Industrial Joint Cross-Service Group

Summary of Selection Process

Introduction

The Principal Deputy Under Secretary of Defense (Acquisition, Technology and Logistics) chaired the Industrial Joint Cross-Service Group (JCSG). The group principals included members from each military service and the Joint Staff. The Industrial JCSG was chartered to review the Department of Defense (DoD) industrial functions, which include maintenance (depot and intermediate), munitions and armaments (including their storage), and ship overhaul and repair.

Responsibilities and Strategy

The Industrial JCSG was responsible for comprehensive analyses of assigned functions, the evaluation of alternatives, and the development and documentation of realignment and closure recommendations for submission to the Secretary of Defense. In developing its analytical process, the JCSG established internal policies and procedures consistent with DoD policy memoranda, the force structure plan, and installation inventories; BRAC selection criteria; and the requirements of Public Law 101-510, as amended.

To facilitate the group's efforts, the JCSG established three subgroups based on the three main functions being analyzed, and subordinate functions were identified for each subgroup. The chair of each subgroup was a principal member of the Industrial JSCG and a subject matter expert. The subgroups comprised members from each service and, as needed for support, contract personnel.

The Industrial JCSG and the Infrastructure Steering Group (ISG) approved the following subgroups and subordinate functions:

Maintenance

- Depot support and
- Combat field support.

Munitions and Armaments

- Munitions production,
- Munitions maintenance,

- Munitions storage,
- Munitions demilitarization, and
- Armaments production/manufacturing.

• Ship Overhaul and Repair

- Depot and
- Intermediate.

Analytical Process

Each industrial subgroup identified installations related to its assigned functions and developed defined capacity measure attributes and metric questions related to the assigned functions. The Military Departments reviewed all of the questions, and the Infrastructure Steering Group approved them. The subgroups then provided the questions to each installation in the form of a controlled data call, and the installations responded to the questions in the form of certified data. The subgroups used the certified data to analyze the capacity, including surge requirements, for their assigned functions. The responses to the capacity data call were also used to create an inventory of installations performing industrial functions.

The JCSG subgroups developed measurable characteristics, or attributes, for each identified function based on the BRAC 2005 selection criteria and then developed targeted data calls based on those characteristics. The Military Departments reviewed the data calls, and the ISG approved the submission of the calls to the installations that had responded to the capacity data call. Using the installations' responses to questions related to certified military value data, the subgroups assessed the military value of each function and subfunction at each installation.

The subgroups then developed strategy-based, data-supported realignment or closure scenarios that would advance joint capabilities, maximize the use of capacity, align infrastructure with operations, save money, provide for future expansion capability, and maximize military value. The subgroups then assessed the scenarios based on the remaining selection criteria (5-8) and using DOD's standard procedures and/or models.

The disparate nature of the functions did not lend itself to a "one-size-fits-all" analytic approach, or strategy. The throughput of a manufacturing entity is viewed and measured very differently from that of a maintenance facility, and ship repair and overhaul offer yet another set of unique functions. The functions overlap somewhat, but to analyze the industrial functions in a meaningful way, the JCSG initially analyzed ammunition and armaments, maintenance, and ship repair as discrete functions.

To fulfill the goals set forth by the Secretary of Defense, the Maintenance subgroup established a strategy based upon minimizing the number of sites performing maintenance while retaining sufficient redundancy within the industrial base and maximizing military value at the commodity level.

The Munitions and Armaments Subgroup addressed, excepting RDT&E, the entire life cycle of munitions. The subgroup sought to create multi-functional installations while eliminating excess capacity through closures versus realignments and avoiding single-point failures. These actions will result in an industrial base that is efficient, effective, flexible, and multifunctional.

The Ship Overhaul and Repair subgroup ensured that ship maintenance requirements were met effectively and efficiently as the Navy reallocated fleet forces. The subgroup also ensured that the number of organic shipyards and the workloads dictated by the 2025 force structure were rationalized. Finally, the subgroup sought to consolidate ship maintenance support functions and to consolidate and regionalize intermediate-level ship maintenance within geographic regions. The ultimate outcome of these efforts resulted in reduced excess capacity.

The three subgroups developed numerous strategy-driven scenario proposals. The JCSG reviewed the proposals, selected the most promising, and reduced the number to 120 scenarios for further analysis. After further analyses of the 120 proposals, the JCSG fully developed 34 candidate recommendations and presented them to the Infrastructure Steering Group (ISG). After review, the ISG forwarded all 34 candidate recommendations to the Infrastructure Executive Council (IEC). The IEC reviewed and approved all but three of the candidate recommendations. Subsequent to IEC approval, several candidate recommendations were integrated into larger Military Department candidate recommendations or were combined for purposes of clarity.

The recommendations approved by the Secretary of Defense follow:

Naval Weapons Station Seal Beach, CA

Recommendation: Realign Naval Weapons Station 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 Marine Corps Logistics Base 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: This recommendation supports depot maintenance function elimination at Naval Weapons Station Seal Beach and follows the strategy of minimizing sites using maximum capacity at 1.5 shifts. This recommendation eliminates over 243,000 square feet of depot maintenance production space with annual facility sustainment and recapitalization savings of \$1.1M. Required capacity to support workloads and Core requirements for the Department of Defense (DoD) is relocated to other DoD Centers of Industrial and Technical Excellence, thereby increasing the military value of depot maintenance performed at these sites. This recommendation decreases the cost of depot maintenance operations across DoD by consolidation and elimination of 30 percent of duplicate overhead structures required to operate multiple depot maintenance activities. Additionally, this recommendation supports transformation of the Department's depot maintenance operations by increasing the utilization of existing capacity by up to 150 percent while maintaining capability to support future force structure. Another benefit of this recommendation includes utilization of DoD capacity to facilitate performance of interservice workload.

