

**BRAC 2005  
Industrial Joint Cross-Service Group (IJCSG)**

**Meeting Minutes of April 14, 2005**

Mr. Michael Wynne, Under Secretary of Defense for Acquisition, Technology and Logistics, chaired the meeting. The list of attendees is at Attachment 1.

The Chairman opened the Industrial JCSG meeting by thanking everyone for their hard work. He stated that the Commission was already starting to work on their schedule and that they'll be asking questions on the procedures and processes of the JCSGs. Once the list of Candidate Recommendations is released the Commission can take up to six weeks to review them.

Mr. Sal Culosi was the first briefer. His topic was the additional savings from overhead that was not already addressed in the COBRA model or by the subgroups. A copy of the briefing is at Attachment 2. In the ensuing discussion, Mr. Culosi identified that GAO statements from previous BRACs show that overhead savings of 50% or more are realized. The following discussion on the subject then commenced:

Mr. Yellin – Mr. Culosi is correct that the consolidation could result in higher savings than what is captured in COBRA. From the last BRAC, information from the closing of 3 NADEPs, and all of the savings from previous BRACs document that the savings are higher.

Mr. Beckett – Why wasn't COBRA model changed to reflect the savings for consolidation?

Mr. Potochney – There are too many variables between the JCSGs to hardwire the COBRA model. The issue was left to the JCSGs to decide how to address and approach it.

Mr. Wynne – We need a factor that can be applied uniformly and conservatively across all of the JCSGs.

RDML Hugel – The methodology being used isn't based on certified data.

Mr. Culosi – Correct. All overhead information has not been asked for in the BRAC process.

Mr. Beckett – The analysis and methodology presented is sound. However, the Commission may not support it because we didn't use certified data. It would be better supported if the GAO backs the process and OSD applies it across all JCSGs.

Mr. Wynne – Does the analysis include mission funded overhead.

Mr. Culosi – No.

Mr. Wynne – If you take the 30% factor and develop a factor against the total cost would that apply to mission funded?

Mr. Culosi – Mission funded would get a pass.

Mr. Wynne – We can't just use the factor for working funded, it must be uniformly applied. We should be able to use relational data that's available but we shouldn't be applying it here but not to others. Maybe apply a .9 factor to mission funded because they are more lean than working capital funded.

The Chairman then asked Mr. Culosi to validate his analysis and make the application applicable to all of the JCSGs. A discussion started on the data used for the analysis – the DMOIR (Depot Maintenance Operations Indications Report). The DMOIR is available for the larger depots but not the smaller, e.g. Lackland. The Chairman stated that the real issue was the smaller ones or “orphans” that must be taken care of. Mr. Pauling stated that they would take back the issue and give the analysis a re-look. He also stated that a decision on the issue wasn't going to be made during the meeting.

Mr. Beckett briefed Maintenance next. A copy of the briefing is at Attachment 3. In the recurring saving slide, the Chairman requested that a range for the annual recurring savings be presented, i.e. 3M – 5M, for the smaller sites such as Lackland. The issue with new data submitted from the Marine Corps was discussed and Barstow's recommendation was briefed last. Mr. Beckett stated that the new data was miss-categorized and Mr. Wynne agreed because there wasn't a MILCON request to build at Barstow. Mr. Wynne also commented that what we're getting is not fitting into the capacity that was reported. The Chairman then recommended that the JCSG be careful with the analysis so that the commission doesn't throw out the new data.

The Munitions brief was presented next by Mr. Motsek. A copy of the briefing is at Attachment 4. During the briefing, two slides were found to need corrections because they stated that the reduction in facilities was 56% and not the real 44% reduction. Mr. Potochney made a comment that slide 22 was a nice wrap up of the subgroup's results. He requested that all of the subgroups present similar information.

RDML Hugel briefed the Ship Repair subgroup's status last. A copy of the briefing is at Attachment 5. The Admiral started his brief by stating that New England could be hit hard from all of the Navy scenarios. He then briefed some changes that were made to IND-0019 and IND-0024 due to data updates. With the briefing of changes to candidate recommendations, the following discussion ensued;

Mr. Potochney – The changes to all candidate recommendations presented were for data changes and not conceptual changes?

Mr. Wynne – The recommendations are on the Secretary's desk. For changes, a slip sheet needs to be added to the package to identify the changes. This process should be used unless a

dramatic change is made to the recommendation. Each data update change to a recommendation does not need to go through the JCSG, ISC, etc. for concurrence.

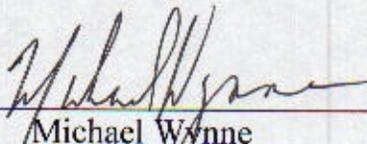
Mr. Motsek – If the IEC has approved the process and the recommendation, then the data updates don't need to be re-briefed?

Mr. Potochney – The reasons for the data changes must be legitimate. However, significant changes must be re-briefed.

Mr. Wynne – The updated data must be reflected in the recommendations.

RDML Hugel then continued his brief with information on Portsmouth. The slide reflected the results with (red) and without (blue) the additional 30% in overhead savings. Additionally, the Admiral mentioned that the hiring numbers for Norfolk were reduced to leave more places for Portsmouth personnel to move into. The Chairman thought that this approach was a good idea.

A final discussion on the 30% overhead saving factor was reenergized with the Chairman reiterating that he wanted a factor that would be universal across all JCSGs. Mr. Pauling stated that his office would look at it again. At this point, the meeting ended.

Approved:   
Michael Wynne  
Chairman, Industrial Joint Cross-Service Group

Attachments:

1. List of attendees
2. Savings From Overhead Not Addressed In COBRA briefing
3. Maintenance Subgroup briefing
4. Munitions and Armament Subgroup briefing
5. Ship Overhaul and Repair Subgroup briefing

**Industrial JCSG Meeting  
April 14, 2005  
Attendees**

**Members:**

- Michael Wynne, Acting Undersecretary of Defense for Acquisition, Technology and Logistics
- RDML Mark Hugel, OPNAV, N43B
- Gray Motsek, Deputy G3, Support Operations, Army Material Command
- Allen Beckett, Deputy Director of Maintenance, Deputy Chief of Staff for Installations and Logistics
- Maj Gen Mary Saunders, Defense Logistics Agency
- BGen Willie Williams, USMC

**Alternates:**

- Shanna Poole, HQMC

**Others:**

- Dave Pauling, ADUSD OSD MPP&R
- Pete Potochney, OSD BRAC Office
- Alex Yellin, OSD BRAC Office
- John Desiderio, OSD BRAC Office
- Jay Berry, OSD Maintenance Policy, Programs and Resources
- George Kingsley, Defense Logistics Agency
- Frank O'Rourke, Defense Logistics Agency
- Steve Krum, NAVSEA
- Stu Paul, NAVAIR
- Don Fathke, NAVAIR
- COL Sarah Smith, OSD Maintenance Policy, Programs and Resources
- Mark VanGilst, HQ USAF/ILMM
- Don Lucht, AFMC
- Maj. S. DuBois, HQMC
- Willie Smith, HQ AFSC
- CAPT Porter, Mr Wynne's MA
- Douglas Ickes, DODIG
- Sal Culosi, LMI



---

# Industrial Joint Cross Service Group

April 14, 2005



---

# Savings From Overhead Not Addressed in COBRA

## The Process



# Objective

---

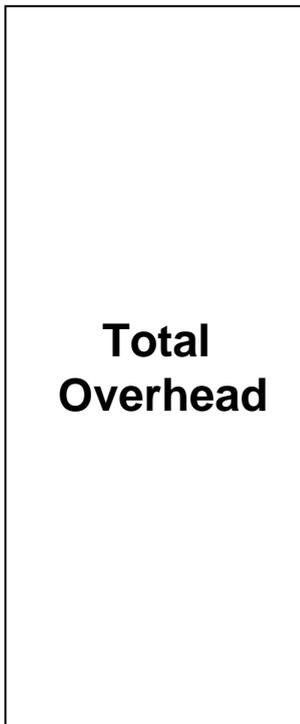
- Identify all overhead savings that are likely to result from base realignments and closures
- While the COBRA model can reflect all cost associated with BRAC actions, in practice, volume discounts on total overhead costs may not be reflected in the reported COBRA savings
- A five step process for identifying all overhead savings was used



# The Process

---

- Step 1: Identify total overhead for losing site from existing sources.

