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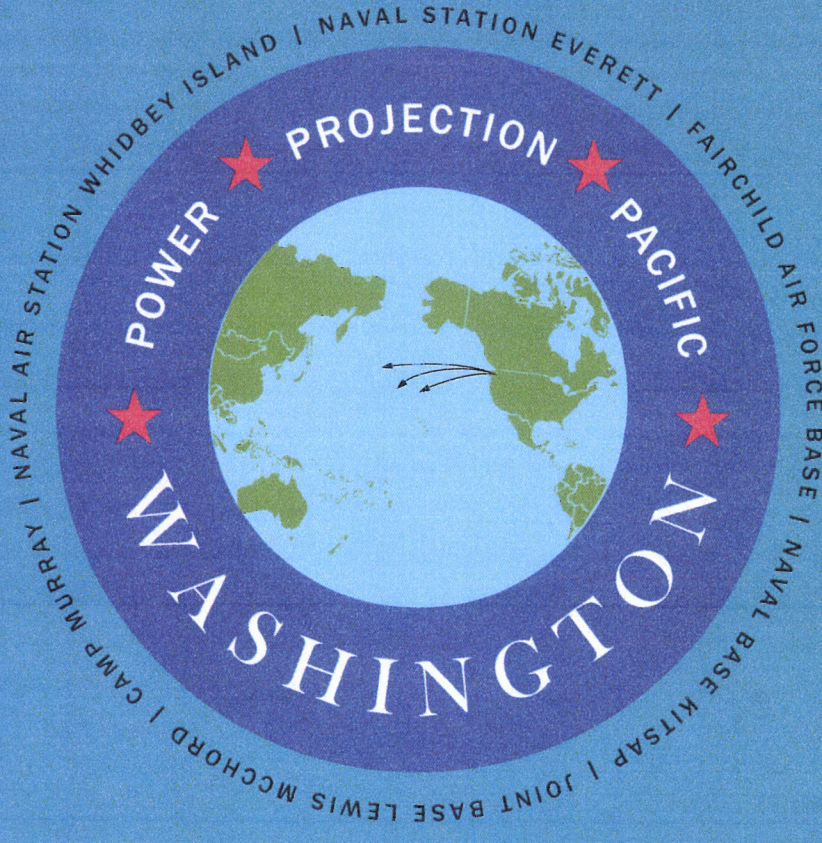
RETAINING AND EXPANDING MILITARY MISSIONS

Increasing Defense Spending and Investment



Washington State's Importance and Opportunities for the Department of Defense in Achieving Its Strategic Initiatives

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EXECUTIVE SUMMARY

Mission: Assess the strengths and opportunities Washington State has to offer the Department of Defense as it implements its strategic plans and provide a comprehensive report, including recommendations as to how the State can assist in promoting military mission retention and expansion.

Process: Review Department of Defense strategy documents and an independent assessment of US Force Posture Strategy by the Center for Strategic and International Studies. Attend Command briefings provided by Naval Station Everett, Fairchild Air Force Base, Naval Base Kitsap, Joint Base Lewis-McChord, Camp Murray, Naval Air Station Whidbey Island. Attend briefings by other Federal entities such as United States Coast Guard District 13, Pacific Northwest National Laboratory, and Volpentest HAMMER Training and Education Center. Conduct interviews with more than 100 interested parties affiliated with educational institutions, local governments and community support organizations such as Economic Alliance Snohomish County Military Affairs Committee, Forward Fairchild, NAS Whidbey Island Task Force, Puget Sound Regional Council, Puget Sound Naval Bases Association, and South Sound Military and Communities Partnership.

General Observations: With a new, changing strategic focus on the Asia-Pacific Region, the installations in Washington State are geographically positioned in an extremely favorable manner to support Department of Defense strategic plans. As well, the Army, Navy, Air Force and National Guard missions and resources in the State are strategically aligned to support and execute the "power projection" necessary in a globally integrated, operational environment in conjunction with United States allied partners. While every installation in the Department of Defense inventory has growth management or encroachment issues, those affecting Washington State's installations are either minor or being addressed through Joint Land Use Studies or other means.

Recommendations:

Director of Military Affairs: Establish a Director of Military Affairs as a policy advisor and the single point of contact for State, Federal and Local officials, as well as assisting military officials and communities surrounding Washington State's military installations in identifying and using state funding sources for planning grants, infrastructure improvements and other resources.

Military Community Support Groups: Formalize the Washington Military Alliance as an advisory board to assist State, Federal and Local officials with policy recommendations affecting Washington State's military installations. Establish a competitive match grant program to help communities in addressing particular areas of need to support their local base.

Installation Quality of Life: Provide funding resources to enhance quality of life issues for the men and women serving in the military and their families, such as matching funds for the School Construction Assistance Program to improve the quality of on-base schools. Provide transportation funding investments to address congestion issues and provide for better access to Washington State's military installations. Develop initiatives for public/private partnerships to facilitate infrastructure upgrades at bases such as electricity grid upgrades/security, wastewater treatment facilities, and transit programs (On-base/Off-base).

Leadership Coordination/Communication: Establish semi-annual state leadership visits to bases and installations' higher headquarters and provide invitations to military leadership to visit the Governor and Legislature regarding statewide issue updates impacting bases and surrounding communities.

Preparation for potential Base Realignment and Closure (BRAC) Actions: Amend the Public Records Act to exempt sensitive military installation analysis information as it relates to base-specific recommendations. Develop comprehensive State plan for the future including updated economic impact and growth management plans, in-depth analysis of Washington State's installations' BRAC 2005 performance and a State strategy for securing new missions based on the Washington State's unique attributes/capabilities.

INTRODUCTION

In January 2012, the Department of Defense (DOD) issued a new Defense Strategic Guidance Report, ***Sustaining U.S. Global Leadership: Priorities for 21st Century Defense***, to identify strategic interests and guide defense spending in light of the transition in the role of American forces in Afghanistan and reductions in federal spending.

To implement this new strategy, the Secretary of Defense (SECDEF) has indicated that the Joint Force of the future will be smaller and leaner, but at the same time be more technologically advanced and agile, flexible, and ready to act. As such, the purpose of this report is to demonstrate to DOD that the State of Washington's military installations are ideally positioned in terms of geography, force-mix, capital infrastructure and statewide technology support to enhance the implementation of this changing strategy, and that maintenance and expansion of their military missions represents the most cost-effective way to meet the objectives of the changing strategy. The State's military installations contain all the requisite elements of power-projection with its Navy surface, sub-surface and air assets, combined with the Army's Stryker Brigade Combat Teams, and the Air Force's strategic airlift and refueling assets.

Further, with the winding down of the U.S. military presence in Afghanistan, along with the announcement of the shift or pivot to the Asia-Pacific Region, there is an interest and concern among many communities surrounding military installations as to what the ultimate impact of this new Strategic Guidance will be. The State of Washington is no exception; as a result, the State has commissioned this report to also assess the potential impact of this shift and its associated re-balancing of forces throughout the military and, in particular, forces in Washington State.

In addition to the change in strategic guidance, there are numerous other factors that will impact on the ultimate disposition of our military forces. Some of the more important factors entail the current budget negotiations and the reduced levels of defense spending that the Defense Department faces as a result of the nation's economic downturn and the actions taken, and planned, by the Administration and the Congress. With the reductions mandated by the Budget Control Act of 2011 and the looming "fiscal cliff" associated with the prospect of sequestration, DOD has no choice but to plan for significant reductions in the budget - - and their resultant impacts on personnel, operations, the implementation of new programs, and the conduct of ongoing research and development.

Since the greatest cost of running the Defense Department is in the area of personnel, the current spending reductions and on-going negotiations over further budget cuts have led the Military Services to look very hard at force structure changes. In Fiscal Year (FY) 2013, the Air Force led DOD's initial efforts with a proposal to implement significant reductions in aircraft and personnel throughout the Service. This proposal was not supported by Members of Congress or the nation's Governors (as the proposed reductions disproportionately impacted State National Guard Forces); it was subsequently put on hold by the Secretary of Defense. The Army is also currently evaluating its composition. Its "Force-Mix/Force-Design" study, which will begin the process of trimming the number of troops and restructuring the Army to support the new strategic guidance, is expected to be released in early 2013, if not sooner.

Another consideration looming in today's environment is the prospect of another round, or rounds, of Base Realignment and Closure (BRAC). In the President's FY13 Budget submittal, there was a request for authorization to conduct two rounds of base closures, in 2013 and 2015. The proposal for these two rounds was also accompanied by the recommendation that the same decision criteria used in the 2005 round be used once again. As with the Air Force's force structure proposal, the U.S. Congress did not agree to this request for two BRAC rounds and therefore, did not provide the required congressional authorization. The general consensus, however, is that the FY14 budget will probably contain a further request to trim the Defense Department's infrastructure through the base closure process; BRAC appears to be a matter of "not if – but when."

Another extremely important factor affecting the disposition of forces deals with local community and State support, which facilitates the military's ability to accomplish their mission, as well as enhancing the quality of life of the service members and their families living and working in the region. The support rendered runs the full gamut of quality of life issues, ranging from transportation challenges to infrastructure, housing, education, medical services, child care, spousal employment, professional licensing and regulatory concerns, to recreational activities and crime/ safety.

This report analyzes each of the military installations in the State from the standpoint of how their mission fits into the new strategic guidance and the cost-effectiveness of maintaining and/ or growing the missions. One good, objective measure of the State's military installations is a review of their "Military Value" rankings in the BRAC 2005 round, and comparing those results to the ranking of similar DOD-wide installations. The data developed in the BRAC process is an extremely useful baseline in measuring an installation's overall value and cost-effectiveness. The data represents the most comprehensive aggregation of cost data and operational metrics, and has been certified by the highest levels of the Defense Department.

In addition to ascertaining the individual installation's compatibility with the new strategic guidance, the report also outlines the major strengths of the individual bases and their ability to accommodate the growth of current missions, as well as the acceptance of new missions such as Unmanned Aerial Systems and Cyber operations. For example, the State has a great deal of expertise and all the requisite elements (military/academic/commercial) to provide a world-class "Center of Excellence" in the critical 'cyber' arena which is a key element of the new strategic guidance.

The report focuses on the strengths of the State's military installations, as well as makes observations on areas that could be further strengthened. There are also specific recommendations to strengthen a particular installation's capability to enhance its mission performance, as well as overarching recommendations for state-wide efforts that would have a positive impact on all the military facilities.

An example is the recommendation to appoint an individual as the Director of Military Affairs. This individual would address a need that was raised on several occasions, and would serve as a state-wide resource for the coordination of all military-related policy issues. The individual would also serve as the central point-of-contact for community-based installation support groups, each of which have contributed immeasurably to the productive relationships that currently exist between the communities and the military installations throughout the State. This individual would not only ensure that all military-related policy issues were handled in a timely, prioritized, and coordinated fashion, but would also provide critical support for the State, the Adjutant General, the Congressional Delegation, the military installation commanders, and the community installation-support groups.

Support for the military in Washington State is not simply a matter of patriotism; military operations are also a critical part of the State economy and must be viewed from an economic and business perspective. The State frequently makes decisions about investments to keep a thriving business, or to attract new businesses to the Evergreen State. Defense Department spending in Washington exceeds $13 billion annually, and the installations and supporting communities warrant an effective, coordinated and prioritized state-wide, support strategy.

In summary, the report provides an in-depth assessment of the current state of affairs for the State's military and federal installations, as well as makes recommendations for further enhancements that will improve the mission capabilities of an extremely important sector of the State's economy.

STRATEGIC FRAMEWORK FOR THE UNITED STATES & THE DEPARTMENT OF DEFENSE (DOD)

DOD Force Structure for Fiscal Years 2011-2015

Army

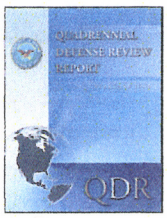
- 4 Corps headquarters
- 18 Divisions with 73 total Brigade Combat Teams (BCTs)

Navy

- 10-11 aircraft carriers and 10 carrier air wings
- 84-88 large surface combatants
- 53-55 attack submarines and 4 guided missile submarines
- 126-171 land-based intelligence, surveillance, reconnaissance (ISR) and electronic warfare aircraft

Air Force

- 10-11 theater strike wing-equivalents
- 30-32 airlift and aerial refueling wing-equivalents
- 5 long range strike (bomber) wings
- 6 air superiority wing-equivalents
- 10 space and cyberspace wings



Section 1

STRATEGIC FRAMEWORK

FOR THE UNITED STATES & THE DEPARTMENT OF DEFENSE (DOD)

Introduction

This report addresses the military installations and bases located in the State of Washington - - the military units located there, the support for those installations provided by the surrounding communities, as well as the impact of the federal spending supporting those forces on the surrounding communities and the State overall.

