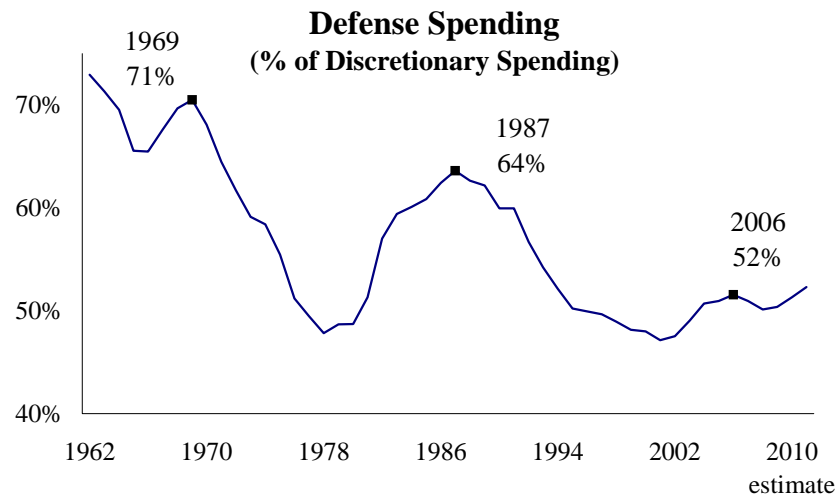


# Case For Higher Defense Spending

■ *Defense spending is still near historical lows as % of GDP*



■ *Defense down to around 50% of discretionary spending*



Source: OMB, Department of Defense and Oppenheimer & Co. Inc.

# Sacrificial Lambs, Tough Choices, or Peanut Butter

---

- Sacrificial Lambs: Programs are killed as examples often as a means to protect higher valued projects, generally targets the weak, lighter backlash...Think Comanche, Crusader, VXX
- Tough Choices: Strategic level reshuffling of priorities with resources available...Think DDG-1000 vs. DDG-51, TSAT vs. AHEF/WGS
- Peanut Butter: Inescapable mandatory cuts across the board; few, if any programs find sanctuary...Think Graham-Hart-Rudman

*Sacrificial Lambs are the Easiest, Tough Choices is the Best....  
But Peanut Butter is the Most Likely*

# Dealing with the Downside of a Budget Cycle: Follow the Customer or the Technology?

---

- Strong Balance Sheets And Declining Addressable Markets Will Test Discipline
- Adjacencies Are Likely to Be Better Forged Through Customer Than Technology Know-How

*"Their death rays, they say, will treat cancer. Their electric rail guns will loft commercial payloads into space and enrich earthling entrepreneurs. Their nuclear reactors, originally meant for war in space, will instead hurl astronauts toward the moon and Mars."*

— *NYT, April 8, 1990 on the Military Industrial Base Repositioning*

# Dealing With the Downside of a Budget Cycle: Supply Chain and Consolidation

- The Bad News: Sharp Drops Will Be Felt the Hardest Down the Chain

<i>(\$USD, Millions)</i>	<u>DoD FY06</u>	<u>DoD FY07</u>	<u>DoD FY08E</u>	<u>DoD FY09E</u>
Procurement, Marines				
Base		6	25	35
Supplemental		<u>412</u>	<u>288</u>	<u>23</u>
<b>Total Proc, Marines</b>	<b>330</b>	<b>418</b>	<b>313</b>	<b>58</b>
Other Procurement, Army				
Base		33	43	48
Supplemental		<u>266</u>	<u>359</u>	<u>176</u>
<b>Total Other Proc, Army</b>	<b>245</b>	<b>300</b>	<b>402</b>	<b>224</b>
MRAP buys (units)	1,500	6,480	7,394	2,000
<i>Est shipset content</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>
<b>Tot Est Radios in MRAP Budget</b>	<b>45</b>	<b>194</b>	<b>222</b>	<b>60</b>
<b>Est Company Radios in Budget</b>	<b>\$620</b>	<b>\$912</b>	<b>\$937</b>	<b>\$342</b>
<i>% Change</i>		<i>47%</i>	<i>3%</i>	<i>-64%</i>