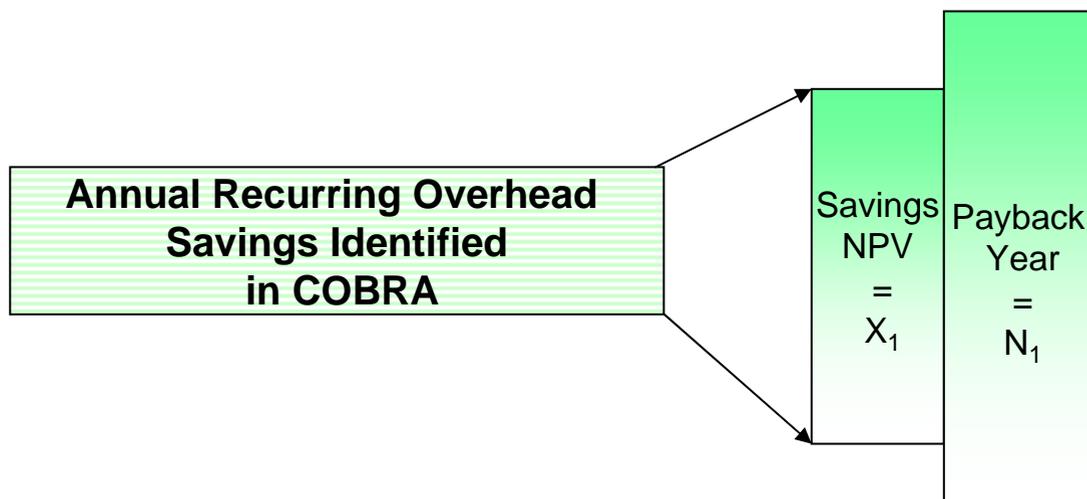


- Data Sources:
  - Defense Maintenance Operations Indicators Report (DMOIR)
  - For sites not included in DMOIR, data was requested from Service BRAC Office



# The Process

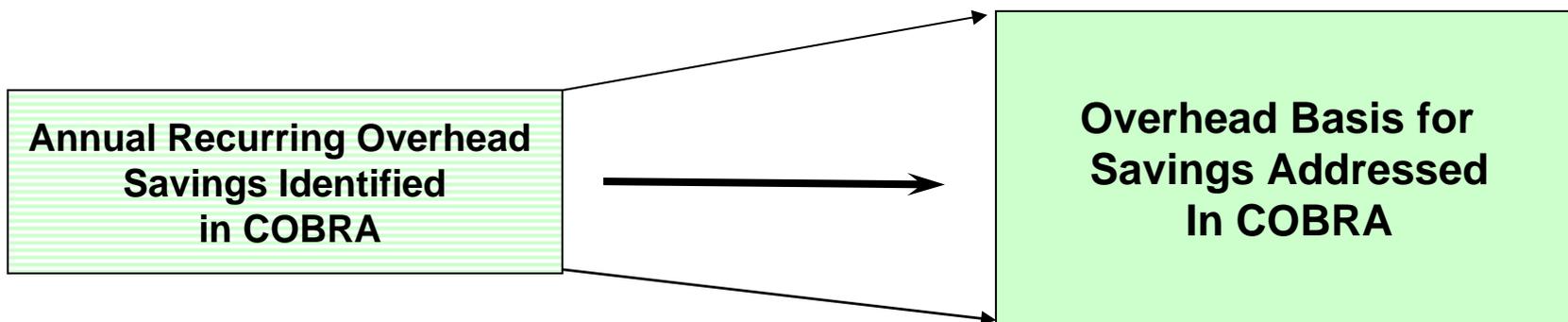
■ Step 2: Identify from Baseline COBRA analysis:  
(1) annual recurring overhead savings; (2) the net present value savings and (3) payback year





# The Process

- Step 3: Use overhead savings in baseline COBRA analysis to determine the basis for total overhead addressed in COBRA





# The Process

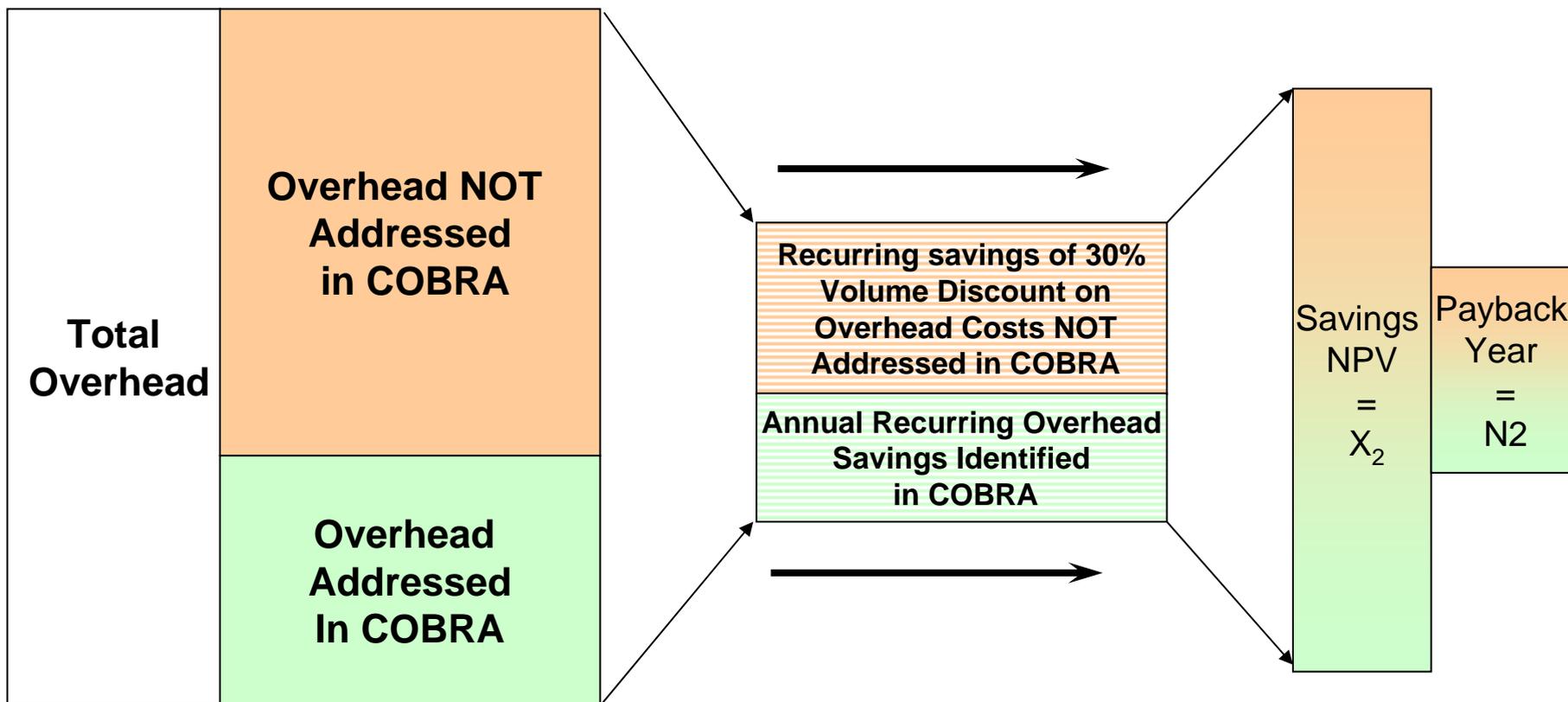
- Step 4: Calculate overhead not addressed in COBRA

<b>Total Overhead</b>	<b>Overhead NOT Addressed in COBRA</b>
	<b>Overhead Addressed In COBRA</b>

# Re-run COBRA Analysis with Additional Overhead Savings

DCN: 11299

- Step 5: Assume a 30% volume discount on overhead NOT considered in COBRA, add these to recurring savings on Screen 5 in the Baseline COBRA analysis, and recalculate NPV and Payback year





---

# Maintenance

# Candidate # IND-0083B – Seal Beach, CA



**Candidate Recommendation** Realign NAVWPNSTA Seal Beach, CA, as follows: relocate the depot maintenance of Electronic Components (Non-Airborne), Fire Control Systems and Components, Radar, and Radio to Tobyhanna Army Depot, PA; relocate the depot maintenance of Material Handling to MCLB Albany, GA; relocate the depot maintenance of Other Components to Anniston Army Depot, AL; and relocate the depot maintenance of Tactical Missiles to Letterkenny Army Depot, PA

## Justification

- Minimizes sites using maximum capacity at 1.5 shifts.
- Eliminates 243K square feet and 30% of duplicate overhead
- Facilitates interservicing

## Military Value

- All commodities move to a location with higher military value except for Material Handling. 1<sup>st</sup> of 4 to 2<sup>nd</sup> of 4
- Military judgment favors movement in order to enable a complete realignment of all depot maintenance commodities.