The installations, personnel, and equipment, however, exist within a framework of an overall security strategy which outlines the elements vital to national interests, as well as policy priorities for the nation. This overall national strategy provides broad guidance on the nature of the missions the Department of Defense and the military services should undertake in achieving these goals, in addition to identifying the risks and particular considerations with the strategic objectives.

As a matter of law and a practical need to provide both long-term guidance to the Department of Defense (DOD) and articulate the basis and goals of its defense policies to its citizens, this strategy is presented in written format and updated at regular intervals.

Within this over-arching strategic framework, more detailed planning documents articulate the specific missions needed to achieve and maintain these strategic interests and define the elements of military force structure necessary to achieve the missions to fulfill the strategy. These planning and review documents outline the forces and military equipment capabilities that are necessary to successfully carry out these missions.

Overview

Five strategy and planning documents issued by the President of the United States and the Department of Defense are most relevant for the purposes of this assessment. These documents, and a short summary of their role in the strategy and planning process, are:

Quadrennial Defense Review Report

- By law (Title 10 U.S.C. Section 118) the Department of Defense is required every four years to conduct a comprehensive examination of "the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program and policies of the United States."
- The report on the Quadrennial Defense Review (QDR) is submitted to the Committees on Armed Services of the Senate and the House of Representatives.
- The most recent QDR Report was issued in February 2010.
- The next Report is expected in February 2014, with the review and analysis process beginning in the spring of 2013.

National Security Strategy

- By law (Title 50 U.S.C. Section 404), the President is required to send to the Congress a report outlining: U.S. worldwide interests, goals, and objectives of the United States that are vital to national security; U.S. foreign policy, worldwide commitments, and national defense capabilities; the uses of U.S. political, economic, military, and other elements of the national power to protect or promote those interests; and, U.S. capabilities to carry out the national security strategy.
- Formally an annual requirement, the National Security Strategy has come to be issued near the beginning of each Presidential Administration.
- The most recent National Security Strategy was issued in May 2010.

National Military Strategy

- The Chairman of the Joint Chiefs of Staff is required every two years to update, based on the QDR and subsequent events, the national military strategy, laying out the continuing and new strategic threats to the U.S. and DOD's objectives in meeting those threats.
- The most recent National Military Strategy was forwarded to the Armed Services Committees of the Senate and House of Representatives in February 2011.

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense

- This review was undertaken in April 2011 at President Obama's direction, and was not statutorily mandated.
- The review's goal was to provide updated strategic guidance to ensure that the almost $500 billion in reductions to the Defense Department budget provided for in the Budget Control Act of 2011 were made in accordance with strategic considerations.
- Sustaining U.S. Global Leadership: Priorities for 21st Century Defense was issued in January 2012.

Capstone Concept for Joint Operations: Joint Force 2020

- Issued by the Chairman of the Joint Chiefs of Staff in September 2012, this document was presented as a first step toward a new concept of operations to meet the requirements set out in Sustaining U.S. Global Leadership: Priorities for 21st Century Defense.

Two other policy review documents are also relevant.

The statutory requirement for the Quadrennial Defense Review also mandates an independent panel be established after DOD issues each QDR to assess the assumptions, strategy, findings, and risks of the Report.

The panel is also charged with examining a variety of possible force structures and to review the resource requirements needed to implement the Review's recommendations:

- The QDR in Perspective: Meeting America's National Security Needs in the 21st Century was issued by the Quadrennial Defense Review Independent Panel in July 2010.

Further, the Fiscal Year 2012 National Defense Authorization Act required an independent study of force posture and deployment plans for U.S. forces in the Pacific Region, based on issues associated with the move of U.S. forces from Japan to Guam; the Department of Defense tasked the Center for Strategic and International Studies to conduct this review. The President's updated strategic guidance in January 2012, Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, which called for focusing the U.S. force posture in the Pacific, also became part of the review:

- U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment was issued in August 2012.

With its overlapping phases dedicated to strategy and force posture definition, as well provisions for the independent reviews of those policies, the defense strategy and planning process is designed to be inclusive and comprehensive, as well as to ensure that strategic and force structure changes are not undertaken in a radical or unjustified manner.

U.S. Department of Defense Current Photos

2010 Quadrennial Defense Review Report

The most recent Quadrennial Defense Review Report was issued in February 2010; the QDR process is designed to take a long-term, strategic view of the United States' national interests and the role of the Department of Defense in securing, implementing, and preserving that national interest. As summarized by General James E. Cartwright, the Vice Chairman of the Joint Chiefs of Staff, at the beginning of the QDR study process in April 2009: the "purpose of the QDR is to assess the threats and challenges the Nation faces, and then integrate strategies, resources, forces, and capabilities necessary to prevent conflict or conclude it on terms that are favorable to the Nation now and in the future." (DOD News Release No. 269-09, April 23, 2009)

Reflecting the years U.S. forces had been engaged in Iraq and Afghanistan, as well as the years to come before those forces would withdraw, Secretary of Defense Robert Gates observed in his cover letter forwarding the QDR Report that it was "truly a wartime QDR. For the first time, it places the current conflicts at the top of our budgeting, policy, and program priorities." (p. i)

Looking beyond the current conflicts, he noted there were a wide range of security challenges on the horizon; to meet them, he stated the new QDR called for "a broad portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict." (p. i)

In framing the overall defense strategy, the QDR discussed how the overall size and capabilities of U.S. armed forces were linked to the four priority objectives of the Department of Defense's overall strategy: 1) to prevail in today's wars; 2) to prevent and deter other conflicts; 3) to prepare to defeat adversaries and succeed in a wide range of contingencies; and, 4) to preserve and enhance the All-Volunteer Force. A focus and investment in a new Air-Sea Battle concept was directed to better achieve these objectives.

The QDR then detailed how these strategic priorities would be met, with sections addressing the adjustment of the force structure and equipment of the armed forces; taking care of servicemembers and their dependents; strengthening key U.S. relationships abroad; and reforming DOD's business operations.

In its section on Rebalancing the Force, the QDR outlines six mission areas for DOD going forward:

- Defend the United States and support civil authorities at home;
- Succeed in counterinsurgency, stability, and counterterrorism operations;
- Build the security capacity of partner states;
- Deter and defeat aggression in anti-access environments;
- Prevent proliferation and counter weapons of mass destruction; and,
- Operate effectively in cyberspace.

The point is made that additional, and better, enabling capabilities are needed to perform these missions more effectively; capabilities ranging from more rotary-winged aircraft to intelligence analysis to a more resilient base structure. Additionally, it is stated that the QDR analysis emphasized that these forces be flexible and adaptable to address the full range of potential challenges.

The QDR also notes that while access to all regions of the world is essential to the ability for the U.S. to deter, defend against, and defeat aggression, the ability of the U.S. to project necessary power into key regions is being challenged by 'anti-access strategies.' Should such challenges be successful, it would call into question the integrity of U.S. alliances and security partnerships, which could also reduce national security and our influence, as well as increase the potential for conflicts.

Specifically mentioned in the context of impeding U.S. deployments and operations in key regions are North Korea, Iran, and China. On China, the QDR observes that it has a comprehensive military modernization underway; these increased capabilities raise questions regarding long-term Chinese policy and intentions.

In providing the force necessary to protect the U.S. from aggression and to project power into key regions, the QDR outlined the general parameters of the DOD force structure for Fiscal Years 2011-2015, which include:

- **Army**
  - 4 Corps Headquarters
  - 18 Divisions with 73 total Brigade Combat Teams (BCTs)
- **Navy**
  - 10-11 aircraft carriers and 10 carrier air wings
  - 84-88 large surface combatants
  - 53-55 attack submarines and 4 guided missile submarines
  - 126-171 land-based intelligence, surveillance, reconnaissance (ISR) and electronic warfare aircraft
- **Air Force**
  - 10-11 theater strike wing-equivalents
  - 30-32 airlift and aerial refueling wing-equivalents
  - 5 long range strike (bomber) wings
  - 6 air superiority wing-equivalents
  - 10 space and cyberspace wings

The QDR identifies cyberspace as "now as relevant a domain for DoD activities as the naturally occurring domains of land, sea, air, and space." (p. 37) It is stated that modern armed forces cannot operate without reliable communication networks and assured access to cyberspace.

Key steps are directed in four key areas to strengthen DOD cyberspace capabilities: developing a DOD-wide concept of operations for cyberspace operations and cybersecurity; developing greater cyberspace expertise; centralizing the command of cyberspace operations; and, enhancing partnerships for cyberspace operations with other agencies, particularly the Department of Homeland Security, and international partners.

Cyberspace is again addressed by the QDR in the section identifying operational risk for DOD in implementing the QDR: to "ensure unfettered access to cyberspace, DoD mission-critical systems and networks must perform and be resilient in the face of cyberspace attacks." (p. 91)

Finally, the QDR highlights the dependence of all defense strategies and operations on personnel in its section entitled Taking Care of Our People; care for wounded warriors is established as the highest priority. Improved health benefits for military members and their families, particularly for such injuries as traumatic brain injury and amputation, are called for. Managing deployment tempos and prioritizing programs that address quality of life (QOL) and resiliency - - such as child care facilities, quality education for children, and 24/7 family support assistance - - are cited as specific goals.

State of Washington and the QDR

Of the relevant defense planning and strategy documents, the QDR is the most comprehensive and detailed; it also has the most relevance to the installations in Washington and the forces based there.

For example, of the 45 Active Component Brigade Combat Teams (BCTs) envisioned in the QDR for the Army force structure, the 2nd Infantry Division has 4 assigned to them (3 Stryker BCTs at Joint Base Lewis-McChord (JBLM), and 1 Heavy BCT in Korea). Two of the aircraft carriers in the Navy force structure are homeported in the state (with a third present for work at the Puget Sound Naval Shipyard & Intermediate Maintenance Facility). Of the airlift and aerial refueling wing-equivalents in the Air Force structure, JBLM hosts two of the airlift and Fairchild Air Force Base hosts two of the refueling wings.

The QDR emphasizes the use of flexible and adaptable forces to deter and defeat aggression in anti-access environments and to project necessary power into key regions; the BCTs at JBLM and the National Guard units in the State are the definition of flexible and adaptable in this context. The carriers homeported in Washington, the ground forces at JBLM, and the air assets at JBLM, Fairchild, and Naval Air Station Whidbey Island are also all key components that are used in power projection and operations facing anti-access elements. In fact, no other area on the West Coast has the combination of military installations from which these operations can be mounted and supported as Washington State does.

The QDR establishes supporting civil authorities as part of the first mission area for DOD going forward; key elements of the National Guard at Camp Murray, JBLM, and Fairchild are dedicated to this mission area.

Further, cyberspace is now a fifth domain in the QDR where DOD operates and must attain and maintain superiority. The Air National Guard's 194th Regional Support Wing and its three cyber squadrons at JBLM and Fairchild are an important presence in this key domain.

The need for the research, development and acquisition process to support the force structure is a major focus in the QDR; the Applied Physics Laboratory at the University of Washington (APL-UW) is very active in defense-related research. In fact, the 2010 QDR included a photo of APL-UW personnel recovering a torpedo from under Arctic ice in its section on Reforming How We Do Business.

Finally, the QDR emphasizes the need to take care of the service-members, their dependents, and retirees and puts a high priority on caring for wounded warriors. All the installations in the State excel at caring for the personnel assigned there, and the low cost of living in Washington adds greatly to the quality of life promoted in the QDR. Naval Hospital Bremerton, Naval Hospital Oak Harbor, and Madigan Army Medical Center are core facilities in their respective service's medical structures, and Madigan's Warrior Transition Battalion is one of the Army's largest and assists wounded soldiers to transition back into active duty or to civilian life.

The QDR in Perspective: Meeting America's National Security Needs in the 21st Century

In July 2010 the 20-member Quadrennial Defense Review Independent Panel (QDR-IP), which was co-chaired by former Secretary of Defense William Perry and former National Security Adviser Stephen Hadley, issued its review of the QDR.

Taking seriously its mandate, the Panel states its view that the 2010 QDR "did not meet the intent of the Congress because the document did not provide a long-range, 20-year assessment with a supporting force structure." (p. 96)

The Panel begins with its own survey of U.S. foreign policy and identified four enduring national interests:

- The defense of the American homeland.
- Assured access to the sea, air, space, and cyberspace.
- The preservation of a favorable balance of power across Eurasia that prevents authoritarian domination of that region.
- Providing for the global "common good" through such actions as humanitarian aid, development assistance, and disaster relief.