Payback: The total estimated one time cost to the Department of Defense to implement this recommendation is \$4.1M. The net of all costs and savings to the Department during implementation period is a savings \$2.3M. Annual recurring savings to the Department after implementation are \$1.6M with payback expected in 1 year. The net present value of the costs and savings to the Department over 20 years is a savings of \$17.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 85 jobs (47 direct jobs and 38 indirect jobs) over the 2006-2011 period in the Santa Ana-Anaheim-Irvine, CA Metropolitan Division, which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has the potential to impact air quality at MCLB Albany, and Tobyhanna AD; and an expected impact at Letterkenny AD. This recommendation has a possible impact on historic properties at MCLB Albany. This recommendation has the potential to impact threatened and endangered species or critical habitat at MCLB Albany and Anniston AD. Anniston AD may require additional mitigation and pollution prevention measures with increased depot maintenance activities. Anniston may also require upgrades to its industrial wastewater treatment plant due to increased depot maintenance activities. This recommendation has no impact on dredging; land use constraints or sensitive resource areas; or marine mammals, marine resources, or marine sanctuaries; noise; waste management; or wetlands. This recommendation will require spending approximately \$0.1M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, or environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Riverbank Army Ammunition Plant, CA

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

Justification: There are 4 sites within the Industrial Base producing Metal Parts. To remove excess from the Industrial Base, the closure allows DoD to generate efficiencies and nurture partnership with multiple sources in the private sector.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$25.2M. The net of all costs and savings to the Department during the implementation period is a cost of \$10.4M. Annual recurring savings to the Department after implementation are \$6.5M with a payback expected within 3 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$53.3M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 106 jobs (89 direct jobs and 17 indirect jobs) over the 2006 – 2011 period in the Modesto, CA Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has the potential to impact air quality at Rock Island Arsenal. A new Source Review will be needed for new construction and the added operations will require an Air Conformity analysis to determine the impact. Continued

management and/or deed restrictions at Riverbank Army Ammunition Plant will be necessary to ensure future protection of federally listed species. Restoration, monitoring/sweeps, access controls, and/or deed restrictions may be required at Riverbank Army Ammunition Plant to prevent disturbance, health and safety risks, and/or long-term release of toxins to environmental media. Riverbank Army Ammunition Plant also has a domestic wastewater treatment facility that may require cleanup. This recommendation has the potential for a minor impact on water resources at Rock Island Arsenal. This recommendation has no impact on cultural, archeological, or tribal resources; dredging; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately \$2.5M for environmental compliance activities. This cost was included in the payback calculation. Riverbank Army Ammunition Plant reports approximately \$10.5M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Sierra Army Depot, CA

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

Justification: Capacity and capability for storage exists at numerous munitions sites. To reduce redundancy and remove excess from the Industrial Base, the realignment allows DoD to create centers of excellence and remove inefficiencies.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$33.4M. The net of all costs and savings to the Department during the implementation period is a cost of \$7.2M. Annual recurring savings to the Department after implementation are \$7.5M with a payback expected within 7 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$66.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 17 jobs (12 direct jobs and 5 indirect jobs) over the period 2006-2011 in the Susanville, CA Micropolitan Statistical Area, which is 0.1 percent of the economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation will require spending approximately \$0.3M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does otherwise not impact the costs of environmental restoration, waste management, and other environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Rock Island Arsenal, IL

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: This recommendation supports minimizing the number of depot maintenance sites through the consolidation of Rock Island's remaining Combat Vehicle workload and capacity at Anniston Army Depot, the Army's Center for Industrial and Technical Excellence for Combat Vehicles. The recommendation also increases overall depot capability utilization by consolidating Rock Island's remaining Tactical Vehicle workload and capability at Letterkenny, the depot with the highest Military Value for Tactical Vehicle maintenance. This recommendation eliminates over 160,000 square feet of depot maintenance production space with annual facility sustainment and recapitalization savings of \$0.6M. This recommendation also decreases the cost of depot maintenance operations across DoD by consolidation and elimination of 30 percent of duplicate overhead structures required to operate multiple depot maintenance activities. Finally, this recommendation facilitates future interservice utilization of DoD depot maintenance capacity.

Payback: The total estimated one time cost to the Department of Defense to implement this recommendation is \$27.0M. The net of all costs and savings to the Department during implementation period is a cost of \$16.2M. Annual recurring savings to the Department after implementation are \$3.1M with payback expected in 9 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$13.8M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 339 jobs (181 direct jobs and 158 indirect jobs) over the 2006-2011 period in the Davenport-Moline-Rock Island, IA-IL Metropolitan Statistical Area, which is 0.2 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has an expected impact to air quality at Letterkenny AD. Additional operations may impact TES, candidate species, and/or critical habitats at Anniston, possibly leading to restrictions on operations. Increased depot maintenance activities at Anniston may require mitigation and pollution prevention measures to protect the aquifer and upgrades to the industrial wastewater treatment plant. This recommendation has no impact on cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; waste management; or wetlands. This recommendation will require spending approximately \$0.2M cost for environmental compliance activities. This cost was included in the payback calculations. This recommendation does not otherwise impact the costs of environmental restoration, waste management, or environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Newport Chemical Depot, IN

Recommendation: Close Newport Chemical Depot, IN.

Justification: There is no additional chemical demilitarization workload slated to go to Newport Chemical Depot. The projected date for completion of existing workload is 2nd quarter of 2008. There is no further use for Newport Chemical Depot.