## Payback

- One-time cost: \$4.166M
- Net implementation savings: \$2.195M
- Annual recurring savings: \$1.609M
- Payback period: 1 year
- NPV: \$17.521M

## Impacts

- Criteria 6: - 85 Jobs (47 direct, 38 indirect); < 0.1 %
- Criteria 7: No issues
- Criteria 8: Issues but no impediments

# Candidate # IND-0127A – MCLB Barstow

**Candidate Recommendation (Summary):** Eliminates depot maintenance functions from Marine Corps Logistics Base Barstow, CA. Required capacity to support workloads and Core requirements for the Department of Defense are relocated to other DoD Centers of Industrial and Technical Excellence.

## Justification

- Minimizes sites using maximum capacity at 1.5 shifts.
- Eliminates 1.1M sq ft & 30% of duplicate overhead
- Facilitates interservicing

## Military Value

- For all commodities except Starters / Alternators / Generators & Construction Equipment, average military value increases. For these two commodities, the Military judgment favors movement in order to enable a complete realignment of all depot maintenance commodities
- Recommendation provides the required products to support the customers

## Payback

- One-time cost: \$40.080M
- Net implementation savings: \$39.676M
- Annual recurring savings: \$19.703M
- Payback period: 1 year
- 20 Yr. NPV (savings): \$226.922M

## Impacts

- Criteria 6: -1,606 Jobs (798 direct, 808 indirect); <1.0%
- Criteria 7: No issues
- Criteria 8: Air, cultural, waste mgmt, water resource, & wetland impacts. No impediments.

# Candidate # IND-0083A – Rock Island Arsenal



**Candidate Recommendation:** Realign Rock Island Arsenal, IL, by relocating the depot maintenance of Combat Vehicles and Other to Anniston Army Depot, AL, and the depot maintenance of Other Equipment and Tactical Vehicles to Letterkenny Army Depot, PA.

## Justification

- Increases depot capability and capacity utilization.
- Supports further consolidation of workload into the Army's Centers for Industrial and Technical Excellence
- Follows the strategy of minimizing sites using maximum capacity at 1.5 shifts
- Reduces costs by eliminating 30% of duplicate overhead structures and 160K sq. ft. of excess

## Military Value

- Combat Vehicles: Average increases from 37.78 to 44.26, 5<sup>th</sup> of 5 to 1<sup>st</sup> of 5
- Other Equipment: Average increases from 38.18 to 41.31, 4<sup>th</sup> of 4 to 3<sup>rd</sup> of 4 (1<sup>st</sup> of 4 not enough capacity)
- Tactical Vehicles: Average increases from 38.53 to 41.61, 7<sup>th</sup> of 7 to 1<sup>st</sup> of 7

## Payback

- One-time cost: \$26.931M
- Net implementation cost: \$16.471M
- Annual recurring savings: \$2.993M
- Payback period: 10 Years
- 20 Yr NPV (savings): \$12.903M

## Impacts

- Criteria 6: -337 Jobs (180 Direct; 157 Indirect); 0.15%
- Criteria 7: No issues
- Criteria 8: Air and Noise issues, No impediments

# Candidate # IND-0083A – Rock Island Arsenal Additional Recurring Savings for Overhead

DCN: 11299



- **Candidate Recommendation:** Realign Rock Island Arsenal, IL, by relocating the depot maintenance of Combat Vehicles and Other to Anniston Army Depot, AL, and the depot maintenance of Other Equipment and Tactical Vehicles to Letterkenny Army Depot, PA.
- Adds \$2.4M recurring savings starting in FY 08
- Payback from 10 to 4 years

## Concerns

- This approach can not be used for all recommendations – consistency concern
- Data not certified by Services

<u>Payback</u>	
One-time cost:	\$26.931M
Net implementation cost:	\$16.471M
Annual recurring savings:	\$2.993M
Payback period:	10 Years
20 Yr NPV (savings):	\$12.903M
<u>Payback With Additional Overhead Savings</u>	
One-time cost:	\$26.931M
Net implementation cost:	\$21.527M
Annual recurring savings:	\$5.432M
Payback period:	4 Years
20 Yr NPV (savings):	\$45.638M

# Candidate # IND-0127B – Red River AD



**Candidate Recommendation (abbreviated):** Realign Red River as follows: Armament and Structural Components, Combat Vehicles, Construction Equipment, Depot Fleet/Field Support, Engines and Transmissions, Fabrication and Manufacturing, Fire Control Systems and Components, and Other to Anniston AD, AL; Construction Equipment, Powertrain Components, and Starters/Generators/Alternators to MCLB Albany, GA; Tactical Vehicles to Tobyhanna AD, PA and Letterkenny; and Tactical Missiles to Letterkenny AD, PA.

## Justification

- Increases depot maintenance capability and capacity utilization.
- Supports the strategy of minimizing sites using maximum capacity at 1.5 shifts
- Supports further consolidation of workload into the Army's Centers for Industrial and Technical Excellence and future inter-service workload
- Eliminates >900K sq ft excess & 30% of duplicate overhead

## Military Value

- For all commodities except Construction Equipment and Starters / Alternators / Generators, average military value increases.
- For these two commodities Military judgment favors movement in order to enable a complete realignment of all depot maintenance commodities.

## Payback

- One-time cost: \$248.301M
- Net implementation cost: \$135.967M
- Annual recurring savings: \$17.771M
- Payback period: 13 years
- 20 Yr. NPV (savings): \$42.849M

## Impacts

- Criteria 6: -2929 Jobs (1752 Direct; 1177 Indirect); 4.3%
- Criteria 7: No impact
- Criteria 8: Potential impact: Letterkenny is marginal for non-attainment of Ozone, exceeds PB and SO2.

# Candidate # IND-0127B – Red River AD

## Additional Recurring Savings for Overhead

DCN: 11299



- **Candidate Recommendation (abbreviated):** Realign Red River as follows: Armament and Structural Components, Combat Vehicles, Construction Equipment, Depot Fleet/Field Support, Engines and Transmissions, Fabrication and Manufacturing, Fire Control Systems and Components, and Other to Anniston AD, AL; Construction Equipment, Powertrain Components, and Starters/Generators/Alternators to MCLB Albany, GA; Tactical Vehicles to Tobyhanna AD, PA and Letterkenny; and Tactical Missiles to Letterkenny AD, PA.
- Adds \$7.7M recurring savings starting in FY 08
- Payback from 13 to 8 years (Total Army closure 3 yr)

### Concerns

- This approach can not be used for all recommendations – consistency concern . Can be used on 3 of 11 recommendations
- Data not certified by Services

### Payback

■ One-time cost:	\$248.301M
Net implementation cost:	\$135.967M
Annual recurring savings:	\$17.771M
Payback period:	13 years
20 Yr. NPV (savings):	\$42.849M

### Payback With Additional Overhead Savings

■ One-time cost:	\$248.301M
Net implementation cost:	\$105.131M
Annual recurring savings:	\$25.480M
Payback period:	8 years
20 Yr. NPV (savings):	\$146.314M

# Candidate # IND-0086 – Lackland AFB

**Candidate Recommendation:** Realign Lackland Air Force Base, TX by relocating the depot maintenance of Computers, Crypto, Electronic Components (Non-Airborne), and Radio to Tobyhanna Army Depot, PA; and disestablish all depot maintenance capabilities

## Justification

- Supports depot maintenance function elimination at Lackland
- Minimizes sites using maximum capacity at 1.5 shifts.
- Eliminates 36.2K square feet
- Eliminates 30% of duplicate overhead
- Facilitates interservicing

## Military Value

- Computers: average increases from 37.41 to 38.19
- Crypto: average increases from 50.38 to 55.36
- Electrical Components (Non-Airborne): average increases from 41.00 to 51.95
- Radio: average increases from 40.75 to 50.05
- Other: not considered relevant, other is primary miscellaneous/general support to the base and is location specific

## Payback

- One-time cost: \$10.297M
- Net implementation costs: \$ 0.332M
- Annual recurring savings: \$ 2.890M
- Payback time: 3 years
- NPV (savings): \$27.380M

## Impacts

- Criteria 6: -376 Jobs (177 direct, 199 indirect); <0.1%
- Criteria 7: No issues
- Criteria 8: No impediments

# Candidate # IND- 0103R Fleet Readiness Centers



**Candidate Recommendation (Summary):** Establish Feet Readiness Centers (FRC) by relocating the depot and intermediate maintenance of Avionics/Electronics Components, Aircraft Hydraulic Components, Aircraft Landing Gear Components, Aircraft Other Components, and Aircraft Structural Components from 4 depots and 25 Intermediate activities to 6 major FRCs and 13 FRC subordinate support sites.