The Panel then identifies five global trends it saw challenging the protection of those interests:

- Radical Islamist extremism and the threat of terrorism.
- The rise of new global great powers in Asia.
- Continued struggle for power in the Persian Gulf and the greater Middle East.
- An accelerating global competition for resources.
- Persistent problems from failed and failing states.

Having framed its philosophy, the Panel begins its review by questioning the foundations of the QDR process and the current national security process.

First, arguing that the current government structures charged with maintaining the national security do not work well, the Panel recommends a re-organization of Congress to establish a single national security appropriations subcommittee for Departments of Defense and State and the intelligence community; in the executive branch this would be mirrored by a consolidated budget line for national security encompassing those departments and agencies.

Following this, the Panel states that success "in military operations requires comprehensive planning and a commitment to train in the way we expect to operate;" it then observes that this principle is not reflected in the present QDR process. It, therefore, urges the QDR process be discontinued and replaced with a truly comprehensive national security strategic planning process, which included all departments/agencies addressing external threats to the U.S.

In commenting on the provisions of the QDR itself, the Panel does not find the proposed force structure envisioned in the QDR adequate to meet the current commitments and potential threats envisioned. The Panel calls for the force structure to be fully modernized (as aging weapons systems represented both decreased performance and rising costs). The Air Force is identified as particularly needing an increased deep strike capability, although the service's overall size is seen as increasing only modestly due to an envisioned use of uninhabited air vehicles (UAVs).

In particular, the Panel states that the need for a substantial increase in the size of the Navy to address maritime strategy in the Asia-Pacific region is unrecognized by the QDR; the Panel argues the fleet should be expanded from the QDR's envisioned 288-322 ships to 346 ships.

The Panel also calls strongly for an increased focus on the cyber mission. It observes that not only were many of the military's information networks and capabilities built (and often operated by) the private sector, legal authorities appropriate to the information age are lacking.

The Panel's focus on the cyber sector includes recommending that the Defense Department be prepared to assist civil authorities in defending cyber space (a role they admit is beyond DOD's current role/statutory authority). The Panel specifically envisions Reserve/National Guard cyberspace wings within the QDR's call for 10 space and cyberspace wings, and suggests that DOD should form reserve component units for cyber missions in areas of the country where cyber skills were plentiful.

In its conclusion the Panel observes that it does not feel that the spending levels and savings envisioned in the QDR would adequately fund the QDR's envisioned force levels, much less the more robust force structure the Panel envisions as being necessary.

It also warns further that rising costs for compensation and benefits, particularly healthcare, will make the All-Volunteer Force unsustainable for the long term; a National Commission on Military Personnel is recommended to address issues such as the ratio of support/headquarters personnel to combat forces, compensation reform, health care, and military personnel management policies.

State of Washington and the QDR in Perspective

The QDR Independent Panel (QDR-IP) observed that U.S. forces did not train as they expect to fight, and viewed the Asia-Pacific region as needing more U.S. attention.

The comments on training, it must be noted, were less applicable to the State's bases than others in the U.S.; forces at the State's Army, Air Force, and Navy bases have largely been trained with current operations in mind. Army forces at JBLM, in particular, were in the forefront of the move to lighter and more flexible forces that were adapted to operations in Iraq and Afghanistan;

the I Corps Commander today is adapting those forces and the training at JBLM to further meet the needs of supporting Pacific Command (PACOM) in the Asia-Pacific region.

The QDR-IP called for an increase in force structure (to 346 ships) for the Navy. Navy homeports in the State of Washington are well-placed to support operations in the Asia-Pacific region; they also have the capacity to absorb additional ships and submarines dedicated to this mission-area, whether current forces are shifted from other areas of operation or, as the QDR-IP suggests, the force level increases to a 346-ship level.

The QDR-IP also strongly supported increased attention to the cyber realm, calling for cyberspace wings within the Reserve/National guard structure, and advocating such units should be established in areas of the country where cyber skills were plentiful. The Air National Guard's 194th Regional Support Wing and its three cyber squadrons at JBLM and Fairchild address this need, and, in fact, draw personnel from the Seattle area where the economy includes cyber-oriented and IT-dependent companies such as Microsoft and Amazon.

National Security Strategy

President Obama issued his first National Security Strategy (NSS) on May 27, 2010, outlining the principles and priorities of his Administration.

In issuing the Strategy, the President acknowledged that the nation was at war. While the U.S. involvement in Iraq was ending, operations in Afghanistan were increasing. The President affirmed that the U.S. would "maintain the military superiority that has secured our country, and underpinned global security, for decades." (p. i)

The focus of the Strategy, however, needed to be on the future and a "strategy of national renewal and global leadership." (p. i)

The President framed his strategic approach by identifying four principles to be America's enduring interests:

- The security of the United States, its citizens, and U.S. allies and partners.
- A strong, innovative, and growing U.S. economy in an open international economic system that promotes opportunity and prosperity.
- Respect for universal values at home and around the world.
- An international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges.

In terms of traditional security concerns, weapons of mass destruction were identified as the greatest threat to the American people; reducing the U.S. nuclear arsenal and strengthening the Nuclear Non-Proliferation Treaty are key priorities, as is securing vulnerable nuclear materials from access by terrorists.

Also of over-riding importance is the war against forces spreading hatred and violence; defeating al-Qaida and its affiliates is identified as the focus of this effort.

Other threats are also identified as more consequential in today's world and addressed as strategic priorities:

- The vulnerability to disruption and attack of space and cyberspace capabilities integral to both everyday life and military operations;
- Dependence upon fossil fuels;
- Climate change and pandemic disease;
- Failing states which breed conflict and endanger regional and global security; and,
- Global criminal networks.

The Strategy differs from its predecessors, however, in that it holds that national security begins at home and that the foundation of America's strength is its economy. Investments toward economic recovery in education, science and innovation, transforming the energy economy, lowering health care costs, and reducing the federal deficit are steps tied directly to sustaining America's ability to lead in the world. It is also stated this recovery will rebuild "an infrastructure that will be more secure in the face of terrorist threats and natural disasters." (p. 2)

Beyond the nation's borders, the Strategy focuses on strengthening international institutions and collective action. In terms of international economics, for example, the focus has shifted from the G-8 group of developed nations to the G-20, which includes a wider base of emerging nations and developing economies such as China and Brazil.

U.S. goals throughout the world are to be addressed through engagement and cooperation; while the right to act unilaterally to preserve U.S. interests is reserved, the goal will be to strengthen the international system and work within international institutions and frameworks. The strategy notes that "diplomats are the first line of engagement, listening to our partners, learning from them, building respect for one another, and seeking common ground." (p. 14)

The Strategy identifies commerce, secure travel, and lines of communication through the sea, air, and space domains as being among the global challenges for which broad cooperation is seen as essential to advance American interests.

Notable in this regard is the declaration that "The United States is an Arctic Nation with broad and fundamental interests in the Arctic region, where we seek to meet our national security needs, protect the environment, responsibly manage resources, account for indigenous communities, support scientific research, and strengthen international cooperation on a wide range of issues. " (p. 50)

State of Washington and the National Security Strategy (NSS)

The QDR and QDR-IP offered a detailed vision of the threats facing the U.S. and how U.S. military forces should be structured to address these security concerns; the National Security Strategy offers a vision of how the U.S. should meet a time of transition and a broad strategy of national renewal and global leadership.

Its priority on economic growth through trade and commerce, on secure travel, and on unfettered lines of communication through the sea, air, and space domains are directly relevant to the State

with its thriving international trade; the forces stationed at the State's installations are directly relevant to maintaining that access.

The NSS sees disruptions and attacks in space and cyberspace as the first of the overall threats to its strategic vision, both for military operations and everyday life. The Guard's resources with the 194th Regional Support Wing squarely address this concern for military operations; work such as that being undertaken by the Pacific Northwest National Laboratory (PNNL) regarding the security of the electric power transmission grid and in micro-grids has relevance for everyday life.

The NSS also declares the U.S. has broad and fundamental interests in the Arctic region. With its long-standing ties to the State of Alaska, and with U.S. Coast Guard District 13 support to Arctic operations in District 17, Washington is well-placed to play a role as the Arctic region becomes a more active area for U.S. commercial and other interests.

National Military Strategy of the United States of America 2011: Redefining America's Military Leadership

In the February 2011 National Military Strategy (NMS), Admiral Michael Mullen, then Chairman of the Joint Chiefs of Staff, stated he is providing his best military advice on how U.S. military forces will support the national interests as set forth in the National Security Strategy and accomplish the defense objectives identified in the Quadrennial Defense Review.

The foremost priority of the military establishment is identified as maintaining the security of the people, territory, and way of life of the American people.

The strategic environment in which this priority is pursued, however, is portrayed as changing. Key factors that will need to be faced in the future are: a shift from two opposing blocs to a relatively fluid "multi-nodal" world; population growth in the Middle East, Africa, and South Central Asia; the U.S. national debt and an increasing Asian share of global wealth; weapons of mass destruction; challenges to freedom of transit in shared areas of sea, air, and space; and, non-state actors with access to advanced technologies.

Military strategy will, therefore, change. Previous strategy was built around the capability to overwhelm specific threats to U.S. security. Military strategy will now focus on working with partners to deter and counter threats.

Against this background, the NMS establishes four National Military Objectives:

- Counter Violent Extremism.
- Deter and Defeat Aggression.
- Strengthen International and Regional Security.
- Shape the Future Force.

A focus on cyberspace is also central to the NMS. The Joint Force, for example, has five domains in which it must act to ensure access, freedom of maneuver, and the ability to project power globally: land, maritime, air, space, and cyberspace.

In the context of defeating aggression, access to shared areas of sea, air, and space and cyberspace (the "global commons") is identified as a core task; the four domains "are essential and interdependent mediums for the Joint Force's projection and sustainment of power and ability to deter and defeat aggression." (p. 9) Effective operations in space and cyberspace are cited as particularly essential to defeating aggression.

The NMS discussion of international and regional security notes that U.S. military forces must be constituted so as to be globally-available yet regionally-focused. North America is the first region addressed, with the Defense Department being prepared to work with the Department of Homeland Security, particularly the Coast Guard, to secure the approaches to the U.S. in the air, maritime, space, cyberspace, and land domains. More specifically, the Defense Department will fund and train National Guard personnel and units to support the Department of Homeland Security, state, and local governments in meeting an attack, cyber incident, or natural disaster.

Looking ahead, the first area addressed in the NMS is people, beginning with the need for intelligent and innovative leaders. The value and role of the all-volunteer force is central to this vision, and the need to safeguard military pay and benefits, providing family support to dependents, and comprehensive care for wounded warriors is stressed.

In terms of capabilities, the Strategy states that the current force has been focused on sustained combat operations in a well-defined geographic area; it will now transition to a Joint Force built around modular, adaptive, general purpose units capable of being used in variable combinations across all five domains to meet any military need.

State of Washington and the National Military Strategy (NMS)

In articulating how our military forces will support the U.S. national interests set forth in the National Security Strategy, the NMS highlights the shift from independent U.S. action to a focus on working with partners. All branches of the armed services and forces at Washington installations have worked to build good relationships with partner and other foreign military forces, and this activity can be expected to increase.

The NMS identifies domains which are critical to Joint Force success: land, sea, air, space, and cyber; Washington State-based forces have critical roles to play in four of those five domains.

The NMS also addresses the transformation of current military assets into a Joint Force which will be globally-available yet regionally-focused. Forces based in Washington are well-placed to support PACOM and operations in the Asia-Pacific region; JBLM and the Yakima Training Center, in particular, would be excellent locations to transition the design for modular and adaptive units that can be used in varying combinations from concept to reality.

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense

This strategic guidance was directed by the President in light of three factors affecting the Defense Department: the death of Osama bin Laden and the imminent end of fighting in Afghanistan; the emergence of a broad range of concerns and challenges overseas; and, budgetary pressures on DOD, including a cut of about $487 billion in spending over the next ten years by the Budget Control Act of 2011. In his letter releasing the new document, the President

stated its purpose was to "identify our strategic interests and guide our defense priorities and spending over the coming decade." (p. i)

In the introduction to Sustaining U.S. Global Leadership: Priorities for 21st Century Defense (Priorities), this purpose is restated as being "an assessment of the U.S. defense strategy in light of the changing geopolitical environment and our changing fiscal circumstances" (p. 1), and that it is intended to be a blueprint for the Joint Force in 2020.

The guidance presents the global security environment today as increasingly complex challenges (and opportunities) that will require the application of all elements of U.S. power. Violent extremists, largely in South Asia and the Middle East, will continue to threaten the U.S., its interests, and its allies. Stopping the proliferation of ballistic missiles and weapons of mass destruction remains a particular focus; preventing Iran from developing a nuclear weapon is emphasized.