- The Good News: Sellers and Buyers Will Be Motivated to Consolidate

# Best Farm League Outside the Red Sox Organization

*Consolidating the supply base,  
plenty of deals  
are still being done ...*

*...though consolidation is  
largely over at the top  
of the defense food chain.*

## U.S. Industrial Base

BA, GD, LMT, NOC, RTN

CSC, GE, HON, LLL, SAI, UTX

ATK, Booz, Bechtel, COL, GR, KBR, HRS, DCP, HRS, ITT, TXT, URS

ARINC, Battelle, CAI, CUB, EDS, MANT, OSK, TDY (and hundreds of others)

### Defense-related M&A

<u>Year</u>	<u>Transactions</u>	<u>Price/Sales</u>
1993	233	NA
1994	243	NA
1995	228	NA
1996	237	1.04
1997	251	1.15
1998	573	1.63
1999	173	1.30
2000	207	1.30
2001	343	1.15
2002	252	1.04
2003	307	1.41
2004	322	1.24
2005	371	0.85
2006	377	0.78
2007	334	1.03
2008*	273	1.05

Source: Infobase Publishers, Inc

\*Through Aug 2008

*Deal Flow Has Dwindled, Likely Returns with a Vengeance As Top-lines Flatten*

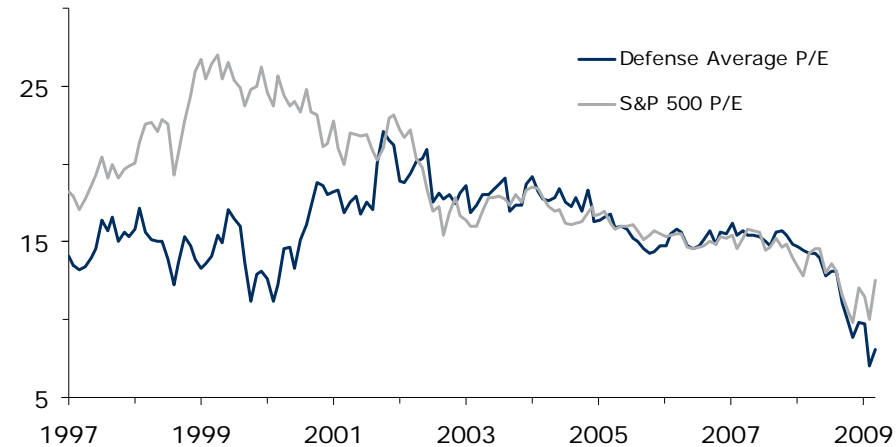
# Valuation

Defense Historical P/E Analysis	Current	5 yr	10 yr
	<u>CY09E</u>	<u>Historical</u>	<u>Historical</u>
<b>GAAP P/E</b>			
General Dynamics	7.6	14.5	15.2
Lockheed Martin	10.4	16.6	17.6
Northrop Grumman	9.9	15.2	13.9
Raytheon	<u>9.3</u>	<u>17.0</u>	<u>16.5</u>
<b>Average GAAP P/E</b>	<b>9.3</b>	<b>15.8</b>	<b>15.8</b>
<b>Economic P/E</b>			
General Dynamics	7.6	14.7	NA
Lockheed Martin	10.5	16.7	NA
Northrop Grumman	10.2	15.4	NA
Raytheon	<u>10.3</u>	<u>26.1</u>	<u>NA</u>
<b>Average Economic P/E</b>	<b>9.6</b>	<b>18.2</b>	<b>NA</b>

Source: Oppenheimer & Co. Inc. estimates and FactSet.

*Multiples reasonable  
reflecting budget uncertainty*

**P/E Trends**  
S&P and Large-cap Defense



Source: FactSet and Oppenheimer & Co. Inc.

*Post 9/11, the group began to  
move in line with the market*

*Defense multiples are reasonable on an historical basis  
and are now in line with the market despite a better growth profile*