Payback: The total one time cost to the Department of Defense to implement this recommendation is \$7.1M. The net of all costs and savings to the Department during the implementation period is a savings of \$95.6M. Annual recurring savings to the Department after implementation are \$35.7M with a payback expected immediately. The Net present value of the costs and savings to the Department over 20 years is a savings of \$436.2M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 838 jobs (571 direct jobs and 267 indirect jobs) over the 2006 – 2011 period in the Terre Haute, IN Metropolitan Statistical Area, which is 0.9 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: Continued management and/or deed restrictions will be necessary to ensure future protection of the Federally listed species. Restoration, monitoring, access control, and deed restrictions may be required for former waste management areas to prevent disturbance, health and safety risks, and/or long term release of toxins to environmental media. Restoration and monitoring of contaminated sites will likely be required after closure to prevent significant long-term impacts to the environment. This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; marine mammals, resources, or sanctuaries; noise; waste management; water resources; or wetlands. This recommendation will require spending approximately \$1.3M for environmental compliance activities. This cost was included in the payback calculation. Newport Chemical Depot reports approximately \$1.2M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Kansas Army Ammunition Plant, KS

Recommendation: Close Kansas Army Ammunition Plant (AAP), KS. Relocate Sensor Fuzed Weapon/Cluster Bomb function and Missile warhead production to McAlester AAP, OK; 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; and Detonators/relays/delays to Crane Army Ammunition Activity, IN.

Justification: Capacity and capability for Artillery, Mortars, Missiles, and Pyro/Demo exists at numerous munitions sites. There are 8 sites producing Artillery, 5 producing Mortars, 9 producing Pyro/Demo, and 13 performing Demilitarization. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence, avoid single point failure, and generate efficiencies.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$25.2M. The net of all costs and savings to the Department during the implementation period is a savings of \$2.1M. Annual recurring savings to the Department after implementation are \$10.3M with a payback expected within 2 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$101.4M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 276 jobs (167 direct jobs and 109 indirect jobs) over the period 2006-2011 in the Parsons, KS Micropolitan Statistical Area, which is 1.8 percent of the economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has possible water resources impact at McAlester and Crane. Significant mitigation measures must be taken to limit releases into waterway. This recommendation has potential impact on air quality at Crane AAA. Crane AAA may need upgrades to industrial wastewater treatment to handle additional lead wastes. Kansas AAP has domestic and industrial wastewater treatments plants that may require closure. This recommendation has no impact on dredging; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation will require spending approximately \$5.2M for environmental compliance activities. This cost was included in the payback calculation. Kansas reports approximately \$33.2M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Lima Tank Plant, OH

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: Capacity and capability for armored combat vehicles exists at three sites with little redundancy among the sites. The acquisition strategy for the Army Future Combat System (FCS) and Marine Corps Expeditionary Force Vehicle includes the manufacturing of manned vehicle chassis at Lima Army Tank Plant. The impact of establishing this capability elsewhere would hinder the Department's ability to meet the USA and USMC future production schedule. This recommendation to retain only the portion of Lima Army Tank Plant required to support the FCS, EFV, and M1 tank recap, reduces the footprint. This allows the Department of Defense to remove excess from the Industrial Base, create centers of excellence, avoid single point failure, and generate efficiencies within the manufacture and maintenance of combat vehicles.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$0.2M. The net of all savings to the Department during the implementation period is a savings of \$5.9M. Annual recurring savings to the Department after implementation are \$1.7M with payback expected immediately. The net present value of the costs and savings to the Department over 20 years is a savings of \$22.3M.

Economic Impact on Communities: This recommendation will not result in any job reductions (direct or indirect) over the period 2006-2011 in the Lima, OH Metropolitan Statistical Area. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation does not impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Mississippi Army Ammunition Plant, MS

Recommendation: Close Mississippi Army Ammunition Plant, MS. Relocate the 155MM ICM artillery metal parts functions to Rock Island Arsenal, IL.

Justification: There are 4 sites within the Industrial Base producing Metal Parts. To remove excess from the Industrial Base, the closure allows DoD to generate efficiencies and nurture partnership with multiple sources in the private sector.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$32.4M. The net of all costs and savings to the Department during the implementation period is a cost of \$10.8M. Annual recurring savings to the Department after implementation are \$5.1M with a payback expected in 7 years. The Net Present Value of the costs and savings to the Department over 20 years is a savings of \$38.6M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 88 jobs (54 direct jobs and 34 indirect jobs) over the 2006 – 2011period in the Picayune, MS Micropolitan Statistical Area, which is 0.5 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has potential impact to water resources at Mississippi Army Ammunition Plant. The installation has both domestic and industrial wastewater treatment plants that may require closure. Significant mitigation measures must be taken at Rock Island to limit release of pollutants during loadings. This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; or wetlands. This recommendation will require spending approximately \$1.4M for environmental compliance activities. This cost was included in the payback calculation. Mississippi Army Ammunition Plant reports \$2.3M in environmental restoration costs. Because the Department has a legal obligation to perform environmental restoration regardless of whether a base is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Hawthorne Army Depot, NV

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

Justification: Capacity and capability for Storage and Demilitarization exists at numerous munitions sites. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness. Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$180.3M. The net of all costs and savings to the Department during the implementation period is a savings of \$59.2M. Annual recurring savings to the Department after implementation are \$73.4M with a payback beginning immediately. The net present value of the costs and savings to the Department over 20 years is a savings of \$777.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 326 jobs (199 direct jobs and 127 indirect jobs) over the period 2006-2011 in the Reno-Sparks, NV Metropolitan Statistical Area, which is less than 0.1 percent of the economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and

personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has expected impact on air quality at Tooele Army Depot. Air Conformity analysis will likely be necessary. Surveys and consultation with the State Historic Preservation Officer will be required at Hawthorne Army Depot. Restoration monitoring/sweeps, access controls and/or deed restrictions may be required at Hawthorne to prevent disturbance and health/safety risks, and/or long-term release of toxins to environmental media. Restoration and/or monitoring of contaminated media may be required after closure. Hawthorne also has domestic and industrial wastewater treatment plants that may require closure. This recommendation has no impact on dredging; cultural, archeological, or tribal resources; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately \$1.5M for environmental compliance activities. This cost was included in the payback calculation. Hawthorne reports approximately \$383.2M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Watervliet Arsenal, NY