### Justification

- Supports OSD’s goal of transforming to fewer maintenance levels (3 to 2)
- Provides better repair activity alignment with the Fleet
- Reduces total cost, repair turnaround time, manpower, infrastructure, transportation, and spares inventories
- Eliminates .310M square footage at losing activities.
- Provides annual facility sustainment savings of \$1.102M.
- Provides a MILCON one-time cost of \$85.704M at gaining activities.

### Military Value

- Direct MV comparisons not meaningful because combining Depot and Intermediate level maintenance.

### Payback

- One-time cost: \$299.206M
- Net implementation savings: \$1550.071M
- Annual recurring savings: \$347.712M
- Payback time: Immediate to 5 years
- NPV (savings): \$4807.663M

### Impacts

- Criteria 6: -13 to -1352; <0.1 to 2.59%
- Criteria 7: No issues
- Criteria 8: No Impediments

- ✓ Strategy
- ✓ Capacity Analysis / Data Verification
- ✓ JCSG/MilDep Recommended
- ✓ De-conflicted w/JCSGs
- ✓ COBRA
- ✓ Military Value Analysis / Data Verification
- ✓ Criteria 6-8 Analysis
- ✓ De-conflicted w/MilDeps



---

# MUNITIONS & ARMAMENTS

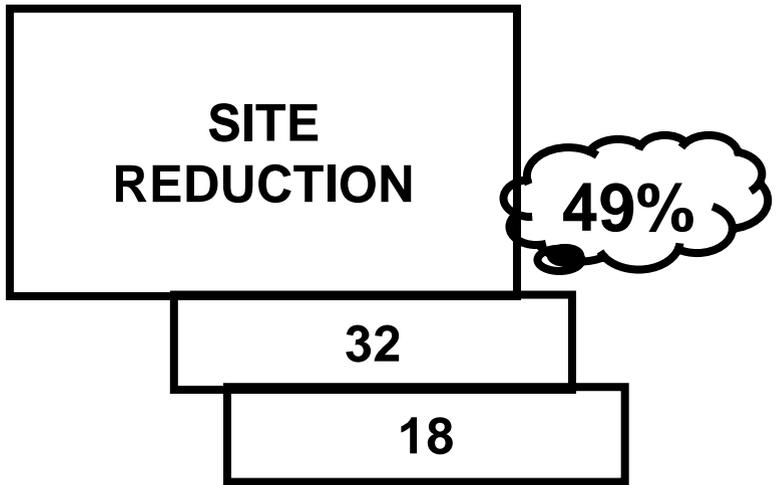
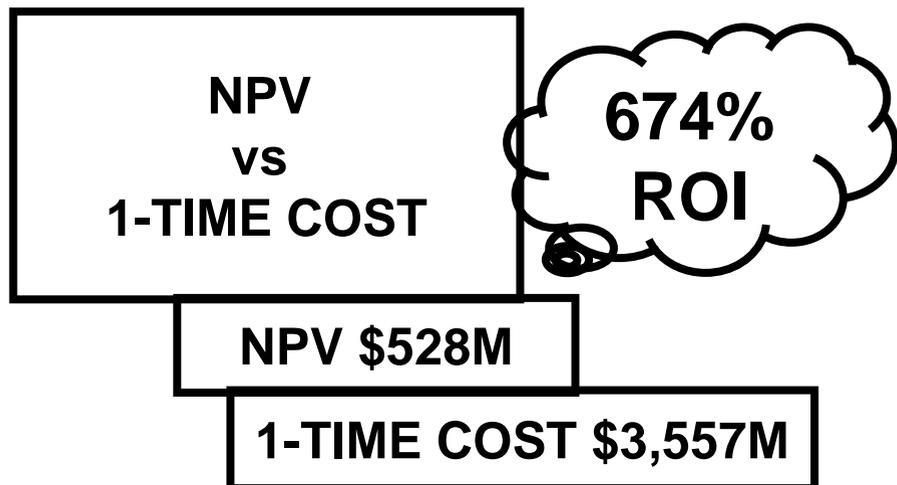
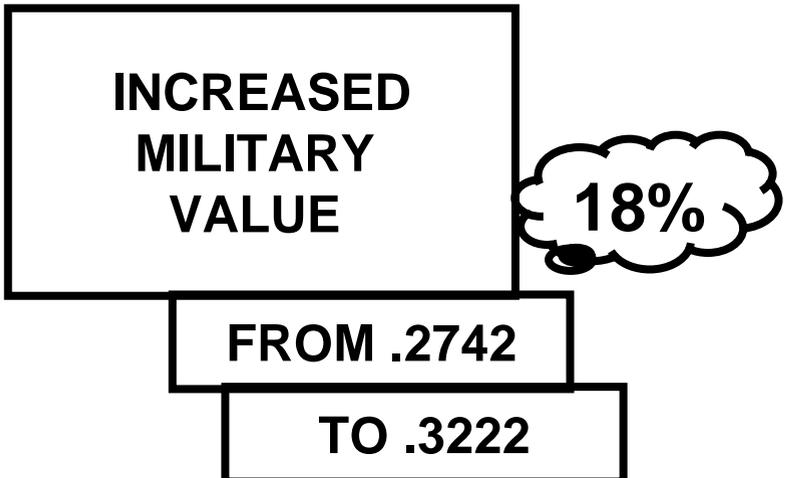
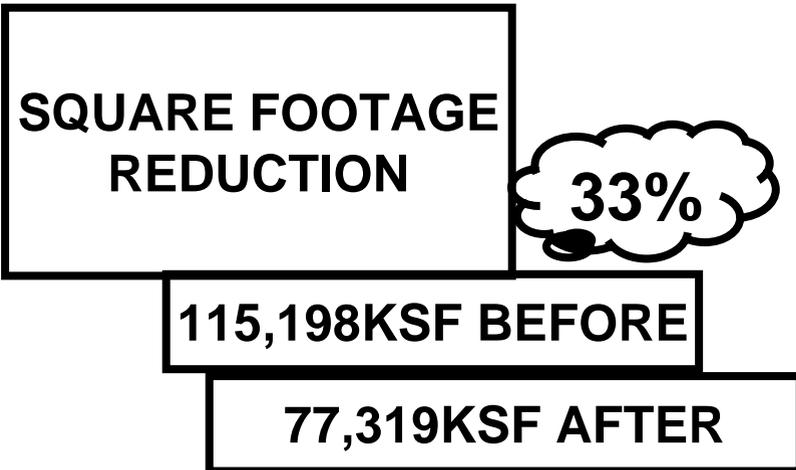


# BRAC ANALYTICAL STRATEGY

---

- Address entire life cycle of munitions (exception: RDT&E)
- Create an industrial base that is efficient, effective, flexible, and multi-functional
- Avoid/minimize single point failures
- Consider the private sector as an alternative
- Modernize/upgrade Cold War capability to support 21<sup>st</sup> century requirements
- Accommodate surge with multiple shifts NOT additional facilities
- Eliminate excess capacity through closure versus realignment
- Support:
  - Joint Transformational Options
  - Military Departments' 20 Year Force Structure
  - Joint Military Readiness