The guidance also notes that U.S. economic and security interests have become linked to the Western Pacific, East Asia, and Indian Ocean regions. China's emergence as a regional power is cited as having the potential to affect the American economy and security. Given this, U.S. military forces will re-balance toward the Asia-Pacific region.

In regard to this point, the public briefings on this guidance were of interest in two ways. First, the President and the Defense Department officials did not specifically name China as being a reason for the new priority on the Pacific. Further, Secretary Panetta in later briefings specified that the U.S. Navy would change from its current 50-50 force ratio between the Pacific and Atlantic Oceans to a 60-40 Pacific-Atlantic ratio as part of this new strategy.

In accomplishing our national goals, the strategic guidance states that the U.S. will build partnership capacity throughout the world. The President's cover letter cited recent operations in Libya as a model for 'new opportunities in burden-sharing.' Working with allies and partners, the U.S. will protect the freedom of access to the global commons vital for trade and communication.

With a length of only eight pages, the guidance had two major sections. The first, 'Primary Missions of the U.S. Armed Forces,' establishes ten missions for U.S. forces through 2020:

- Counter Terrorism and Irregular Warfare
- Deter and Defeat Aggression
- Project Power Despite Anti-Access/Area Denial Challenges
- Counter Weapons of Mass Destruction
- Operate Effectively in Cyberspace and Space
- Maintain a Safe, Secure, and Effective Nuclear Deterrent
- Defend the Homeland and Provide Support to Civil Authorities
- Provide a Stabilizing Presence
- Conduct Stability and Counterinsurgency Operations
- Conduct Humanitarian, Disaster Relief, and Other Operations.

Of this overall list, the guidance states that the overall capacity of the future force would be based on the requirements of four of these: 1) counter terrorism and irregular warfare; 2) deter and defeat aggression; 3) maintain a safe, secure, and effective nuclear deterrent; and 4) defend the homeland and support civil authorities.

In the past, the conduct of simultaneous operations in disparate parts of the world was central to the structure and capabilities of the armed forces. Significant in this section, therefore, is the refined statement, in discussing the deterrence and defeat of aggression, that the force structure envisioned would be capable of deterring and defeating aggression in one region while other forces are committed to large scale operations in a second region. Responsive ground forces, balanced lift, presence, and prepositioning will enable success in this mission.

In contrast, in discussing stability and counterinsurgency operations, the guidance states, "U.S. forces will no longer be sized to conduct large-scale, prolonged stability operations." (p. 6) The emphasis will be on power projection, particularly in vital areas where anti-access efforts were underway.

The second major section of the guidance is entitled 'Toward the Joint Force of 2020.' It lists eight principles that will guide force and program development:

- Maintenance of a broad portfolio of military capabilities
- Differentiation between investments needed now and those that are deferrable
- Maintenance of a ready and capable force
- Reducing the "cost of doing business"
- Revising plans to better align limited resources with requirements
- Determine the best suited Active Component / Reserve Component mix
- Use networked warfare advancements to make joint forces truly interdependent
- Maintain an adequate industrial base and S&T investments.

One central facet of this future force is that it will be designed to operate and/or fight in areas where the U.S. presence is discouraged or denied (anti-access and area denial, or A2AD).

The strategic guidance document concludes the U.S. "faces profound challenges that require strong, agile, and capable military forces whose actions are harmonized with other elements of U.S. national power." (p. 8)

State of Washington and Sustaining U.S. Global Leadership: Priorities for 21st Century Defense

In overall terms, the rebalance to the Asia-Pacific, and the 60-40 Pacific-Atlantic ratio later articulated by the Secretary of Defense, have the potential to benefit both Naval Base Kitsap, Naval Station Everett, and the Puget Sound Naval Shipyard & Intermediate Maintenance Facility in terms of ships homeported and maintenance/repair workloads. The strategy's emphasis on power projection, particularly in areas where anti-access efforts are underway, will also rely heavily on Navy and Air Force assets for its execution. The emphasis on balanced lift and responsive ground forces further points toward an increase in the rotation of JBLM forces into

the PACOM area of operations and in air-lift support from McChord Field and Fairchild AFB and the State's strategic ports.

Priorities for 21st Century Defense establishes mission for U.S. forces through 2020. Four (of ten) mission areas have a direct impact on forces based in the State. Part of the mission of Special Forces at JBLM address the first priority: to counter terrorism and irregular warfare. Forces at JBLM and the surface ship homeports are key participants in the second priority, to deter and defeat aggression, particularly in the Asia-Pacific region. Both NBK Bangor and Fairchild AFB play roles in the third: maintaining a safe, secure, and effective nuclear deterrent. All the military forces play a role in the first portion of the fourth priority, to defend the homeland, but the National Guard is uniquely trained and situated to meet the second half of the mission, to provide support to civil authorities.

The State's bases and assigned military forces are also complementary to the principles it lists that will guide force development. The first and third of these, a broad portfolio of military capabilities and a ready and capable force, are certainly reflected in forces currently present in the State. The State's low cost of living helps to meet the fourth: reducing the cost of doing business. The presence in the State of commercial leaders in the computer/cyber and IT fields, as well as the Guard's cyber units, help to meet the mandate to use networked warfare advancement to make joint forces truly interdependent.

U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment

In the Fiscal Year 2012 National Defense Authorization Act, signed into law in December 2011, the Congress tasked the Defense Department to commission "an independent assessment of United States security interests in the United States Pacific Command area of responsibility."

This requirement was largely due to an ongoing debate between the Congress and the Administration about a negotiated move of U.S. Marine troops from Okinawa to Guam, particularly the costs associated with building new facilities. The new strategic guidance issued by the President in January 2012 became an additional element in the discussion of the U.S. presence in the region and included in the charter for the report.

The Center for Strategic and International Studies was selected in March 2012 to conduct the study; its report on the U.S. force posture in the Asia-Pacific region and U.S. Pacific Command (PACOM) deployment plans was publicly released in August 2012.

Overall, U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment (CSIS) concurs that the Asia Pacific will be the future focus of U.S. foreign policy. It forthrightly observes that "the most significant problem for the United States in Asia today is China's rising power, influence, and expectations of regional pre-eminence." (p. 13)

It also concludes that while the Defense Department is well-positioned to align the force posture toward the Asia Pacific region, DOD "has not adequately articulated the strategy behind its force posture planning nor aligned the strategy with resources in a way that reflects current budget realities." (p. 5)

CSIS recommends actions to strengthen PACOM engagement plans and capabilities, as well as its better integration into the Defense command structure; it also endorses the move of the Marines to Guam, observing that no alternatives were more promising than the current plans in terms of maintaining the needed forward presence in the region.

Significantly, the assessment's Introduction notes that the cyberspace and space risks posed by Asia Pacific entities were not part of the Panel's charter. It goes on to state, however, that all those interviewed for the report asserted cyber and space issues were integral to any overall strategy for the region. "Cyberspace attacks originating in China and Russia were a significant problem, while incidents originating in North Korea were increasing." (p. 12)

State of Washington and the CSIS Independent Assessment

The charter that the Center for Strategic and International Studies (CSIS) was given was to assess U.S. security interests in the PACOM area of responsibility. The panel concurred with both the need to focus on the Asia-Pacific region, and that additional assets, from Marine units to attack submarines, needed to be assigned to area.

One of its key recommendations directly affected the 2nd Division Heavy BCT permanently stationed in Korea and assigned to I Corps at JBLM: the Assessment recommended I Corps transition to a PACOM-aligned Joint Task Force and that forces from the continental U.S. be rotated through the theater (primarily, Korea).

The panel also commented on an issue that was not in its charter; it noted that all those they interviewed called for increased activity and budgets in the cyber domain, citing cyber attacks from Russia and China as a serious problem for PACOM, with North Korean attacks on the rise. The panel was concerned that an interruption of communication/data links between the U.S. Pacific forces and partner nations, as well as links back to the U.S., would affect PACOM's ability to conduct operations. No recommendations on the issue were made, but it was noted that the matter required further exploration. This observation should be timely and relevant to the National Guard's 194th Support Wing, located at JBLM.

Capstone Concept for Joint Operations: Joint Force 2020

In presenting the Capstone Concept, General Martin Dempsey, the current Chairman of the Joint Chiefs of Staff, begins by observing the United States faces a security paradox: overall, the world is becoming more stable; at the same time a wide range of destructive technologies are available to an increasing range of potential adversaries. "As a result the world is potentially more dangerous than ever before." (p. iii)

To meet the threat, defense concepts of operation therefore need to change. Recognizing that military force is one of various elements of national power, the Capstone Concept foresees the first change to be "globally integrated operations;" Joint Force 2020 will consists of force structure elements world-wide which can be quickly combined and bring their capabilities to bear "across domains, echelons, geographic boundaries, and organizational affiliations." (p. iii)

The Capstone Concept is not detailed guidance to be used in building the elements of Joint Force 2020. Rather, it will "establish a bridge from the new strategic guidance to subordinate concepts, force development guidance, and follow-on doctrine." (p. 1) General Dempsey states that about 80 percent of Joint Force 2020 exists today or is programmed. The Capstone Concept defines the changes needed in the remaining 20 percent and outlines changes to manner in which military forces will be used.

In the first of its four sections, the Capstone Concept looks toward the future security environment. Summarizing the Joint Force 2020 environment as "likely to be more unpredictable, complex, and potentially dangerous than today" (p. 3), six trends are identified as characterizing it:

- The proliferation of weapons of mass destruction.
- The rise of modern competitor states.
- Violent extremism.
- Regional instability.
- Transnational criminal activity.
- Competition for resources.

The advantage in capabilities that U.S. forces have had over adversaries and challengers in the past will narrow: with advanced technologies now easily accessible across the world, "middleweight militaries and non-state actors" can use weapons once available only to superpowers. The global commons is foreseen as being more at risk, and U.S. forces will be able to be targeted in their operational areas, while they are deploying and returning from operations, and while in port.

Space and cyberspace will be key domains for the projection of military power and grow in importance. Operations in space and cyberspace are expected to become a precursor to any military action in the land, air, and marine domains, as well as to be integral to combat operations.

As a further complication, the Capstone Concept observes that while the challenges faced will increase, the operational tempo is unlikely to decrease, and the level of overall defense spending will fall.

The second section addresses how the Joint Force will meet these challenges - - allowing commanders to cope with complexity and rapid change, to tailor and scale a force to the situation, to exercise initiative at the lowest levels, and to enhance military effectiveness with fewer fiscal resources.

The Capstone Concept outlines eight key principles that make up this "globally integrated operations" concept which will ensure that Joint Force 2020 is effective:

- Mission command (decentralized decision-making empowered by digital technology).
- Seize, retain and exploit the initiative.
- Global agility.
- Partnering.
- Flexibility in establishing Joint Forces.
- Cross-domain synergy.
- Use of flexible, low-signature capabilities.
- Increasingly discriminate to minimize unintended consequences.

The concept is designed to integrate current and emerging capabilities into swift and variable military response capabilities that will produce a cost-effective, cross-domain force with a decisive advantage at any point on the globe where it is needed.

The third section addresses how force development will need to change to make globally integrated operations a reality; twenty-three priorities and needed change across seven functional areas, four of which are outlined below.:

- Enabling mobile communication technologies to increase the situational awareness and decrease response times for commanders.
- Ensuring all echelons across the Joint Force are "pervasively interoperable."
- Coordinate fire support, including cyber, to enable any element of the Joint Force to be supported without delay by the most appropriate supporting arm.
- Improve strategic and operational mobility.
- Reduce operational energy needs, the largest share of logistical requirements.

The final section of the Capstone Concept addresses the potential risks of adopting the new concept of operations. The identified risks include the inability of communications technology to support the highly-networked Joint Force envisioned; the advanced technologies underpining the Joint Force may be unaffordable; the needed decentralization of command decisions may lead to a lack of coordination and inefficiency; the increased agility envisioned in terms of rapidly deployable forces and lift capacity may be unachievable; and, emphasizing organizational flexibility to achieve integrated operations may limit operational effectiveness.

The document concludes by stating that the future Joint Force will face a more complex, uncertain, and rapidly changing world than today's force: security challenges will increase in destructive potential while becoming less clearly identified in terms of the actors and responsibility and geographical boundaries.

Through globally integrated operations, Joint Force 2020 will be able to quickly combine its units in combinations tailored to meet ever-variable threats; to quickly bring those capabilities to bear where and when needed regardless of domain, or organizational affiliation of the Force components, or the geographic location or political boundaries of the threat location; and to ensure command decisions are made at the lowest levels to provide the needed adaptability and tempo of operations.