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

Justification: The Department no longer requires the capability for Other Field Artillery Components at Watervliet Arsenal. The Department will require and will retain at Watervliet Arsenal the capability to support core cannon tube, rotary forge, and swage. Disestablishing the Other Field Artillery Components capability will allow the Department to reduce its overall footprint at Watervliet Arsenal. It will also allow the Department to explore partnering with the local community, perhaps through a leaseback arrangement. This type of partnering could allow the government to reduce its footprint while maintaining that portion of Watervliet Arsenal needed to fulfill core capabilities.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$63.7M. The net of all costs and savings to the Department during the implementation period is a cost of \$46.8M. Annual recurring savings to the Department after implementation are \$5.2M with a payback expected in 18 years. The net present value of the costs and savings to the Department over 20 years is a savings of \$5.2M.

Economic Impact on Communities: This recommendation will not result in any job reductions over the period 2006-2011 in the Troy, NY Metropolitan Statistical Area. The aggregate

economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: Surveys and consultation with SHPO will be required to ensure protection of cultural resources on Watervliet Arsenal. Restoration and monitoring of contaminated groundwater sites at Watervliet Arsenal will likely be required after to prevent significant long-term impacts to the environment. This recommendation has no impact on air quality; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; or wetlands. This recommendation will require spending approximately \$1.3M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, or environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Umatilla Chemical Depot, OR

Recommendation: Close Umatilla Chemical Depot, OR.

Justification: There is no additional chemical demilitarization workload slated to go to Umatilla Chemical Depot. The projected date for completion of its existing workload is 2nd quarter of 2011. There is no further use for Umatilla Chemical Depot.

Payback: The total one time cost to the Department of Defense to implement this recommendation is \$15.5M. The net of all costs and savings to the Department during the implementation period is a savings of \$89.1M. Annual recurring savings to the Department after implementation are \$61.0M with a payback expected immediately. The Net present value of the costs and savings to the Department over 20 years is a savings of \$681.1M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 884 jobs (512 direct jobs and 372 indirect jobs) over the 2006 – 2011 period in the Pendleton-Hermiston, OR Micropolitan Statistical Area, which is 2.0 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and

personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: Surveys and consultation with the SHPO will be required to determine disposition of archaeological and historical resources. Restoration, monitoring, access control, and deed restrictions may be required for former waste management areas to prevent disturbance, health and safety risks, and/or long term release of toxins to environmental media. Restoration and monitoring of contaminated sites will likely be required after closure to prevent significant long-term impacts to the environment. This recommendation has no impact on air quality; dredging; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation will require spending approximately \$1.3M for environmental compliance activities. This cost was included in the payback calculation. Umatilla reports approximately \$10.3M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Lackland Air Force Base, TX

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 disestablishing all depot maintenance capabilities.

Justification: This recommendation supports depot maintenance function elimination at Lackland Air Force Base, TX and follows the strategy of minimizing sites using maximum capacity at 1.5 shifts. This recommendation eliminates over 36,200 square feet of depot maintenance production space with annual facility sustainment and recapitalization savings of \$0.1M. Required capacity to support workloads and Core requirements for the Department of Defense (DoD) is relocated to other DoD Centers of Industrial and Technical Excellence, thereby increasing the military value of depot maintenance performed at these sites. This recommendation decreases the cost of depot maintenance operations across DoD by consolidation and elimination of 30 percent of duplicate overhead structures required to operate multiple depot maintenance activities. Additionally, this recommendation supports transformation of the Department's depot maintenance operations by increasing the utilization of existing capacity by 150 percent while maintaining capability to support future force structure. Another benefit of this recommendation includes utilization of DoD capacity to facilitate performance of interservice workload.

Payback: The total estimated one time cost to the Department of Defense to implement this recommendation is \$10.2M. The net of all costs and savings to the Department during implementation period is a cost of \$0.07M. Annual recurring savings to the Department after

implementation are \$2.9M with payback expected in 3 years. The net present value of the costs and savings to the Department over 20 years is a saving of \$28.0 M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 376 jobs (177 direct jobs and 199 indirect jobs) over the 2006-2011 period in the San Antonio, TX, Metropolitan Statistical Area which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has a potential to impact air quality at Tobyhanna. This recommendation has no impact on cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation will require spending approximately \$0.4M for environmental compliance activities. This cost was included in the payback calculation. This recommendation does otherwise not impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Lone Star Army Ammunition Plant, TX

Recommendation: Close Lone Star Army Ammunition Plant (AAP), TX. Relocate the Storage and Demilitarization functions to McAlester AAP, IL. 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 Army Ammunition Activity (AAA), IN.