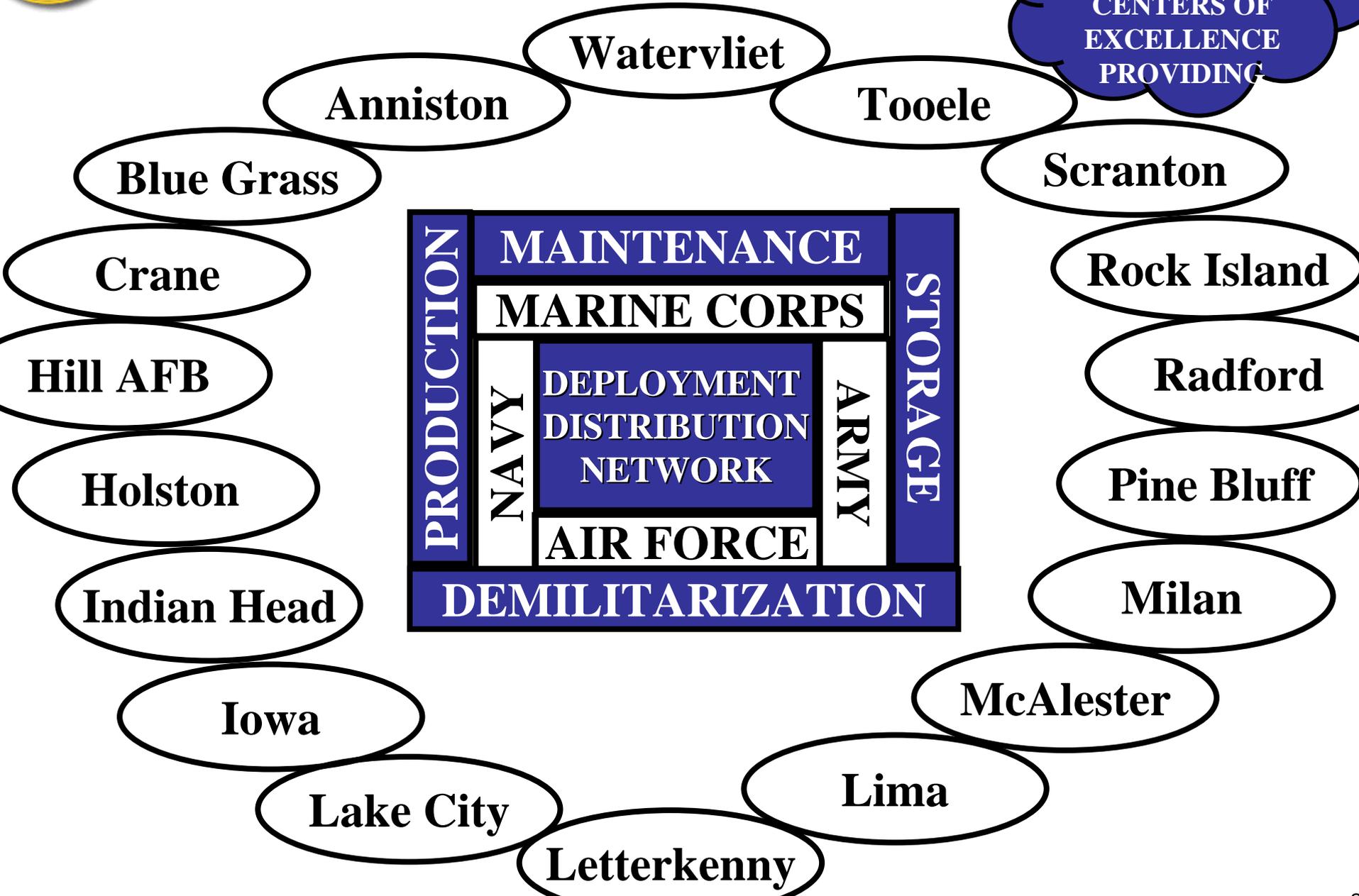
# RESULTS OF ANALYSIS





# FUTURE INDUSTRIAL BASE STRATEGY

**JOINT  
DCMI M299  
MULTI-  
FUNCTIONAL  
CENTERS OF  
EXCELLENCE  
PROVIDING**





# INDUSTRIAL CAPABILITIES RETAINED

DCN: 11299

JOINT SUPPORT TO WARFIGHTER

TORPEDOES

ARTILLERY

TANK

BOMBS

SMALL CAL

CANNON TUBES

PYRO/DEMO

DEMIL

ROCKETS

EFV

MORTAR

ENERGETICS

MINES

FCS

MISSILES

GUN MOUNTS

MED CAL

MAINTENANCE





## #IND-0117: DESERET CHEMICAL DEPOT

DCN: 11299

## Candidate Recommendation: Close Deseret Chemical Depot. Transfer the storage igloos and magazines to Tooele Army Depot.

### Justification

- ✓ No additional chemical demilitarization workload scheduled to go to Deseret
- ✓ Projected date for completing existing workload is 2<sup>nd</sup> quarter of 2008
- ✓ Deseret storage igloos and magazines could be used by Tooele Army Depot

### Military Value

- ✓ Deseret ranked 18<sup>th</sup> out of 23 storage facilities.
- ✓ Closure increases average military value from 0.17139 to 0.17797.

### Payback

- ✓ One time cost: \$4.37M
- ✓ Net implementation savings: \$65.05M
- ✓ Annual recurring savings: \$30.33M
- ✓ Payback Time: Immediate
- ✓ NPV (savings): \$356.36M

### Impacts

- ✓ Criterion 6: -391 jobs (248 direct, 143 indirect); 0.06%
- ✓ Criterion 7: No Issues
- ✓ Criterion 8: Extensive environmental restoration/monitoring

✓ Strategy

✓ Capacity Analysis / Data Verification

✓ JCSG/MilDep Recommended

✓ De-conflicted w/JCSGs

✓ COBRA

✓ Military Value Analysis / Data Verification

✓ Criteria 6-8 Analysis

✓ De-conflicted w/MilDeps

## #IND-0108: HAWTHORNE ARMY DEPOT DCN: 11299



Candidate Recommendation: Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

<u>Justification</u>		<u>Military Value</u>	
<ul style="list-style-type: none"> <li>✓ Capacity and capability for Storage and Demil exists at numerous munitions sites.</li> <li>✓ Closure reduces redundancy and removes excess from the Industrial Base</li> <li>✓ Allows DoD to create centers of excellence and establish deployment networks that support readiness for all Services</li> </ul>		<ul style="list-style-type: none"> <li>✓ Hawthorne: Storage/Dist, 2<sup>nd</sup> of 23; Demil 1<sup>st</sup> of 13</li> <li>✓ Tooele: Storage/Dist 5<sup>th</sup> of 23; Demil 2<sup>nd</sup> of 13</li> </ul>	
<u>Payback</u>		<u>Impacts</u>	
<ul style="list-style-type: none"> <li>✓ One-Time Cost:</li> <li>✓ Net Implementation Savings:</li> <li>✓ Annual Recurring Savings:</li> <li>✓ Payback Period:</li> <li>✓ NPV (savings):</li> </ul>	<ul style="list-style-type: none"> <li>\$179.69M</li> <li>\$59.81M</li> <li>\$73.42M</li> <li>Immediate</li> <li>\$778.22M</li> </ul>	<ul style="list-style-type: none"> <li>✓ Criterion 6: -146 jobs (86 Direct, 60 Indirect); 0.06%</li> <li>✓ Criterion 7: No Issues</li> <li>✓ Criterion 8: Air quality, historic, land constraints, threatened species, water, and waste mgmt. No impediments.</li> </ul>	

## # IND-0116 – NSWC INDIAN HEAD

DCN: 11299

Candidate Recommendation: Realign NSWC Indian Head, MD by relocating the Bomb Energetic production function to McAlester AAP, OK and the 5” Navy Gun Projectile, Grenade (PBX), and Signals functions to Crane AAA, IN.

Justification

- ✓ Realignment removes redundancies
- ✓ Establishes multifunctional and fully work-loaded Munitions Centers of excellence that support readiness.
- ✓ Indian Head continues to produce munitions needed to support their R&D efforts.

Military Value

- ✓ Munitions Production Facilities
  - Indian Head 5<sup>th</sup> of 16
  - McAlester 1<sup>st</sup> of 16
  - Crane 4<sup>th</sup> of 16

Payback

- ✓ One-time cost: \$4.47M
- ✓ Net implementation cost: \$4.30M
- ✓ Annual recurring savings: \$0.31M
- ✓ Payback time: 20 Years
- ✓ NPV (cost): \$.90M

Impacts

- ✓ Criteria 6: -7 jobs (4 direct, 3 indirect); <0.1%
- ✓ Criteria 7: No issues
- ✓ Criteria 8: Modifications required for air and waste water permits. No impediments.

- ✓ Strategy
- ✓ Capacity Analysis / Data Verification
- ✓ JCSG/MilDep Recommended
- ✓ De-conflicted w/JCSGs
- ✓ COBRA
- ✓ Military Value Analysis / Data Verification
- ✓ Criteria 6-8 Analysis
- ✓ De-conflicted w/MilDeps

## # IND-0106 – KANSAS AAP

DCN: 11299



Candidate Recommendation: Close Kansas Army Ammunition Plant, KS. Relocate Sensor Fuzed Weapon/Cluster Bomb function and Missile warhead production to McAlester AAP, OK; Storage function to Pine Bluff Arsenal, AK; 155MM ICM Artillery and 60MM, 81MM, and 120MM Mortar functions to Milan, TN; 105MM HE, 155MM HE, and Missile Warhead functions to Iowa AAP, IA; Detonators/relays/delays to Crane AAA, IN.