State of Washington and the Capstone Concept for Joint Operations

The vision of Joint Force 2020 articulated in the Capstone Concept is broadly applicable to all U.S. military forces in the State. The missions that the Joint Force will address remain those established in the Priorities for 21st Century Defense, and the Army, Navy, Air Force, and National Guard units in the State will have a direct role in carrying them out.

The Capstone Concept focuses, however, on how elements of existing forces, and elements which need to be designed/created, will work together to accomplish those missions better given the future strategic and fiscal environments they will face. Globally integrated operations by force structure elements that are highly-networked are key to this vision.

As communications and other technologies necessary to make Joint Force 2020 a reality emerge from development, a "battle laboratory" will be needed to make the Force a reality. Such a facility would need existing expertise with advanced communications technology, wireless networking, and cyberspace. The proximity of forces from all the armed services from which the smaller force elements integral to the concept could be drawn would be an advantage. Similarly, access to military transport by air and sea would be necessary to work out the vision of units that could be tailored to meet variable threats and quickly brought to bear where and when needed.

With some of the Army's most capable units assigned there; elements of the Navy and Air Force close at hand; easy access to air, land and sea transportation; an existing organizational affiliation to PACOM, the operational area most likely to need these new capabilities; and, its location in an area known for communications/IT technology and cyber capabilities resident on base, JBLM seems to be a logical location for Joint Force 2020 to be transitioned from the laboratory to the battlefield.

Enduring Priorities and Continuing Themes

Several common themes and positions emerge across these five strategy and planning documents and the two independent reviews that are relevant to the State's interests in this report.

First, the documents are consistent in recognizing that the strategic environment is for the United States is changing rapidly, becoming more complex and more dangerous.

There is agreement that weapons of mass destruction (WMD) pose the greatest danger to the American people, particularly given their proliferation to an increasing number of nations and their pursuit by terrorist groups.

The 2010 Quadrennial Defense Review's starting point is that for the United States the world order was fairly stable from the end of the Second World War to the fall of the Soviet Union. Since then, there have been significant changes in terms of nations growing in economic power and influence and military capabilities that have changed that bi-polar model to one that is much more complicated.

Further, advances in technology and the globalization of information and communications have allowed non-state actors, such as terrorist groups, to gain powers and influence that in the past were only possessed and exercised by nations. The "rise of new powers, the growing influence of non-state actors, the spread of weapons of mass destruction and other destructive enabling technologies, and a series of enduring and emerging trends pose profound challenges to international order." (QDR, p. 5)

The National Military Strategy in 2011 similarly framed the underlying challenge to the structure of our military forces and how they will be used in the future: "The United States remains the world's preeminent power, even as a growing number of state and non-state actors exhibit consequential influence. This changing distribution of power indicates evolution to a "multi-nodal" world characterized more by shifting, interest-driven coalitions based on diplomatic, military, and economic power, than by rigid security competition between opposing blocs." (NMS, p. 2)

In the most recent document, the Chairman of the Joint Chiefs of Staff's (JCS) Capstone Concept for Joint Operations, there is a more specific assessment of the changes and what they mean for both U.S. military forces and the civilian populace: "In a world where fragile critical infrastructure is widely connected to the internet, and in which sabotage and terrorism have profound effects, adversaries can also more easily escalate a conflict laterally, including to the U.S. homeland. In such a world, the dimensions of any particular security challenge may not align with existing boundaries or command structures. Likewise, the conventions by which wars are fought are no longer as settled as they once were. Notions of who is a combatant and what constitutes a battlefield in the digital age are rapidly shifting beyond previous norms." (Capstone, p. 3)

New threat areas are identified that contribute to this more complex environment. One is climate change, which the QDR notes that the National Intelligence Council in 2008 identified more than 30 military installations that were at risk from rising sea levels.

Cyberspace has an increasing focus from the QDR to the Capstone Concept, from the vital role that computers and communication play in modern weapons systems, to the dangers of on-going cyber operations directed against internet-dependent operations and the communications infrastructure to the role of cyberspace in war.

Further, military operations in Iraq and Afghanistan have brought home the point that energy supply lines can be vulnerable to attack and disruption. The QDR established a new category of security: "Energy security for the Department means having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs. Energy efficiency can serve as a force multiplier, because it increases the range and endurance of forces in the field and can reduce the number of combat forces diverted to protect energy supply lines." (QDR, p. 87)

Meeting DOD's energy needs, assuring secure energy sources, and finding alternatives to current oil-based fuels are also an increasing focus throughout the documents.

Second, in the strategic environment summarized above, the ability to influence events and meet threats through the projection of military force wherever needed remains key.

The documents all recognize the U.S. is a global power with interests and responsibilities around the world. The QDR states the U.S. "remains the only nation able to project and sustain large-scale operations over extended distances," (QDR, p. iv), identifying the Navy as key in this regard and which "will continue to be capable of robust forward presence and power projection operations." (QDR, p. x) A second component of this global presence is also foundational in the Review: "forward-stationed and rotationally deployed U.S. forces continue to be relevant and required." (QDR p. 63)

Related to the projection of military power world-wide is the concept of the "global commons" and our increasing dependence on access and the free flow of goods and information. The QDR defines the global commons as "domains or areas that no one state controls but on which all rely. They constitute the connective tissue of the international system. Global security and prosperity are contingent on the free flow of goods shipped by air or sea, as well as information transmitted under the ocean or through space." (QDR, p. 8)

By 2011 the reference to the global commons came with a clear warning. The National Military Strategy notes that threats to operations in the global commons are increasing: assured "access to and freedom of maneuver within the global commons... and globally connected domains such as cyberspace are being increasingly challenged by both state and non-state actors." (NMS, p. 3)

Anti-access and area denial, or A2AD, actions have specifically motivated changes in the approach to the projection of influence/force. The rapid development and proliferation of advanced military technologies and weapons means many nations can now credibly threaten to close access to international airspace or waterways where the U.S. considers free passage to be vital.

The QDR reflects the precepts of the Air-Sea Battle concept in its approach to operations in areas where access to and freedom of maneuver within the global commons are threatened.

At its heart, Air-Sea Battle recognizes that U.S. forces have unique technology and operational advantages, although not all forces have the same technologies and capabilities; it is an operational concept that allows specific advantages and capabilities to be utilized in a joint manner against threats and, given the changing nature of these threats, to be specifically tailored to a given threat or operation as the need arises.

This approach was fully embodied in the National Military Strategy: "Our strategy, forged in war, is focused on fielding modular, adaptive, general purpose forces that can be employed in the full range of military operations." (NMS, p. 18)

In the Capstone Concept for Joint Operations, the tactical focus of the Air Sea Battle concept has become the core strategy. General Dempsey states: "While cross-domain synergy is particularly important to defeating anti-access efforts, ...it should become a core operating concept in all joint operations." (Capstone, p. 7)

In fact, the Capstone Concept never mentions the military services, and restates principles inherent in the Air-Sea Battle concept as the three core elements of Joint Force 2020:

- "This capstone concept advances the notion of globally integrated operations to address the operational challenge arising from the future security environment.
- Joint force elements postured around the globe can combine quickly with each other and mission partners to harmonize capabilities fluidly across domains, echelons, geographic boundaries, and organizational affiliations.
- These networks will form, evolve, dissolve and reform in different arrangements in time and space as required with significantly greater fluidity and flexibility than do current Joint Forces." (Capstone, p. 16)

Also consistent across the strategic documents and reviews is a focus on the countries in the Pacific and South Asia.

In the QDR, this focus is framed in demographic and economic terms; it points out that China is the world's most populous country and India is the world's largest democracy. The economies of both countries have grown greatly, allowing them to become more militarily capable and, therefore, increasing the need for the U.S. to devote additional monitoring and analysis to them. A specific point is raised with regard to China: "However, lack of transparency and the nature of China's military development and decision-making processes raise legitimate questions about its future conduct and intentions within Asia and beyond." (QDR, p. 60)

The National Military Strategy reiterated the focus on this region: "The Nation's strategic priorities and interests will increasingly emanate from the Asia-Pacific region." (NMS, p. 13)

The view of China, however, is more sharply defined - - the U.S. is prepared to act if necessary if China over-reaches: "We remain concerned about the extent and strategic intent of China's military modernization, and its assertiveness in space, cyberspace, in the Yellow Sea, East China Sea, and South China Sea. To safeguard U.S. and partner nation interests, we will be prepared to demonstrate the will and commit the resources needed to oppose any nation's actions that jeopardize access to and use of the global commons and cyberspace, or that threaten the security of our allies." (NMS, p. 14)

By the formulation of the January 2012 strategic guidance, this recognition of economic and military growth in the region becomes a reason for strategic action: "U.S. economic and security interests are inextricably linked to developments in the arc extending from the Western Pacific and East Asia into the Indian Ocean region and South Asia, creating a mix of evolving challenges and opportunities. Accordingly, while the U.S. military will continue to contribute to security globally, we will of necessity rebalance toward the Asia-Pacific region." (Priorities, p. 2)

As previously noted, more detail on this view was provided when the Secretary of Defense on June 2, 2012, in Singapore stated that by 2020 the "Navy will re-posture its forces from today's roughly 50/50 percent split between the Pacific and the Atlantic to about a 60/40 split between those oceans -- including six aircraft carriers, a majority of our cruisers, destroyers, Littoral Combat Ships, and submarines." (quoted in "U.S. Navy's Pacific Presence to Expand, Panetta Says," Ratnam & Ten Kate, Bloomberg, June 2, 2012)

A further emphasis common to all the strategy and planning documents is the need to focus on U.S. military personnel and the All-Volunteer Force, although in this case there is a definite shift in emphasis from 2010 to 2012.

In the QDR, the strain of years of military action and multiple deployments is noted as having put a 'considerable' strain on the All-Volunteer Force; it states that DOD will work to "to lessen the burden shouldered by our personnel and their families—the most important pillar of America's defense." (QDR, p.3)

The QDR emphatically states DOD is committed to the long-term viability of the All-Volunteer Force, and pledges to "prioritize programs that sustain resiliency such as: child care facilities, quality education for children, 24/7 family support assistance, outreach to Guard and Reserve members and their families, and referrals for non-medical counseling. By emphasizing the emotional, social, spiritual and family aspects of fitness, these health-of-the-force investments will pay dividends in national security today and well into the future." (QDR, p. 102)
The National Security Strategy and the National Military Strategy have a similar emphasis, although the NMS reflects an awareness of issues associated with returning to civilian life: "We must safeguard Service members' pay and benefits, provide family support, and care for our wounded warriors. We will place increased emphasis on helping our Service members master the challenging upheavals of returning home from war and transitioning out of the military back to civilian life." (NMS, p. 16)

The January 2012 strategic guidance was drafted against the background of the Congressional debate on spending and deficit levels and the 2011 Budget Control Act. Its commitment to the All-Volunteer Force and military personnel is framed in terms of cutbacks: "As DoD takes steps to reduce its manpower costs, to include reductions in the growth of compensation and health care costs, we will keep faith with those who serve.... As the Department reduces the size of the force, we will do so in a way that respects these sacrifices. This means, among other things, taking concrete steps to facilitate the transition of those who will leave the service. These include supporting programs to help veterans translate their military skills for the civilian workforce and aid their search for jobs." (Priorities, p. 7)

The strategy and guidance documents all concur that new technologies are creating new threats and that the domains within which the U.S. will need to act are expanding, particularly with regard to space and cyberspace.

The QDR is succinct in summing up cyberspace and its importance: "Although it is a manmade domain, cyberspace is now as relevant a domain for DoD activities as the naturally occurring domains of land, sea, air, and space. There is no exaggerating our dependence on DoD's information networks for command and control of our forces, the intelligence and logistics on which they depend, and the weapons technologies we develop and field. In the 21st century, modern armed forces simply cannot conduct high-tempo, effective operations without resilient, reliable information and communication networks and assured access to cyberspace." (QDR, p. 37)

The QDR also identifies a need to assist federal, state, and local governments in addressing cyber threats: "The Department of Defense should be prepared to assist civil authorities in defending cyberspace – beyond the Department's current role." (QDR-IP, p. xiii)

The National Military Strategy reiterates the importance of space and cyberspace, and notes that the two new domains also offer opportunities to terrorist/non-state entities: "Our ability to operate effectively in space and cyberspace, in particular, is increasingly essential to defeating aggression. The United States faces persistent, widespread, and growing threats from state and non-state actors in space and cyberspace. We must grow capabilities that enable operations when a common domain is unusable or inaccessible. Space and cyberspace enable effective global warfighting in the air, land, and maritime domains, and have emerged as war-fighting domains in their own right." (NMS, 9)

These vulnerabilities were also identified as critical by the CSIS panel in its review of the strategic guidance, which also tied the threat to the Asia Pacific region as a whole. The panel was straightforward: "Cyberspace attacks emanating from Russia and China represent a significant problem, and incidents from North Korea are increasing as well. An interruption of U.S. and partner nation communication and data links would affect U.S. ability to execute operations in the Asia Pacific region." (CSIS p. 12)

The Capstone further emphasizes the importance of these domains in the future, calling for improved cyber defense capabilities because the computer and communications infrastructure is now subject to anti-access/area denial efforts as well.