Justification: Capacity and capability for Artillery, Mortars, Missiles, Pyro/Demo, and Storage exists at numerous munitions sites. There are 8 sites producing Artillery, 5 producing Mortars, 9 producing Pyro-Demo, 15 performing storage, and 13 performing Demilitarization. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence, avoid single point failure, and generate efficiencies. Goal is to establish multi-functional sites performing Demilitarization, Production, Maintenance, and Storage. Lone Star primarily performs only one of the 4 functions.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$29.0M. The net of all costs and savings to the Department during the implementation period is a cost of \$4.7M. Annual recurring savings to the Department after

implementation are \$17.3M with a payback expected within 1 year. The Net Present Value of the costs and savings to the Department over 20 years is a savings of \$164.2M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 229 jobs (149 direct jobs and 80 indirect jobs) over the period of 2006-2011 in the Texarkana, TX-Texarkana, AR Metropolitan Statistical Area, which is 0.3 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: Surveys and consultation with the State Historic Preservation Officer will be required at Lone Star to ensure protection of cultural resources. Remediation of munitions contaminants on three operational ranges may be required at Lone Star. Continued management and/or deed restrictions at Lone Star may be necessary to ensure future protection of federally listed species. Restoration, monitoring/sweeps, access controls, and/or deed restrictions may be required to prevent disturbance and health/safety risks and/or long-term release of toxins to environmental media. Restoration and/or monitoring of contaminated media may be required after closure in order to prevent significant long-term impacts to the environment. Lone Star has an industrial wastewater treatment plan that may require closure. This recommendation has no impact on air quality; dredging; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately \$5.4M for environmental compliance activities. This cost was included in the payback calculation. Lone Star reports approximately \$2.7M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Desertt Chemical Depot, UT

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

Justification: There is no additional chemical demilitarization workload slated to go to Deseret Chemical Depot. The projected date for completion of its existing workload is 2nd quarter of 2008. Because of the close proximity of Deseret Chemical Depot to Tooele Army Depot, the sophistication of the security system, the number and conditions of igloos and magazines, this

recommendation increases the storage and distribution deployment network capability at Tooele Army Depot at a minimal cost.

Payback: The total one time cost to the Department of Defense to implement this recommendation is \$4.4M. The net of all costs and savings to the Department during the implementation period is a savings of \$65.1M. Annual recurring savings to the Department after implementation are \$30.3M with a payback expected immediately. The Net present value of the costs and savings to the Department over 20 years is a savings of \$356.4M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 391 jobs (248 direct jobs and 143 indirect jobs) over the 2006 – 2011 period in the Salt Lake City, UT metropolitan statistical area, which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: Surveys and consultation with the SHPO will be required to determine disposition of archaeological and historical resources. Continued management and or deed restrictions will be necessary to ensure future protection of the federally listed species. Restoration, monitoring, access control, and deed restrictions may be required for former waste management areas to prevent disturbance, health and safety risks, and/or long term release of toxins to environmental media. Restoration and monitoring of contaminated sites will likely be required after closure to prevent significant long-term impacts to the environment. This recommendation has no impact on air quality; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; water resources; or wetlands. This recommendation will require spending approximately \$1.3M for environmental compliance activities. This cost was included in the payback calculation. Deseret Chemical Depot reports approximately \$66.9M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Ship Intermediate Maintenance Activity Norfolk, VA

Recommendation: Realign Ship Intermediate Maintenance Activity (SIMA) Norfolk, VA, by relocating intermediate ship maintenance function to Naval Shipyard Norfolk, VA.

Justification: This recommendation supports capacity reduction at the SIMA Norfolk, VA, and reduces excess ship repair capacity. This consolidation matches the ship maintenance infrastructure at the other major Fleet concentrations where depot and intermediate level activities are collocated. This consolidation will lead to synergy and efficiency in ship maintenance. This recommendation assumes that Norfolk Naval Shipyard becomes a Direct or Mission Funded activity.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$10.6M. The net of all costs and savings to the Department during the implementation period is a savings of \$26.8M. Annual recurring savings to the Department after implementation are \$8.2M with a payback expected in one year. The net present value of the costs and savings to the Department over 20 years is a savings of \$104.3M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 209 jobs (95 direct jobs and 114 indirect jobs) over the 2006-2011 period in the in the Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation does not impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Fleet Readiness Centers

Recommendation: Realign Naval Air Station Oceana, VA, by disestablishing the Aircraft Intermediate Maintenance Department Oceana, the Naval Air Depot Cherry Point Detachment, and the Naval Air Depot Jacksonville Detachment; establishing Fleet Readiness Center Mid Atlantic, Naval Air Station Oceana, VA; and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Mid Atlantic, Naval Air Station Oceana, VA.

Realign Naval Air Station Patuxent River, MD, by disestablishing the Aircraft Intermediate Maintenance Department at Naval Air Warfare Center Aircraft Division; establishing Fleet

Readiness Center Mid Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD; and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Mid Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD.

Realign Naval Air Station Norfolk, VA, by disestablishing the Aircraft Intermediate Maintenance Department Norfolk VA, the Naval Air Depot Jacksonville Detachment, and Naval Air Warfare Center Aircraft Division Lakehurst Detachment; establishing Fleet Readiness Center Mid Atlantic Site Norfolk, Naval Air Station Norfolk, VA; and transferring all intermediate and depot maintenance workload and capacity to Fleet Readiness Center Mid Atlantic Site Norfolk, Naval Air Station Norfolk, VA.

Realign Naval Air Station Joint Reserve Base New Orleans, LA, by disestablishing the Aircraft Intermediate Maintenance Department, establishing Fleet Readiness Center Mid Atlantic Site New Orleans, Naval Air Station Joint Reserve Base New Orleans, LA; and transfer all intermediate maintenance workload and capacity to Fleet Readiness Center Mid Atlantic Site New Orleans, Naval Air Station Joint Reserve Base New Orleans, LA.