Justification

- ✓ Capacity and capability for Artillery, Mortars, Missiles, Pyro/Demo, and Storage exists at numerous munitions sites.
- ✓ Closure reduces redundancies and creates centers of excellence.

Military Value

- ✓ Cluster Bombs: Kansas 3<sup>rd</sup> of 3
- ✓ Storage: Kansas 19<sup>th</sup>, Pine Bluff 14<sup>th</sup> of 23
- ✓ Artillery: Kansas 7<sup>th</sup>, Milan 2<sup>nd</sup>, Iowa 6<sup>th</sup> of 8
- ✓ Mortar: Kansas 4<sup>th</sup>, Milan 1<sup>st</sup> of 5
- ✓ Missiles: Kansas 5<sup>th</sup>, Iowa 4<sup>th</sup>, McAlester 1<sup>st</sup> of 6
- ✓ Pyro/Demo: Kansas 7<sup>th</sup>, Crane 3<sup>rd</sup> of 9

Payback

- ✓ One-time cost: \$25.15M
- ✓ Net implementation savings: \$2.14M
- ✓ Annual recurring savings: \$10.28M
- ✓ Payback time: 2 Years
- ✓ NPV (savings): \$101.44M

Impacts

- ✓ Criteria 6: -276 jobs (167 direct, 109 indirect); 1.82%
- ✓ Criteria 7: No issues
- ✓ Criteria 8: Possible Archeological, Tribal, and Wildlife impacts

# # IND-0115 – LIMA ARMY TANK PLANT

DGN-11299

Candidate Recommendation: Realign Lima Tank Plant, OH. Retain the portion required to support the manufacturing of armored combat vehicles to include Army Future Combat System (FCS) program, Marine Corps Expeditionary Force Vehicle (EFV) chassis, and M1 Tank recapitalization program.

## Justification

- ✓ Army acquisition strategy for the FCS and Marine Corps acquisition strategy for the EFV includes mfg of manned vehicle chassis at Lima
- ✓ Retains capability for M1 tank recap
- ✓ Re-establishing this capability elsewhere would far exceed the projected savings
- ✓ Reduces administrative ownership and footprint

## Military Value

- ✓ Lima: 3rd of 3 Armaments
- Production/Manufacturing Facilities

## Payback

- ✓ One time cost: \$0.74M
- ✓ Net implementation savings: \$5.30M
- ✓ Annual recurring savings: \$1.73M
- ✓ Payback Time: 1 Year
- ✓ NPV (savings): \$21.72M

## Impacts

- ✓ Criteria 6: No losses or gains.
- ✓ Criteria 7: No issues
- ✓ Criteria 8: No Impediments.

- ✓ Strategy
- ✓ COBRA

- ✓ Capacity Analysis / Data Verification
- ✓ Military Value Analysis / Data Verification

- ✓ JCSG/MilDep Recommended
- ✓ Criteria 6-8 Analysis

- ✓ De-conflicted w/JCSGs
- ✓ De-conflicted w/MilDeps

# #IND-0122: LONE STAR AAP



Candidate Recommendation: Close Lone Star Army Ammunition Plant, TX. Relocate the Storage and Demilitarization functions to McAlester AAP, OK. Relocate the 105MM and 155MM ICM Artillery, MLRS Artillery, Hand Grenades, 60MM and 81MM Mortars functions to Milan AAP, TN. Relocate Mines and Detonators/Relays/Delays functions to Iowa AAP, IA. Relocate Demolition Charges functions to Crane AAA, IN.

<u>Justification</u>	<u>Military Value</u>
<ul style="list-style-type: none"> <li>✓ Capacity and capability for Artillery, Mortars, Missiles, Pyro/Demo, and Storage exists at numerous munitions sites.</li> <li>✓ 8 sites produce Artillery; 5 produce Mortars; 9 produce Pyro/Demo; 15 perform Storage; 9 perform Demilitarization</li> <li>✓ Closure reduces redundancy and creates centers of excellence</li> </ul>	<ul style="list-style-type: none"> <li>✓ Lone Star: Demil 12<sup>th</sup> of 13; Production 3<sup>rd</sup> of 16; Storage/Distro 21<sup>st</sup> of 23</li> <li>✓ McAlester: Demil 3<sup>rd</sup> of 13; Storage/Dist 1<sup>st</sup> of 23</li> <li>✓ Milan: Production 2<sup>nd</sup> of 16</li> <li>✓ Iowa: Production 6<sup>th</sup> of 16</li> <li>✓ Crane: Production 4<sup>th</sup> of 1</li> </ul>
<u>Payback</u>	<u>Impacts</u>
<ul style="list-style-type: none"> <li>✓ One time cost: \$29.08M</li> <li>✓ Net implementation cost: \$4.76M</li> <li>✓ Annual recurring savings: \$17.31M</li> <li>✓ Payback Time: 1 Year</li> <li>✓ NPV (savings): \$164.14M</li> </ul>	<ul style="list-style-type: none"> <li>✓ Criterion 6: -229 jobs (149 direct, 80 indirect); 0.34%</li> <li>✓ Criterion 7: No Issues</li> <li>✓ Criterion 8: air quality, cultural, T&amp;E, water &amp; waste mgmt issues. No impediments.</li> </ul>



# #IND-0119: NEWPORT CHEMICAL DEPOT

DCN: 11299

## Candidate Recommendation: Close Newport Chemical Depot

### Justification

- ✓ No additional chemical demilitarization workload scheduled to go to Newport.
- ✓ Projected date for completing existing workload is 2<sup>nd</sup> quarter of 2008.

### Military Value

- ✓ Newport ranked 20<sup>th</sup> out of 23 storage facilities.
- ✓ Closure increases average military value from 0.17139 to 0.17825

### Payback

- ✓ One time cost: \$7.06M
- ✓ Net implementation savings: \$93.87M
- ✓ Annual recurring savings: \$35.04M
- ✓ Payback Time: Immediate
- ✓ NPV (savings): \$427.69M

### Impacts

- ✓ Criterion 6: -838 jobs (571 direct, 267 indirect); 0.93%
- ✓ Criterion 7: No Issues
- ✓ Criterion 8: Extensive environmental restoration/monitoring

- ✓ Strategy
- ✓ COBRA

- ✓ Capacity Analysis / Data Verification
- ✓ Military Value Analysis / Data Verification

- ✓ JCSG/MilDep Recommended
- ✓ Criteria 6-8 Analysis

- ✓ De-conflicted w/JCSGs
- ✓ De-conflicted w/MilDepts

## #IND-0118: PUEBLO CHEMICAL DEPOT

DCN: 11299

## Candidate Recommendation: Close Pueblo Chemical Depot

Justification

- ✓ No additional chemical demilitarization workload is scheduled to go to Pueblo
- ✓ Projected date for completing existing workload was 3<sup>rd</sup> quarter of 2010.

Military Value

- ✓ Pueblo ranked 17<sup>th</sup> out of 23 storage facilities
- ✓ Closure increases average military value from 0.17139 to 0.17767

Payback

- ✓ One time cost: \$17.65M
- ✓ Net implementation savings: \$106.65M
- ✓ Annual recurring savings: \$65.95M
- ✓ Payback Time: Immediate
- ✓ NPV (savings): \$745.61M

Impacts

- ✓ Criterion 6: -578 jobs (411 direct, 167 indirect); 0.82%
- ✓ Criterion 7: No Issues
- ✓ Criterion 8: Extensive environmental restoration/monitoring

- ✓ Strategy
- ✓ COBRA

- ✓ Capacity Analysis / Data Verification
- ✓ Military Value Analysis / Data Verification

- ✓ JCSG/MilDep Recommended
- ✓ Criteria 6-8 Analysis

- ✓ De-conflicted w/JCSGs
- ✓ De-conflicted w/MilDeps

# #IND-0111: RED RIVER MUNITIONS CENTER

**Candidate Recommendation:** Realign Red River Munitions Center, TX. Relocate Storage, Demilitarization, and Munitions Maintenance functions to McAlester AAP, OK. Relocate Munitions Maintenance functions to Blue Grass Army Depot, KY.