The JCS Chairman also portrays cyberspace as a potential battlefield: "Space and cyberspace will play a particularly important role in the years ahead. As these domains figure more prominently in the projection of military power, operations in them will become both a precursor to and integral part of armed combat in the land, maritime and air domains. Future adversaries may even elect to attack only in cyberspace, where military networks and critical infrastructure are vulnerable to remote attack, and actions remain difficult to trace." (Capstone, p. 2)

An additional theme that gains prominence across the strategy documents is that U.S. world-wide interests should be pursued through a strategy of partnership and international cooperation; the U.S. will act alone only if necessary and as a last resort.

The QDR presents this concept as a strategic foundation: "Furthermore, as a global power, the strength and influence of the United States are deeply intertwined with the fate of the broader international system—a system of alliances, partnerships, and multinational institutions that our country has helped build and sustain for more than sixty years." (QDR, p. iii)

The National Security Strategy reiterates the foundational nature of the United States' alliances: "These relationships must be constantly cultivated, not just because they are indispensable for U.S. interests and national security objectives, but because they are fundamental to our collective security. Alliances are force multipliers: through multinational cooperation and coordination, the sum of our actions is always greater than if we act alone." (NSS, p.41)

It also, however, notes that military power flows from economic success, and that economic alliances and partnerships will be pre-eminent. The shift in economic focus from the G-8 to the G-20, with its focus on emerging economies, is to both generate trade and increasing prosperity for more countries, but also to increase the range of potential partners across the world with whom the U.S. can act in support of critical strategic issues.

This emphasis on acting in concert with international partners is also reflected in the National Military Strategy: "Lastly, we will be prepared to act as security guarantor – preferably with partners and allies, but alone if necessary – to deter and defeat acts of aggression. For all of these leadership approaches, we will pursue wider and more constructive partnerships." (NMS, p. 1)

The Capstone also casts its discussion of essential military strategy in a cooperative light: "this concept recognizes that military force is only one element of national power. In many cases strategic success will turn on our ability to operate in concert with the rest of the U.S. government, allied governments and their armed forces, and nongovernmental partners." (Capstone, p. 1)

Energy also increases in prominence across the documents, growing from one factor of many in DOD operations to a major point of vulnerability and a central planning consideration for US forces. The QDR presents energy as a basic consideration in planning military campaigns and power projection movements: "Energy security for the Department means having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs. Energy efficiency can serve as a force multiplier.... DoD must incorporate geostrategic and operational energy considerations into force planning, requirements development, and acquisition processes." (QDR, p. 87)

The QDR also establishes energy issues as critical for forces and installations within the U.S.: "To address energy security while simultaneously enhancing mission assurance at domestic facilities, the Department is focusing on making them more resilient. U.S. forces at home and abroad rely on support from installations in the United States. DoD will conduct a coordinated energy assessment, prioritize critical assets, and promote investments in energy efficiency to ensure that critical installations are adequately prepared for prolonged outages caused by natural disasters, accidents, or attacks." (QDR, p. 88)

By the drafting of the Capstone Concept, energy is part of the critical national infrastructure subject to cyberspace attack and a core sustainment issue for Joint Force 2020: "Energy is the largest share of logistical requirements. Improving how forces use energy, especially reducing demand for liquid fuel, will decrease the amount of combat power that must be dedicated to transporting those forces. Improved energy efficiency will also enhance operational endurance and mobility. In concert with reducing energy requirements, developing alternative energy sources will lead to a greater number of operational options." (Capstone, p. 13)

One further observation can be made in reviewing the above strategy and guidance documents: strategic vision is bounded by budget realities.

For example, while the 2010 QDR states that it "supports investment in many critical enablers" (such as more rotary wing aircraft, Special Operations Forces, and language and cultural expertise)," it also observes those enablers "have been persistently short in our inventory." (QDR, p. 101)

The QDR, similarly, calls for an active duty Army structure of 45 Brigade Combat Teams (BCTs); in less than three years' time, however, budget pressures are such that the Army is now completing a Force Mix/Force Design study that would reduce the Army by 80,000 personnel to a force with only 37, and possibly 32, BCTs.

The Independent QDR panel recognized the link between strategic vision and budget and pointed out that without more spending achieving the vision was questionable: "Modernization has suffered in the interest of sustaining readiness and carrying the cost of current operations; however, the modernization bill is coming due. Meeting the crucial requirements of modernization will require a substantial and immediate additional investment that is sustained through the long term" (QDR-IP, p.61)

The National Security Strategy called for rebuilding the foundation of American strength and influence, but its focus was less on direct spending for military forces than economic recovery, on rebuilding the infrastructure, and on integrating national security more closely with homeland security:

- "At the center of our efforts is a commitment to renew our economy, which serves as the wellspring of American power."
- "Our recovery includes rebuilding an infrastructure that will be more secure and reliable in the face of terrorist threats and natural disasters.
- "These steps complement our efforts to integrate homeland security with national security; including seamless coordination among Federal, state, and local governments to prevent, protect against, and respond to threats and natural disasters." (NSS, p.2)

With its focus on managing the Department of Defense in a post-Budget Control Act environment, the January 2012 strategic defense guidance, similarly, outlines its goals with the assumption that Department will not have the funding to achieve all of its goals all of the time in the future.

In its key "Toward the Joint Force of 2020" section, for example, future force management is defined and bounded with budget-related caveats and terminology:

- "Likewise, DoD will manage the force in ways that protect its ability to regenerate capabilities that might be needed to meet future. ...maintaining intellectual capital and rank structure that could be called upon to expand key elements of the force." (Priorities, p. 6)
- "...we have sought to differentiate between those investments that should be made today and those that can be deferred. (Priorities, p. 7)
- "....so that more limited resources may be better tuned to their requirements." (Priorities, p.7)

This consideration (as well as the challenges that will be faced by those budget-impacted forces) is also clear in the JCS Chairman's over-arching vision of how our military forces will be transformed: "Joint Forces must also adapt to the nation's fiscal environment. Though some key capability areas will see increased investment, the cumulative impact of retrenchment in defense accounts will be reduced capacity in terms of overall force structure. While the armed forces are likely to grow smaller, it is less likely their operational tempo will decrease." (Capstone, p. 3-4)

Summary

Perhaps the most important element of these strategy documents is their continued affirmation of the need for U.S. military forces to carry out power projection missions - - to maintain and promote U.S. interests in peacetime and to effectively prosecute military campaigns far from the homeland's shores in conflict.

The State's location in the Pacific Northwest facing the sea and air routes to the Far East, combined with the presence of those Army, Navy and Air Force units that are among the most likely to be used for power projection, closely align the State for supporting this strategic imperative. The State is also ideally located to be a spring-board or center of operations for actions following up on the National Security Strategy's declaration of broad and fundamental U.S. interests in the Arctic region.

Similarly, the State's facilities are well-positioned to support the re-balancing of the U.S. presence toward the Asia-Pacific region. For example, the Army units stationed at JBLM are exactly the mobile and adaptable and re-configurable forces envisioned for rotational assignments throughout the region. The Air Force's strategic lift capabilities at McChord Field (JBLM) and refueling capabilities at Fairchild AFB make possible the deployment of ground forces and other global reach resources throughout the Pacific and Arctic regions, including denial of access areas far from U.S. shores. The presence of facilities in the Puget Sound, both military and civilian, dedicated to ship repair and maintenance and Washington State's modern homeports for Navy surface and submarine forces reinforces this "confluence of capability" to execute the national defense strategy.

Further, while the U.S. will continue to have forward-based forces, the cost of maintaining those forces overseas is significant; the reduced cost of supporting forces at permanent bases in Washington compared to other Asia-facing bases, also weighs in the State's favor.

In terms of opportunities, one area where resources and capabilities resident in the State align with priorities identified in the strategy and guidance documents is a nexus between terrorism, cyber, and energy.

The documents show an increasing concern over how vital computer and communication networks are to the functionality and resiliency of both military systems and every aspect of the U.S. economy and infrastructure. They also note increasing efforts are being launched to penetrate these cyber networks, thereby raising the prospect of terrorist attacks, and even warfare, being carried out in the cyber domain. The most recent document, the 2012 Capstone Concept for Joint Operations, specifically mentions cyberspace attacks on critical infrastructure.

This concern was also recently raised by the National Academy of Sciences in a report entitled "Terrorism and the Electric Power Delivery System" which showed that the U.S. electrical power transmission/distribution grid was vulnerable to terrorist attacks, both in terms of physical and cyber assaults, that could black out large regions of the country for weeks or months and cost many billions of dollars. As worrisome as that prospect is for the general population, military facilities simply cannot risk being without full power for any period of time, as it would threaten the security of the American homeland and significantly degrade military power projection capabilities.

There are facilities and capabilities in the State, however, well-equipped to address this challenge. Several of the military installations have military units dedicated to cyberspace activities, and the State is a center of computer/cyber technology and expertise, for both academia and commerce. Further, the Pacific Northwest National Laboratory is under-taking leading-edge work in the areas of power grid modernization, grid security, and microgrids. These all contribute unique Washington State resources and capabilities strongly aligned with the priorities identified in the national strategy and guidance documents.

In summary, the military installations in Washington fit extremely well with the relevant strategy and guidance documents reviewed above. The State has all the requisite elements of a Power Projection Platform (Strategic Ports, Rail, Roads, and Airports) and the complementary air, land, and sea units with which to accomplish the mission.

THE STATE OF WASHINGTON
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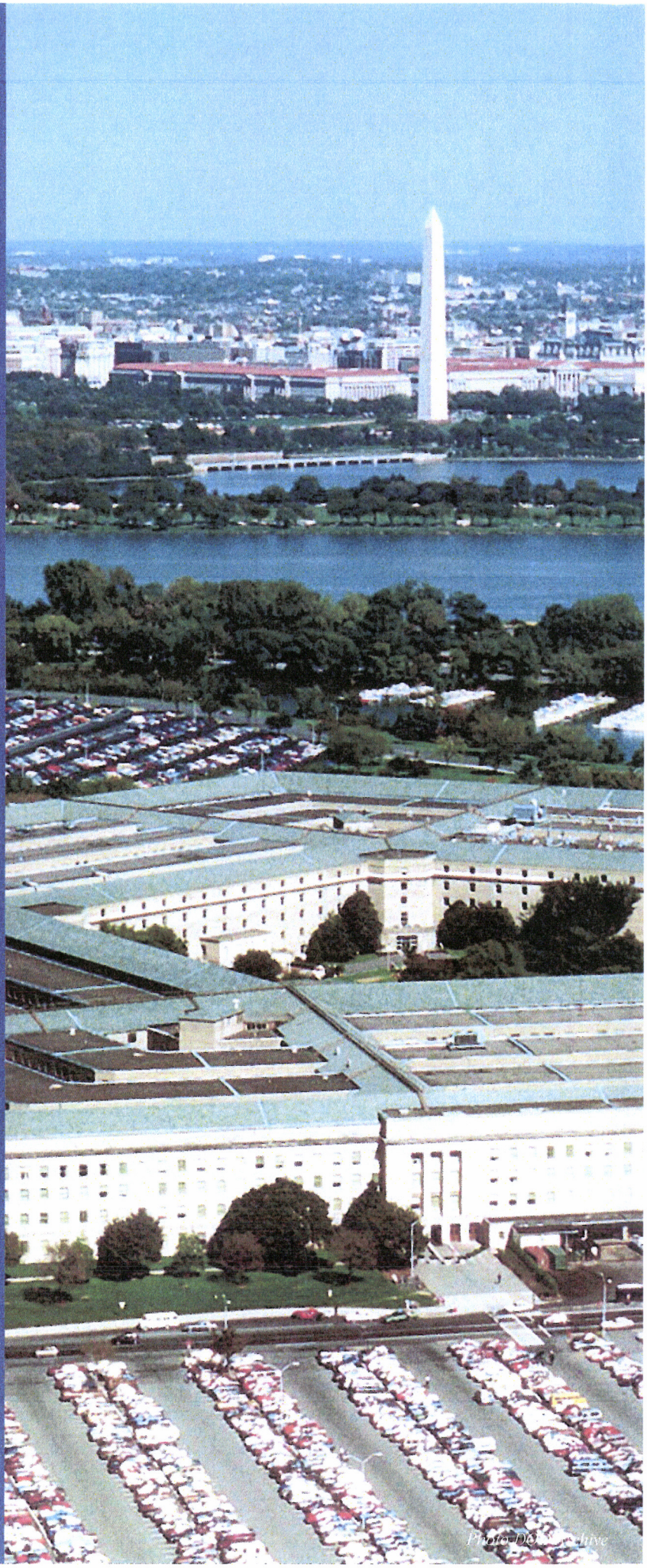
DEPARTMENT OF DEFENSE BASE REALIGNMENT AND CLOSURE (BRAC)



Section 2

DEPARTMENT OF DEFENSE
BASE REALIGNMENT AND CLOSURE (BRAC)

In the years after the end of the United States' involvement in Vietnam, the size of the armed forces decreased, in terms of both the number of ships and aircraft, as well as and ground units and the size of the base infrastructure needed to support them.