Realign Marine Corps Air Station Cherry Point, NC, as follows: disestablish Naval Air Depot Cherry Point; establish Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 39 K DLHs), Aircraft Hydraulic Components (approximately 69 K DLHs), Aircraft Landing Gear Components (approximately 8 K DLHs), Aircraft Other Components (approximately 23 K DLHs), and Aircraft Structural Components (approximately 126 K DLHs) to Fleet Readiness Center Mid Atlantic, Naval Air Station Oceana, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11 K DLHs), Aircraft Hydraulic Components (approximately 19 K DLHs), Aircraft Landing Gear Components (approximately 2 K DLHs), Aircraft Structural Components (approximately 35 K DLHs), and Aircraft Other Components (approximately 6 K DLHs) to Fleet Readiness Center Mid Atlantic Site Norfolk, Naval Air Station Norfolk, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6 K DLHs), Aircraft Hydraulic Components (approximately 10 K DLHs), Aircraft Landing Gear Components (approximately 1 K DLHs), Aircraft Other Components (approximately 3 K DLHs), and Aircraft Structural Components (approximately 18 K DLHs) to Fleet Readiness Center Mid Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 2 K DLHs), Aircraft Hydraulic Components (approximately 3 K DLHs), Aircraft Landing Gear Components (approximately 0.4K DLHs), Aircraft Other Components (approximately 1 K DLHs), and Aircraft Structural Components (approximately 6 K DLHs) to FRC Mid Atlantic Site New Orleans, Naval Air Station JRB New Orleans, LA.; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 9 K DLHs), Aircraft Hydraulic Components (approximately 16 K DLHs), Aircraft Landing Gear Components (approximately 2 K DLHs), Aircraft Other Components (approximately 6 K DLHs) and Aircraft Structural Components (approximately 30 K DLHs) to the Fleet Readiness Center East Site Beaufort, hereby established at Marine Corps Air Station Beaufort, SC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11 K DLHs), Aircraft Hydraulic Components

(approximately 20 K DLHs), Aircraft Landing Gear Components (approximately 2 K DLHs), Aircraft Other Components (approximately 6 K DLHs), Aircraft Structural Components (approximately 36 K DLHs), Aircraft Rotary (approximately 1 K DLHs), Aircraft VSTOL (approximately 2 K DLHs), Aircraft Cargo/Tanker (approximately 0.02K DLHs,), Aircraft Other (approximately 18 K DLHs), Aircraft Structural Components (approximately 0.001K DLHs), Calibration (approximately 0.15 K DLHs) and "Other" Commodity (approximately 0.3 K DLHs) to Fleet Readiness Center East Site New River, hereby established at Marine Corps Air Station New River, Camp Lejeune, NC; and transfer all remaining depot maintenance workload and capacity to Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC.

Realign Marine Corps Air Station Beaufort, SC, by disestablishing Naval Air Depot Jacksonville Detachment Beaufort and transferring all depot maintenance workload and capacity to Fleet Readiness Center East Site Beaufort, Marine Corps Air Station Beaufort, SC.

Realign Naval Air Station Jacksonville, FL, as follows: disestablish Naval Air Depot Jacksonville, Naval Air Depot Jacksonville Detachment Jacksonville, and Aircraft Intermediate Maintenance Department Jacksonville; establish Fleet Readiness Center Southeast, Naval Air Station, Jacksonville, FL; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 8 K DLHs), Aircraft Hydraulic Components (approximately 6 K DLHs), Aircraft Landing Gear Components (approximately 3 K DLHs), Aircraft Other Components (approximately 27 K DLHs), and Aircraft Structural Components (approximately 9 K DLHs) to Fleet Readiness Center Southeast Site Mayport, hereby established at Naval Air Station, Mayport, FL; transfer all remaining intermediate and depot maintenance workload and capacity to Fleet Readiness Center Southeast, Naval Air Station Jacksonville, FL.

Realign Naval Air Station Mayport, FL, by disestablishing Aircraft Intermediate Maintenance Department, Naval Air Depot Jacksonville Detachment Mayport, and Naval Air Warfare Center Aircraft Division Lakehurst Voyage Repair Team Detachment Mayport and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Southeast Site Mayport, Naval Air Station Mayport, FL.

Realign Naval Air Station Lemoore, CA, by disestablishing Aircraft Intermediate Maintenance Department Lemoore and Naval Air Depot North Island Detachment; establishing Fleet Readiness Center West, Naval Air Station Lemoore, CA; and transferring all intermediate and depot maintenance workload and capacity to Fleet Readiness Center West, Naval Air Station Lemoore, CA.

Realign Naval Air Station Fallon, NV, by disestablishing the Aircraft Intermediate Maintenance Department Fallon and the Naval Air Depot North Island Detachment Fallon; establishing Fleet Readiness Center West Site Fallon, Naval Air Station Fallon, NV; and transferring all intermediate and depot maintenance workload and capacity to Fleet Readiness Center West Site Fallon, Naval Air Station Fallon, NV.

Realign Naval Air Warfare Center Weapons Division China Lake, CA, by disestablishing the Aircraft Intermediate Maintenance Department and relocating its maintenance workload and capacity for Aircraft (approximately 3 K DLHs), Aircraft Components (approximately 45 K

DLHs), Fabrication & Manufacturing (approximately 6 K DLHs) and Support Equipment (approximately 16 K DLHs) to Fleet Readiness Center West, Naval Air Station Lemoore, CA.

Realign Naval Air Station Joint Reserve Base Fort Worth, TX, by disestablishing the Aircraft Intermediate Maintenance Department, establishing Fleet Readiness Center West Site Fort Worth, Naval Air Station Fort Worth, TX, and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center West Site Fort Worth, Naval Air Station Joint Reserve Base Fort Worth, TX.

Realign Naval Air Station Whidbey Island, WA, by disestablishing the Aircraft Intermediate Maintenance Department, establishing Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA, and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA.