<u>Justification</u>		<u>Military Value</u>	
<ul style="list-style-type: none"> <li>✓ Capacity and capability for Munitions Storage, Demil, and Maintenance exists at numerous munitions sites.</li> <li>✓ Closure reduces redundancy and removes excess from the Industrial Base</li> <li>✓ Allows DoD to create centers of excellence, generate efficiencies and create deployment networks servicing all Services</li> </ul>		<ul style="list-style-type: none"> <li>✓ Red River: Storage/Dist 4<sup>th</sup> of 23; Demil 7<sup>th</sup> of 13; Maintenance 6<sup>th</sup> of 10</li> <li>✓ McAlester: Storage/Dist 1<sup>st</sup> of 23; Demil 3<sup>rd</sup> of 13; Maintenance 4<sup>th</sup> of 10</li> <li>✓ Blue Grass: Maintenance 1<sup>st</sup> of 10</li> </ul>	
<u>Payback</u>		<u>Impacts</u>	
<ul style="list-style-type: none"> <li>✓ One-Time Cost: \$113.68M</li> <li>✓ Net Implementation Cost: \$76.01M</li> <li>✓ Annual Recurring Savings: \$14.92M</li> <li>✓ Payback Period: 7 Years</li> <li>✓ NPV (savings): \$74.27M</li> </ul>		<ul style="list-style-type: none"> <li>✓ Criterion 6: -207 jobs (124 Direct/83 Indirect); 0.3%</li> <li>✓ Criterion 7: No Issues</li> <li>✓ Criterion 8: Historic, land constraints, and waste mgmt. No impediments.</li> </ul>	



# #IND-0112: RIVERBANK AAP

DCN: 11299

Candidate Recommendation: Close Riverbank Army Ammunition Plant, CA. Relocate the artillery cartridge case metal parts functions to Rock Island Arsenal, IL.

## Justification

- ✓ 4 sites within the Industrial Base produce Metal Parts.
- ✓ Closure allows DoD to generate efficiencies and nurture partnership with multiple sources in the private sector.

## Military Value

- ✓ Riverbank: Metal Parts Production 3<sup>rd</sup> of 4
- ✓ Rock Island: Armaments Production 1<sup>st</sup> of 3
- ✓ Military judgment deems Rock Island as most cost efficient destination for this mission, providing highest overall military value because of similar existing job skills plus available buildings and land

## Payback

- ✓ One time cost: \$25.24M
- ✓ Net implementation cost: \$10.44M
- ✓ Annual recurring savings: \$6.54M
- ✓ Payback Time: 3 Years
- ✓ NPV (savings): \$53.34M

## Impacts

- ✓ Criterion 6: -106 jobs (89 direct, 17 indirect); 0.05%
- ✓ Criterion 7: No Issues
- ✓ Criterion 8: Air quality, water resources, and waste management issues. No impediments.



# # IND-0113 – Sierra Army Depot

DCN: 11299

Candidate Recommendation: Realign Sierra Army Depot, CA. Relocate Storage to Tooele Army Depot, NV and Demilitarization to Blue Grass, KY, Crane Army Ammunition Activity, IN and McAlester Army Ammunition Plant, OK.

### Justification

- ✓ Capacity and capability for Storage exists at numerous munitions sites.
- ✓ Reduces redundancy and removes excess from the Industrial Base
- ✓ Creates centers of excellence.

### Military Value

- ✓ Storage and Distribution Facilities
  - Sierra 6<sup>th</sup> of 23
  - McAlester 1<sup>st</sup> of 23
  - Crane 3<sup>rd</sup> of 23
  - Tooele 5<sup>th</sup> of 23
  - Blue Grass 7<sup>th</sup> of 23

### Payback

- ✓ One-time cost: \$33.72M
- ✓ Net implementation savings: \$15.37M
- ✓ Annual recurring savings: \$14.03M
- ✓ Payback time: 4 Years
- ✓ NPV (savings): \$151.42M

### Impacts

- ✓ Criteria 6: -17 jobs (12 direct, 5 indirect); 0.12%
- ✓ Criteria 7: No issues
- ✓ Criteria 8: No issues

- ✓ Strategy
- ✓ Capacity Analysis / Data Verification
- ✓ JCSG/MilDep Recommended
- ✓ De-conflicted w/JCSGs
- ✓ COBRA
- ✓ Military Value Analysis / Data Verification
- ✓ Criteria 6-8 Analysis
- ✓ De-conflicted w/MilDeps

#IND-0120: UMATILLA CHEMICAL DEPOT<sup>DCN: 11299</sup>

## Candidate Recommendation: Close Umatilla Chemical Depot.

<u>Justification</u>	<u>Military Value</u>
<ul style="list-style-type: none"> <li>✓ No additional chemical demilitarization workload scheduled to go to Umatilla</li> <li>✓ Projected date for completing existing workload is 2<sup>nd</sup> quarter of 2011.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Umatilla ranked 11<sup>th</sup> out of 23 storage facilities</li> <li>✓ Closure increases average military value from 0.17139 to 0.17337</li> </ul>
<u>Payback</u>	<u>Impacts</u>
<ul style="list-style-type: none"> <li>✓ One time cost: \$15.45M</li> <li>✓ Net implementation savings: \$89.06M</li> <li>✓ Annual recurring savings: \$60.98M</li> <li>✓ Payback Time: Immediate</li> <li>✓ NPV (savings): \$681.13M</li> </ul>	<ul style="list-style-type: none"> <li>✓ Criterion 6: -884 jobs (512 direct, 372 indirect); 1.97%</li> <li>✓ Criterion 7: No Issues</li> <li>✓ Criterion 8: Extensive environmental restoration/monitoring</li> </ul>

# #IND-0114: WATERVLIET ARSENAL

Candidate Recommendation: Realign Watervliet Arsenal, NY, by disestablishing all capabilities for Other Field Artillery Components.

## Justification

- ✓ Retains capacity and capability for cannons, gun tubes, rotary forging, and chrome plating.
- ✓ Reduces footprint and offers opportunity for leaseback partnership with local community.
- ✓ Partnering reduces Watervliet's footprint/retains property needed to fulfill core capabilities.

## Military Value

- ✓ Watervliet: 2nd of 3 Armaments Production/Manufacturing sites

## Payback

- ✓ One time cost: \$63.7M
- ✓ Net implementation costs: \$46.8M
- ✓ Annual recurring savings: \$5.2M
- ✓ Payback Time: 18 Years
- ✓ NPV (savings): \$5.4M

## Impacts

- ✓ Criterion 6: 0 job losses
- ✓ Criterion 7: No Issues
- ✓ Criterion 8: No impediments

# # IND-0121 NSWC INDIAN HEAD, DET YORKTOWN, VA

DCN: 11299



Candidate Recommendation: Realign NSWC Indian Head, Detachment Yorktown, VA. Relocate Bomb Energetic production functions to McAlester AAP. Relocate PBX Production and load for the Zuni to NSWC Indian Head. Relocate Demo Charges functions to Iowa.

### Justification

- ✓ Realignment removes redundancies
- ✓ Establishes multifunctional and fully work-loaded Munitions Centers of excellence that support readiness.
- ✓ Yorktown continues to produce munitions needed to support their R&D efforts.

### Military Value

- ✓ Munitions Production Facilities:
  - Yorktown 11<sup>th</sup> of 16
  - McAlester 2<sup>nd</sup> of 16
  - Indian Head 5<sup>th</sup> of 16
  - Iowa 6<sup>th</sup> of 16

### Payback

- ✓ One-time cost: \$7.60M
- ✓ Net implementation cost: \$6.07M
- ✓ Annual recurring savings: \$0.34M
- ✓ Payback time: 36 Years
- ✓ NPV (costs): \$2.71M

### Impacts

- ✓ Criteria 6: -14 jobs (6 direct, 8 indirect); <0.1%
- ✓ Criteria 7: No issues
- ✓ Criteria 8: Possible air quality, waste management and water resource impacts



---

# Ship Overhaul and Repair

# Ship Overhaul and Repair Candidate Recommendation Round-up

DCN: 11299



- Changes to Ship Overhaul and Repair Scenarios:
  - Incorporated COBRA 6.09 changes to all candidate recommendations
  - Incorporated data corrections
  - Incorporated DON consolidation effects at NAVSHIPYD NORFOLK
    - Added civilian and enlisted personnel
    - Proportionally added MILCON otherwise deleted
    - Affected five Ship Overhaul and Repair scenarios
      - IND-0024: Tidewater depot and intermediate consolidation
      - IND-0037: NAVSUBSUPPFAC New London closure
      - IND-0056: NAVSHIPYD PORTSMOUTH closure
      - IND-0096: NAVPESO Annapolis relocation
      - IND-0097: NAVSHIPSO Philadelphia relocation
  - Consolidated IND-0095, IND-0096, and IND-0097 into IND-0095R, per OSD direction
  - Consolidated 4 other scenarios into DON fence-line closures:
    - IND-0019 to DON-0002R
    - IND-0030 to DON-0032R
    - IND-0037 to DON-0030R
    - IND-0056 to DON-0133R
- Consideration: Effect on Northeast, three large activities closed with Industrial impact NAVSHIPYD PORTSMOUTH (IND-0056/DON-0133), NAVSUBSUPPFAC NEW LONDON (IND-0037/DON-0033), and NAS BRUNSWICK (IND-0124/DON-0138).