The Congress, however, was wary of the Department of Defense (DOD) desire to close unneeded bases. Not only would a base's closure seriously impact nearby communities, the DOD decision process was not transparent, and there was concern that factors other than budget/operational cost and military utility played key roles in that process. Legislation was enacted in 1977 that effectively prevented DOD from closing any bases.

Pressured by the need to reduce spending on unneeded infrastructure, DOD and the Congress agreed in 1988 to a new one-time base closure decision-making process. Under this compromise, the Secretary of Defense's prerogative to propose a list of bases that were to be closed or realigned was preserved. That list, however, would then be reviewed by an independent commission. The commission would review the closure/realignment candidates - - as a complete record of the data and the decision-making process used in selecting the closure/realignment candidates - - and have the power to accept, reject, or change DOD's recommendations.

After completing its review, the commission would forward its recommendations to the President for approval. Once approved by the President, the list would be submitted to the Congress. The Congress was allotted a set time for its review; unless the House of Representatives and the Senate both passed resolutions of disapproval, the closure and realignment recommendations would take effect.

This process worked well in 1988, although only a portion of DOD's excess infrastructure was addressed. The Congress then agreed to four further rounds of base realignment and closure (BRAC) in 1991, 1993, 1995, and 2005.

The process established by the BRAC law is notable for the transparency of the DOD data and decision process (with the data certified for accuracy and decisions being justified against the planned force structure), as well as the independent review and the expedited Congressional approval process.

BRAC Law

The central feature of the BRAC law was its mandate that defined selection criteria be used. The eight mandated criteria are set out in Section 2913 of Title 10 U.S.C. Priority consideration is given to the first four, the military value criteria:

1. The current and future mission capabilities and the impact on operational readiness of the total force of the Department of Defense, including the impact on joint war fighting, training, and readiness.
2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.
4. The cost of operations and the manpower implications.

The other four criteria for consideration are:

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.
6. The economic impact on existing communities in the vicinity of military installations.
7. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel.
8. The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance.

Utility of Analysis of the BRAC 2005 Data

The central goal of this report is to survey each of the military installations in the State and analyze how their mission areas fit into the new strategic guidance and the force structure toward which DOD is re-designing the military services, Joint Force 2020.

Base closure activity is relevant to this effort in at least two ways. First, the data used in the BRAC 2005 process presents a relatively recent 'snapshot' of an installation and of the missions and activities performed there, as well as information on the condition of its infrastructure and its cost of operation.

The BRAC analysis further provides a view of the State's installations as compared to other bases in the U.S. performing similar functions and hosting forces which are tasked with similar missions. The data and comparisons are valuable in assessing shortfalls and needed improvements at a base; they can also serve as a guide to a base's attributes and ability to host additional missions, perhaps drawn from a base with a similar mission and forces but which ranked much less highly in terms of military value.

In proposing or justifying why a mission would be better performed at a Washington installation, there will undoubtedly be vigorous arguments raised in opposition by groups in states who currently host the forces performing that function; the validity of each installation's cost, condition, and mission metrics from 2005 will, however, be hard to questioned.

Second, force levels have been reduced since 2005 and budget pressures on the Department have continued to grow. DOD is adamant that it has a significant level of excess infrastructure that can only be effectively addressed through BRAC, and that there are needed changes in force structure and disposition that are best addressed through that process.

The President's Budget Request (PBR) for Fiscal Year 2013, issued in January 2012, requested two rounds of base closure - using the structure and same decision criteria used in the 2005 round -- one in 2013 and a second in 2015.

At the time, there was some question as to whether a 2013 round could even be executed; the data call and analysis process take approximately two years (for the 2005 BRAC round, the services issued their first data call in January 2004) and the FY13 National Defense Authorization Act, which would contain any BRAC approval, would not likely be acted upon until the Fall of 2012. In any event, the Congress met the President's request with announcements that it would not even consider any request for BRAC in the FY13 budget deliberations.

It is expected that the Defense Department will continue to pursue further BRAC rounds, with a renewal of the BRAC request as part of the FY14 President's Budget Request. Our judgment is that BRAC is not a matter of "if," but is a matter of "when."

It is against this background that the installation assessments in the following Section include, where available, the relevant summary data from the BRAC 2005 round on military value and the peer rankings.

Additionally, a short description is given regarding the capabilities and attributes utilized in the Services' evaluation process.

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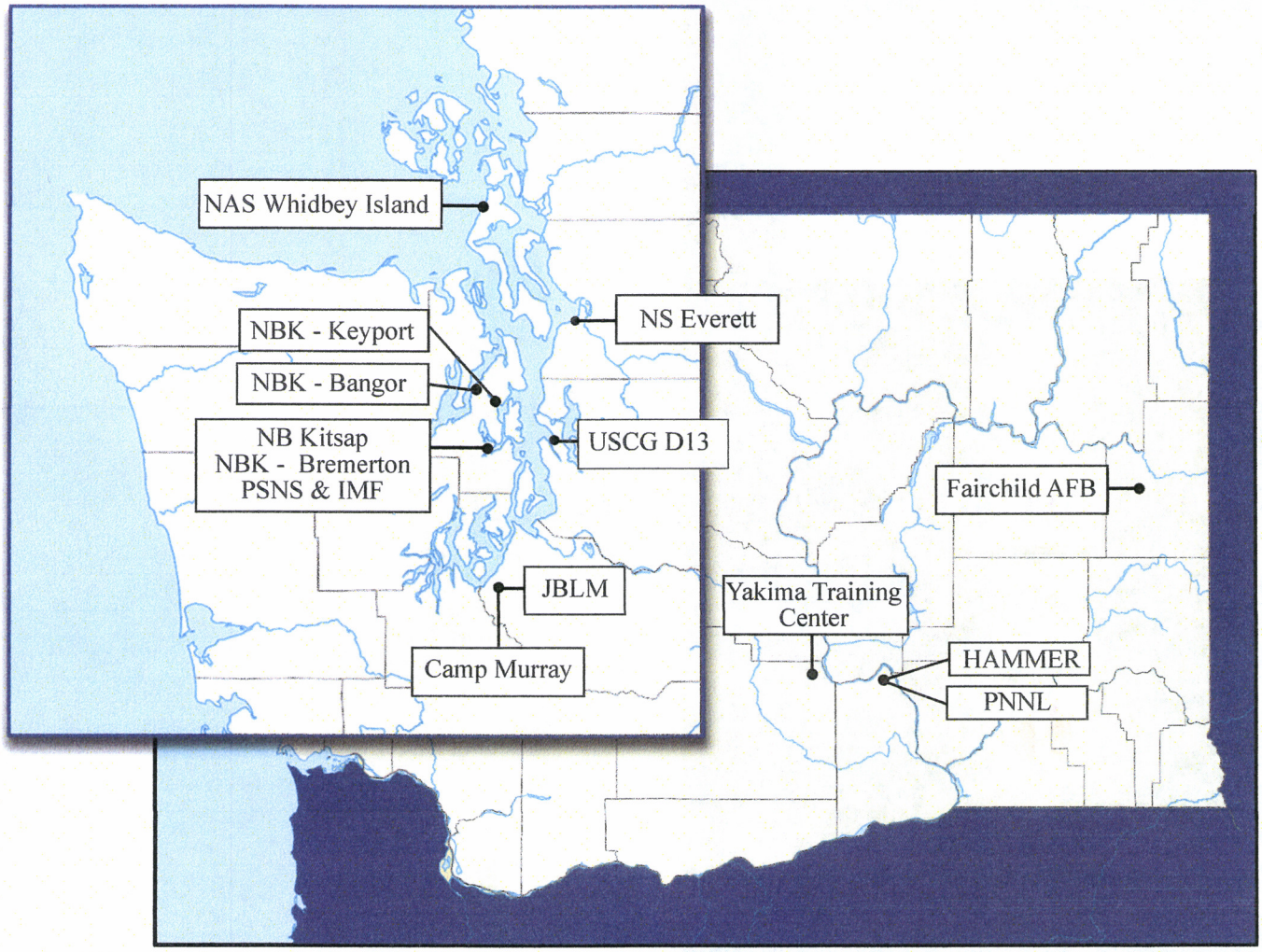
WASHINGTON STATE

MILITARY BASES & FEDERAL FACILITIES



MILITARY & RELATED FEDERAL ASSETS IN WASHINGTON

Mission

Provide State-of-the-Art training and infrastructure, responsive Quality of Life programs, and fully-capable mobilization and deployment operations for the Army, Navy, Air Force and Marines.

Section 3

MILITARY & RELATED FEDERAL ASSETS IN WASHINGTON STATE

Washington State hosts six major military installations:

1. Joint Base Lewis-McChord (including the Yakima Training Center)
2. Naval Base Kitsap
3. Naval Air Station Whidbey Island
4. Naval Station Everett
5. Fairchild Air Force Base
6. Washington National Guard (Camp Murray).

The U.S. Coast Guard, the nation's fifth military service, is part of the Department of Homeland Security; it cooperates very closely with DOD in peacetime, and becomes a component of the Defense Department during wartime.

In addition, two Department of Energy facilities in Washington pursue training and research that have benefits for the DOD, the HAMMER Training and Education Center and the Pacific Northwest National Laboratory (PNNL).

Finally, the University of Washington has a long-standing relationship of research undertaken for the Department of the Navy through its Applied Physics Laboratory.

Visits to these installations, included receipt of command briefings and meetings with community support groups.

Overview and observations on the installations and their missions follow:

▸ **ARMY**	Joint Base Lewis – McChord (JBLM)
▸ **U.S. NAVY**	Naval Base Kitsap Naval Air Station (NAS) Whidbey Island Naval Station Everett (NSE)
▸ **U.S. AIR FORCE**	Fairchild Air Force Base (AFB)
▸ **NATIONAL GUARD OF THE UNITED STATES**	Washington State National Guard (Camp Murray)
▸ **DEPARTMENT OF HOMELAND SECURITY**	U.S. Coast Guard - District 13
▸ **DEPARTMENT OF ENERGY**	Volpentest Hammer Training and Education Center Pacific Northwest National Laboratory (PNNL) The Applied Physics Laboratory - University Of Washington (APL-UW)

JOINT BASE LEWIS – McCHORD (JBLM)

Installation / Organizational Facts

JBLM is the largest Joint Base West of the Rocky Mountains, and the Number One Power Projection Platform in the U.S. Army.

Personnel:
Base population consists of a total of 118,300 personnel:
- Military Population: 46,800
- Civilian Workforce: 16,300
- Family Members: 55,200

Size (Acreage):
414,000 acres - Lewis, McChord & Yakima Training Center (YTC)

Primary Units:
ARMY: 18 Brigade Sized Elements

I Corps Headquarters
- 3 Stryker Brigade Combat Teams with supporting units.
- Fires, Military Police, Medical, Battlefield Surveillance, Engineer & Sustainment Brigades
- 16th Combat Aviation Bridade

7th Infantry Division Headquarters (Administrative Command)

Special Operations
- 1st Special Forces Group (ABN)
- 2nd Battalion, 75th Ranger Regiment
- 4th Battalion, 160th Special Operations Aviation Regiment
- 4th Squadron, 6th US Air Cavalry Regiment Training

Training
- 191st Infantry Brigade
- 8th ROTC Brigade
- 1st Joint Mobilization Brigade

Western Region Medical Command

AIR FORCE – Classic Association (Active / Reserve)
62nd Airlift Wing, Air Mobility Command
446th Airlift Wing, Air Force Reserve (62nd & 446th assigned 51 C-17A's)
Western Air Defense Sector (WA Air National Guard)
627th Air Base Group

Economic Impact:
$6.1B in Total Annual Economic Impact (2010 Data)

U.S. ARMY

JOINT BASE LEWIS – McCHORD (JBLM)

Mission

Provide State-of-The-Art Training and Infrastructure, Responsive Quality of Life Programs, and Fully-Capable Mobilization and Deployment Operations for the Army, Navy, Air Force and Marines

Installation Strengths & Attributes

As a result of the recommendation of the 2005 Base Closure and Realignment Commission, Joint Base Lewis-McChord was formed in February 2010, combining the former Fort Lewis and neighboring McChord Air Force Base.