Realign Naval Support Activity Crane, IN, by relocating the depot maintenance workload and capacity for ALQ-99 Electronic Warfare to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA.

Realign Naval Air Station North Island, Naval Base Coronado, CA, as follows: disestablish Naval Air Depot North Island, COMSEACONWINGPAC (AIMD), and NADEP North Island Detachment North Island; establish Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6 K DLHs), Aircraft Hydraulic Components (approximately 2 K DLHs), Aircraft Landing Gear Components (approximately 3 K DLHs), Aircraft Other Components (approximately 13 K DLHs), and Aircraft Structural Components (approximately 4 K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Point Mugu, hereby established at Naval Air Station Point Mugu, Naval Base Ventura, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 26 K DLHs), Aircraft Hydraulic Component (approximately 8 K DLHs), Aircraft Landing Gear Components (approximately 13 K DLHs), Aircraft Other Components (approximately 55 K DLHs), Aircraft Structural Components (approximately 16 K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Miramar, hereby established at Marine Corps Air Station Miramar, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 8 K DLHs), Aircraft Hydraulic Components (approximately 2 K DLHs), Aircraft Landing Gear Components (approximately 4 K DLHs), Aircraft Other Components (approximately 17 K DLHs), and Aircraft Structural Components (approximately 5 K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Pendleton, hereby established at Marine Corps Air Station Camp Pendleton, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6 K DLHs), Aircraft Hydraulic Components (approximately 2 K DLHs), Aircraft Landing Gear Components (approximately 3 K DLHs), Aircraft Other Components (approximately 12 K DLHs), Aircraft Structural Components (approximately 3 K DLHs) from Naval Air Depot North Island to Fleet Readiness Southwest Site Yuma, hereby established at Marine Corps Air Station Yuma, AZ; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6 K DLHs), Aircraft Hydraulic Components (approximately 2 K

DLHs), Aircraft Landing Gear Components (approximately 3 K DLHs), Aircraft Other Components (approximately 12 K DLHs), and Aircraft Structural Components (approximately 3 K DLHs) from Naval Air Depot North Island to Fleet Readiness Center West Site Fort Worth, Fort Worth TX; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 25 K DLHs), Aircraft Hydraulic Components (approximately 8 K DLHs), Aircraft Landing Gear Components (approximately 13 K DLHs), Aircraft Other Components (approximately 53 K DLHs), and Aircraft Structural Components (approximately 15 K DLHs), from Naval Air Depot North Island to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA; and transfer all remaining intermediate and depot maintenance workload and capacity to Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA.

Realign Naval Air Station Point Mugu, Naval Base Ventura, CA, by disestablishing the Aircraft Intermediate Maintenance Department and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Southwest Site Point Mugu, Naval Base Ventura, CA.

Realign Marine Corps Air Station Miramar, CA, by transferring depot maintenance workload and capacity for Aircraft Other (approximately 28 K DLHs) and Aircraft Fighter/Attack (approximately 39 K DLHs) and intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Fabrication & Manufacturing and Support Equipment from Marine Aviation Logistics Squadron (MALS)-11 and 16 to Fleet Readiness Center Southwest Site Miramar, Marine Corps Air Station Miramar, CA.

Realign Marine Corps Air Station Camp Pendleton, CA, by transferring depot maintenance workload and capacity for Aircraft Other (approximately 22 K DLHs) and Aircraft Rotary (approximately 102 K DLHs) and intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Fabrication & Manufacturing and Support Equipment from MALS-39 to Fleet Readiness Center Southwest Site Camp Pendleton, Marine Corps Air Station Camp Pendleton, CA.

Realign Marine Corps Air Station Yuma, AZ, by transferring depot maintenance workload and capacity for Aircraft Fighter/Attack, Aircraft Other and Aircraft Rotary and intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Communication/Electronics Equipment, Ordnance Weapons & Missiles, Software and Support Equipment from MALS-13 to Fleet Readiness Center Southwest Site Yuma, Marine Corps Air Station Yuma, AZ.

Justification: This recommendation realigns and merges depot and intermediate maintenance activities. It creates 6 Fleet Readiness Centers (FRCs), with 13 affiliated FRC Sites at satellite locations. FRC Mid-Atlantic will be located on NAS Oceana, VA, with affiliated FRC Sites at NAS Patuxent River, MD, NAS Norfolk, VA, and JRB New Orleans, LA. FRC East is located at Cherry Point, NC, with affiliated FRC Sites at MCAS Beaufort, SC, and MCAS New River, NC. The existing intermediate level activity associated with HMX-1 at MCB Quantico, VA, will also be affiliated with FRC East. FRC Southeast will be located on NAS Jacksonville, FL, and will have an affiliated FRC Site at NAS Mayport, FL. FRC West will be located on NAS Lemoore, CA, and will have FRC affiliated sites at NAS JRB Fort Worth, TX, and NAS Fallon,

NV. FRC Southwest will be located on Naval Station Coronado, CA, and will have affiliated sites at MCAS Miramar, CA, MCAS Pendleton, CA, MCAS Yuma, AZ, and NAS Point Mugu, CA. FRC Northwest will be located on NAS Whidbey, WA, with no affiliated FRC Sites.