# IND-0095R: Disestablish Shipyard Detachments



**Candidate Recommendation:** Realign NAVSHIPYD PUGET SOUND DET BOSTON MA by relocating the ship repair function to NAVSHIPYD PUGET SOUND WA. Realign NNSY DET NAVPESO ANNAPOLIS MD by relocating the ship repair function to NAVSHIPYD NORFOLK VA. Realign NNSY DET NAVSHIPSO PHIL PA by relocating the ship repair function to NAVSHIPYD NORFOLK VA.

## Justification

- Reduce excess capacity
- Synergy of collocation

## Military Value

- NAVSHIPYD PUGET SOUND DET BOSTON MA 6<sup>th</sup> of 9
- NNSY DET NAVPESO ANNAPOLIS MD 8<sup>th</sup> of 9
- NNSY DET NAVSHIPSO PHIL PA 9<sup>th</sup> of 9
- NAVSHIPYD PUGET SOUND WA 1<sup>st</sup> of 9
- NAVSHIPYD NORFOLK VA 2<sup>nd</sup> of 9

## Payback

- One-time cost: \$12,511K
- Net implementation cost: \$ 946K
- Annual recurring savings: \$ 2,250K
- Payback time: 4 years
- NPV (savings): \$20,689K

## Impacts

- Criteria 6: (Boston) -213 (108 direct, 105 indirect); .02%; (Philadelphia) -114 (63 direct, 51 indirect); .01%; (Annapolis) -25(13 direct, 12 indirect); 0%
- Criteria 7: No issues
- Criteria 8: No issues

- ✓ Strategy
- ✓ Capacity Analysis / Data Verification
- ✓ JCSG/MilDep Recommended
- ✓ De-conflicted w/JCSGs
- ✓ COBRA
- ✓ Military Value Analysis / Data Verification
- ✓ Criteria 6-8 Analysis
- ✓ De-conflicted w/MilDeps

# IND-0095R: Disestablish Shipyard Detachments



<b>Candidate Recommendation:</b> <ul style="list-style-type: none"> <li>■ Realign NAVSHIPYD PUGET SOUND DET BOSTON MA by relocating the ship repair function to NAVSHIPYD PUGET SOUND WA</li> <li>■ Realign NNSY DET NAVPESO ANNAPOLIS MD by relocating the ship repair function to NAVSHIPYD NORFOLK VA.</li> <li>■ Realign NNSY DET NAVSHIPSO PHIL PA by relocating the ship repair function to NAVSHIPYD NORFOLK VA.</li> </ul>	IND-0095 As Presented	IND-0096 As Presented	IND-0097 As Presented	IND-0095R As Revised
One Time Cost	\$ 7,161K	\$541K	\$4,121K	\$12,511K
Net Implementation Savings	\$ 5,275K	\$391K (Cost)	\$1,658K (Cost)	\$ 946K (Cost)
Annual Recurring Savings	\$ 1,206K	\$37K	\$ 619K	\$ 2,250K
Payback Time	2 Years	18 years	7 Years	4 years
NPV	\$15,827K	(Cost) \$15K	\$4,149K	\$20,689K
Criteria 6	-208 jobs (105 direct, 103 indirect); <0.1%	-25 jobs (13 direct, 12 indirect); < 0.1%	-114 jobs (63 direct jobs and 51 indirect jobs); < 0.1%	(Boston) -213 (108 direct, 105 indirect); .02%; (Philadelphia) -114 (63 direct, 51 indirect); .01%; (Annapolis) -25(13 direct, 12 indirect); 0%

# IND-0019: Closes SIMA Pascagoula & Moves I-level Work to SIMA Mayport

DC NM 1299



Candidate	As Presented	As Revised
<b>Recommendation:</b> Close SIMA PASCAGOULA MS by relocating the ship intermediate repair function to SIMA MAYPORT FL.		
One Time Cost	\$ 1,906K	\$ 1,894K
Net Implementation Savings	\$ 94,070K	\$ 93,577K
Annual Recurring Savings	\$ 17,320K	\$ 17,236K
Payback Time	Immediate	Immediate
NPV (savings)	\$248,435K	\$255,182K
Criteria 6	-346 jobs (191 direct, 155 indirect); 0.5%	-346 jobs (191 direct, 155 indirect); 0.5%

## IND-0024: Realign SIMA NORFOLK to NAVSHIPYD NORFOLK



Candidate <b>Recommendation:</b> Realign SIMA NORFOLK VA by relocating intermediate ship maintenance function to NAVSHIPYD NORFOLK VA.	As Presented	As Revised
One Time Cost	\$ 2,437K	\$ 10,564K
Net Implementation Savings	\$30,618K	\$ 26,820K
Annual Recurring Savings	\$ 7,371K	\$ 8,217K
Payback Time	Immediate	1 year
NPV (savings)	\$96,626K	\$104,262K
Criteria 6	-209 jobs (95 direct, 114 indirect); <0.1%	-209 jobs (95 direct, 114 indirect); .02%

## IND-0030: Close NS Ingleside TX (NS San Diego, CA receives)



Candidate <b>Recommendation:</b> Close SIMA NRMF INGLESIDE TX by relocating the ship intermediate repair function for all MCM/MHC to SIMA SAN DIEGO CA.	As Presented	As Revised
One Time Cost	\$ 2.878M	\$ 3.350M
Net Implementation Savings	\$106.931M	\$117.723M
Annual Recurring Savings	\$ 30.94M	\$ 34.06M
Payback Time	Immediate	Immediate
NPV (savings)	\$385.5M	\$439.775M
Criteria 6	- 842 jobs (395 direct, 447 indirect); 0.38%	- 842 jobs (395 direct, 447 indirect); 0.38%

## IND-0037: Close SUBASE NEW LONDON CT

DCN: 11299

(NS Norfolk VA, SUBASE Kings Bay GA Receive)



Candidate	As Presented	As Revised
<b>Recommendation:</b> Realign NAVSUBSUPPFAC NEW LONDON CT by relocating the intermediate submarine repair function to SIMA NORFOLK VA, NAVSHIPYD NORFOLK VA, and TRIREFFAC KINGS BAY GA		
One Time Cost	\$40,565K	\$28,363K
Net Implementation Savings	\$57,826K	\$74,559K
Annual Recurring Savings	\$14,901K	\$43,898K
Payback Time	5 Years	Immediate
NPV (savings)	\$87,575K	\$497,463K
Criteria 6	-1,292 jobs (694 direct, 598 indirect); 0.77%	-1, 129 jobs (605 direct, 524 indirect); 0.67%

# IND-0056: Close NAVSHIPYD PORTSMOUTH NH DGN: 11299

## (Remaining Shipyards Receive)



<b>Candidate Recommendation:</b> Realign NAVSHIPYD PORTSMOUTH NH by relocating the ship depot repair function to NAVSHIPYD NORFOLK VA, NAVSHIPYD AND IMF PEARL HARBOR HI, and NAVSHIPYD PUGET SOUND WA, and by relocating the Submarine Maintenance Engineering, Planning and Procurement Command to NAVSHIPYD NORFOLK VA.	As Presented	As Revised
One Time Cost	\$426M	\$386M
Net Implementation Cost	\$204M	\$146M <span style="color: red;">(\$59M)*</span>
Annual Recurring Savings	\$73M	\$68M <span style="color: red;">(\$90M)*</span>
Payback Time	7 Years	6 Years <span style="color: red;">(4 Years)*</span>
NPV (savings)	\$486M	\$521M <span style="color: red;">(\$813M)*</span>
Criteria 6	-8,420 jobs (4,233 direct, 4,187 indirect); 3.53%	-7,540 jobs (3,666 direct, 3,874 indirect); 2.27%