This recommendation supports both DoD and Navy transformation goals by reducing the number of maintenance levels and streamlining the way maintenance is accomplished with associated significant cost reductions. It supports the Naval Aviation Enterprise's (NAE's) goal of transforming to fewer maintenance levels, i.e., from 3 to 2 levels; and it supports the NAE's strategy of positioning maintenance activities closer to fleet concentrations when doing so will result in enhanced effectiveness and efficiency, greater agility, and allows Naval Aviation to achieve the right readiness at the least cost. This transformation to FRCs produces significant reductions in the total cost of maintenance, repair and overhaul plus the associated Supply system PHS&T (Packaging, Handling, Storage and Transportation) as well as reparables inventory stocking levels as a result of reduced total repair turn-around times, reduced transportation, lower spares inventories, less manpower, and more highly utilized infrastructure. It requires integration and collaboration between Depot level Civil Service personnel and Military Intermediate level Sailors and Marines. At those FRCs involving Marine Corps MALS (Marine Aviation Logistics Squadrons), because the MALS remain deployable commands, they will affiliate with their FRC organizations, but will remain operationally distinct and severable in all respects. The FRC D-level functions within the MALS fall under the Commanding Officer of each MALS. The FRC Commander is the provider of embedded depot personnel, as well as Dlevel technical and logistics support within the MALS. For all FRCs, there is a combined annual facility sustainment savings of \$1.1M; elimination of a total of 529,000 square feet of depot/intermediate maintenance production space and military construction cost avoidances of \$0.2M. This recommendation also includes a military construction cost of \$85.7M.

In addition to the actions described in this recommendation, there are four additional actions involved in the comprehensive merger of depot and intermediate maintenance: Naval Air Station Joint Reserve Base Willow Grove, PA, Naval Air Station Corpus Christi, TX, Naval Air Station Brunswick, ME, and Naval Air Station Atlanta, GA. The actions at these installations are described in separate installation closure recommendations in the Department of the Navy section of the BRAC Report.

Payback: The total estimated one time cost to the Department of Defense to implement this recommendation is \$298.1M. The net of all costs and savings to the Department during implementation period is a savings of \$1,528.2M. Annual recurring savings to the Department after implementation are \$341.2M with a payback expected immediately. The net present value of the costs and savings to the Department over 20 years is a savings of \$4,724.2M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 104 jobs (53 direct jobs and 51 indirect jobs) over the 2006-2011 period in the Bakersfield, CA Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 221 jobs (152 direct jobs and 69 indirect jobs) over the 2006-2011 period in the Martin County, IN, economic area, which is 2.6 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 13 jobs (7 direct jobs and 6 indirect jobs) over the 2006-2011 period in the Fallon, NV Micropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 512 jobs (218 direct jobs and 294 indirect jobs) over the 2006-2011 period in the Jacksonville, FL Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,190 jobs (632 direct jobs and 558 indirect jobs) over the 2006-2011 period in the New Bern, NC Micropolitan Statistical Area, which is 1.8 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 12 jobs (7 direct jobs and 5 indirect jobs) over the 2006-2011 period in the Oxnard-Thousand Oaks-Ventura, CA Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,279 jobs (623 direct jobs and 656 indirect jobs) over the 2006-2011 period in the San Diego-Carlsbad-San Marcos, CA Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 68 jobs (44 direct jobs and 24 indirect jobs) over the 2006-2011 period in the Virginia Beach-Norfolk-Newport News, VA Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces, and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation may impact air quality at NAS Lemoore and NAS JRB Fort Worth. A conformity determination may be required. This recommendation has the potential to impact cultural, archeological, or tribal resources at NAS Lemoore, NAS Fallon, and NAS Whidbey Island, WA, if construction is required. There is a possible impact to water resources at NAS Whidbey Island and NAS Fallon. This recommendation has no impact on

dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; or wetlands. This recommendation will require spending approximately \$0.4M for waste management and environmental compliance activities. This recommendation does not otherwise impact the cost of environmental restoration, waste management, or environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Naval Shipyard Detachments

Recommendation: Realign Puget Sound Naval Shipyard Detachment Boston, MA, by relocating the ship repair function to Puget Sound Naval Shipyard, WA.

Realign Naval Station Annapolis, MD, by relocating the Norfolk Naval Shipyard Detachment, Naval Sea Systems Command Plant Equipment Support Office ship repair function to Norfolk Naval Shipyard, VA.

Realign the Navy Philadelphia Business Center, PA, by relocating the Norfolk Naval Shipyard Detachment, Naval Sea Systems Command Shipbuilding Support Office ship repair function to Norfolk Naval Shipyard, VA.

Justification: This recommendation supports mission elimination at Puget Sound Naval Shipyard Detachment Boston, MA, Norfolk Naval Shipyard Detachment, Naval Sea Systems Command Plant Equipment Support Office, Annapolis, MD, and Norfolk Naval Shipyard Detachment, Naval Sea Systems Command Shipbuilding Support Office, Philadelphia, PA, and reduces excess ship repair capacity. This relocation will create synergy among like functions at Puget Sound Naval Shipyard and Norfolk Naval Shipyard. Although this expected synergy is not captured in the payback calculations, experience has shown that it will produce additional long-term savings.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is \$12.5M. The net of all costs and savings to the Department during the implementation period is a cost of \$0.9M. Annual recurring savings to the Department after implementation are \$2.3M with a payback expected in four (4) years. The net present value of the costs and savings to the Department over 20 years is a savings of \$20.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 213 jobs (108 direct jobs and 105 indirect jobs) over the 2006-2011 period in the in the Boston-Quincy, MA Metropolitan Division, which is less than 0.1 percent of economic area employment.

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 25 jobs (13 direct jobs and 12 indirect jobs) over the 2006-2011 period in the in the

Baltimore-Towson, MD Metropolitan Statistical Area, which is less than 0.1 percent of economic area employment

Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 114 jobs (63 direct jobs and 51 indirect jobs) over the 2006-2011 period in the in the Philadelphia, PA Metropolitan Division, which is less than 0.1 percent of economic area employment.

The aggregate economic impact of all recommended actions on these economic regions of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the communities to support missions, forces and personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; waste management; water resources; or wetlands. This recommendation does not impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.