With the Army as lead service, the joint base garrison operates the installation on behalf of the Army and Air Force warfighting units assigned there.

General Observations: The local communities' installation support group, the South Sound Military & Communities Partnership (SSMCP), has done an outstanding job in developing a close and extremely effective working relationship with JBLM. SSMCP has been proactive in developing communications, understanding and mutual support for JBLM and its activities with the surrounding counties and municipalities. SSMCP serves as the primary point of contact for coordination with the base and resolution of issues of mutual interest.

With the base population more than doubling since 2002, many issues such as transportation, housing, education and a myriad of quality of life issues have posed challenges for the entire region. SSMCP has met the challenges head-on: an extensive plan, "Joint Base Lewis-McChord, GROWTH COORDINATION PLAN, December 2010" outlines 10 key areas that warrant regional study and the development of recommendations for implementation. The 10 key resource areas include:

1. **Economics**
2. **Housing**
3. **Education, Childcare, and Schools**
4. **Transportation**
5. **Land Use Policy**
6. **Public Safety**
7. **Utilities and Infrastructure**
8. **Health**
9. **Social Services**
10. **Quality of Life**

Since the completion of the GROWTH COORDINATION PLAN, several initiatives have been, and continue to be, pursued by SSMCP in conjunction with the base. These initial efforts deal with transportation, housing, education and childcare issues, as well as focusing on the enhancement of quality of life opportunities in the area. In 2011, a Community Needs Survey of military personnel and their families was conducted to establish their perceptions and preferences in areas ranging from transit opportunities to outdoor amenities to access to medical care and so on, as well as to include their views on the supportive nature of the surrounding communities. The responses have been used to identify the needs and desires of the military personnel and their families, and to develop strategies to satisfy these varying needs.

The supportive actions of the SSMCP were clearly pointed out in several briefings as the type of cooperative relationships that the military appreciated and required to ensure the accomplishment of their mission which is dependent on soldiers and airmen that are secure in the knowledge that their families are being cared for.

Strategic Location: As the major Power Projection Platform (PPP) in the Pacific Northwest (one of 15 PPP's designated by the Army), JBLM has all the requisite requirements which include:

- **Strategic Sea Ports**
- **Strategic Aerial Port – McChord Field (and other airfields / airports)**
- **Strategic Rail Corridor Network**
- **Strategic Highway Network**

Additionally, in the BRAC 2005 proceedings, Fort Lewis was ranked as the Number One Power Projection Platform (PPP) in the Army's analysis and evaluations. This capability, combined with its geographical location fully supports the recent change in military strategy which now focuses on the Asia-Pacific Area of Operations (AOR). JBLM is in a unique and strategically advantageous position. Another key element of a PPP is to also have the capability to house, feed, train and deploy the mobilized units. JBLM has these assets and capabilities, and its close coordination with the SSCMP will ensure that nothing adverse will occur that would negatively impact training or any other required elements of the PPP.

Infrastructure Considerations: The recent site visit to JBLM and Madigan Army Medical Center revealed the tremendous investments that have occurred in the past decade to complement the increase in the military population. Some of the key infrastructure considerations and improvements involve:

- **Local JBLM infrastructure includes:**

  - 90,000 acres
  - 5,000 Family Housing Units
  - 7 Fitness Centers
  - 12,000 Barracks Spaces
  - 2 Librariess
  - 10 Child Development Centers
  - 2 Temporary Lodging Facilities
  - 6 Elementary Schools
  - 11 Dining Facilities
  - 9 Chapels

- **Plant replacement value of $11.5B.**

- **With the base population more than doubling to 46,800, JBLM has realized over $2B in Milcon projects during the last decade.**

- **However, there is still $5B in Milcon backlog with key gaps in the following areas:**

  - Replacement of *Relocatable* Admin & Maintenance facilities that impact 13 of the Brigade sized units stationed on the base.
  - Common Area Latrine (CAL) *Barracks* need to replaced to comply with the Army's standard of 1+1 (two soldiers with individual bedrooms and shared kitchenette and bathroom). Currently affects four units and 58 buildings.
  - *Aircraft hangers* are a key facility deficit in supporting the 16th Combat Aviation Brigade (CAB).

- **Further, the FY13-18 Future Years Defense Plan (FYDP) includes less than $500M in Milcon projects.**

- **Other key infrastructure areas include the need to upgrade:**

  - Utilities (electrical, water and communications) need to be upgraded to support the current population.
  - JBLM Transportation Analysis funded by DOD's Office of Economic Assistance (OEA) identified the need for improvements in an 11 mile stretch of the I-5 corridor which splits the base. Recommended improvements included:
    - Replacing interchanges at four exits: $160M.
    - Add general purpose lanes thru the corridor: $600M.
  - 2010 Access Control Point (ACP) Transportation Engineering Assessment recommended adding 19 inbound lanes to the existing 24 inbound lanes at a cost of $91.3M which is currently unfunded. I-5 ACP's would require an additional 18 inbound lanes to the current 18 in place.
  - SSMCP and local jurisdictions, along with the Washington State Department of Transportation (WSDOT) and the DOD through its Defense Access Road (DAR) project funds, are working to develop short and long-term solutions to the transportation challenges, which include the Cross-Base Highway (SR 704). This highway would significantly improve east-west travel and improve accessibility between Lewis and McChord.

- Another significant project in the planning stage is the Freedom Crossing Project, a shopping area in a historic district that will include the Commissary, Exchange and the co-location of many other retail and recreational facilities arranged in a mall-type configuration to facilitate shopping convenience for the military members and their families. This project is being spearheaded by the Army Air Force Exchange System (AAFES) and will include construction of approximately 330,000 SF of retail and 160,000 SF of renovated space. The project will also include the housing of many BASE OPS (base operations) facilities on the upper floors of the new and renovated buildings.

Training Capabilities: On-base facilities for training include:

- Amphibious Operations - Solo Point Beach
- Military Operations in Urban Terrain (MOUT) Site – Leschi Town

JBLM also has the Yakima Training Center (YTC) which is 168 miles to the southeast. YTC provides the capability to support Brigade and Division sized maneuver space, and can accommodate the firing of almost all Army weapons systems, as well as the conduct of joint training exercises with its restricted airspace. Some of the unique training aspects include:

- Over 600 Full-Time Employees (Military and Civilian)
- Over 327,000 acres of training space (511 square miles / 126 mile border)
- Varied elevation from 400 ft. to 4100 ft.
- 22,000 acre Impact Area
- 20 Training Areas; 26 Established Ranges; 212 Artillery Firing Points
- Ability to Tailor Ranges and Training Areas to fit Units' Special Requirements
- 1,635 Mile Road Network
- Restricted Airspace to 55,000 ft.
- Battle Command Training Center
- Intelligence Operations Facility
- Medical Simulation Training Center

The increased dwell times between deployments that have been announced by the Army will result in more home-station training at JBLM and YTC which will take place 24/7, and will be split evenly between day-time and night-time training requirements. Noise will be a key consideration and will be factored into when and where training will be conducted.

Quality of Life Considerations: JBLM is one of the most sought after assignments in the DOD because of the ability to conduct some of the most effective training in all of DOD, as well as the pristine environment of the Pacific Northwest combined with an exceptional quality of life. Some of the key quality of life considerations include:

- **Base / Community Cooperation** – In addition to the many valuable contributions that have been made by the SSMCP as outlined earlier, the local communities have fully adopted JBLM's Community Connections Program which entails the partnering of major units with a local municipality. The objectives of the program are to enhance interaction between the military and local communities, enhance understanding of today's military, and to develop and maintain strong and positive partnerships. The program was started in March 2000 and has been a tremendous success.

- **Cost of Living** – The cost of living in the Pacific Northwest is very reasonable compared to other West Coast locations, as well as the East Coast locations of many military facilities.

- **Housing** – The general on-base / off-base split for most military installations is 30% of the military members and their families live on-base, and the remaining 70% live off-base in local communities. Although there is a short-fall of available rental units in the surrounding area, the SSMCP and the local municipalities are working diligently to rectify this situation with the implementation of several strategies and initiatives developed in their Growth Coordination Plan.

- ***Transit*** – Transit systems exist off-base for use by the community and service members.
- ***Education*** – There are six elementary schools on-base. All six schools are in the process of being replaced with new construction - two are under construction and expected to open in September 2013; three are pending grant approval; and one school is pending funding. Numerous on and off-base college level courses and degree programs offered for military personnel and dependents.
- ***Utilities*** – The base maintains its own energy infrastructure, as well as water and waste water treatment facilities. With the population increases of the last decade, the utilities are reaching, or have reached, maximum capacity.
- **Recreation** – There is a tremendous variety of on and off-base recreational activities and facilities for the military personnel and their families to include eight fitness centers, a skating rink, bowling alleys, movie theaters, etc.
- ***Employment*** – SSMCP and the surrounding local communities work with the base to provide numerous spousal employment opportunities.
- ***Safety / Crime*** – JBLM cooperates very closely with the surrounding communities to develop police liaison programs to manage off-base incidents involving service members.
- ***Child Care*** – The base has 11 Child Development Centers, 3 School Age Centers & 3 Youth Centers.

Madigan Army Medical Center (MAMC)

- **Healthcare** – Our site visit to the Madigan Army Medical Center (MAMC), which is a key component of the Madigan Healthcare System, revealed the following:

  - **Headquarters** for the Western Region Medical Command (WRMC)

  - **Mission is to:**
    - Promote and restore health: 40,300 Active Duty service members; 41,000 Active Duty family members; 27,200 retirees & families are registered for medical care.
    - Educate medical professionals
    - Support and add value to the community
    - Expand and enhance the body of medical knowledge (research grants)

  - **Promoting a "System of Health"**
    - MAMC (the hospital is the center-piece)
    - Clinics
    - Community Medical Homes (for off-post personnel and families)
    - Soldier Centered Medical Homes (on-base personnel)
    - Clinics / Homes are designed to push the care out to where people live, not require everyone to come to MAMC.

  - **Key attributes:**
    - Level 2 Trauma Center with 119,000 beneficiaries (2nd largest behind Womack at Fort Bragg, NC)

- Personnel: 1,200 Military; 3,300 Civilians, 4,456 Clinic Visits; 4,387 Lab Procedures; 3,900 Prescriptions – on a Daily Basis.
- Values-Based / Standards-Driven Care

Installation Opportunities And Issues

Opportunities: With the declining Milcon budgets forecasted out through FY18, it would be beneficial for the local counties and the State to view areas in which Public / Private Ventures (PPV's) may be relevant in order to assist the base in accommodating the tremendous growth that has occurred.

As mentioned, the base is reaching maximum capacity on its capability to handle its utility and waste water treatment requirements. Successful PPV's have been implemented across the Army and DOD in the housing and lodging areas, and others may have a possibility for implementation. The Association of Defense Communities (ADC) recently presented the Governor of South Dakota with an award for the Rapid City area communities' contribution to help solving Ellsworth Air Force Base's problem with Waste Water Treatment. Basically, the local communities built a new regional facility which included / accommodated the base's requirements. DOD has also been pursuing a number of alternatives in the energy arena.

Additionally, SSMCP's Growth Coordination Plan contains a number of areas where the State could be helpful in implementing the recommendations / initiatives. Consideration should be given to providing maximum support to this effort which has been very comprehensive in its approach. The obvious recommendations that have received the most attention deal with the transportation issues on I-5 which are being addressed; however, there are others in the 10 key areas studied that could be supported, particularly in the areas of Utilities & Infrastructure, as well as the area of Land Use Policy.

The last Joint Land Use Study (JLUS) was conducted in 1992, and the SSMCP is currently preparing to assist in an updated study which will be beneficial to ensuring that local area growth and development are compatible with JBLM's ability to accomplish its mission.

Additionally, the Washington State Congressional Delegation could render support with DOD on some of the focus and challenge areas that are facing JBLM, such as facilitating the construction of the Freedom Crossing Project, and assisting with streamlining hiring processes to help offset current personnel shortages.

Issues for Consideration: Beyond assisting with the utility infrastructure (power and waste water treatment), as well as the transportation challenges that have been previous mentioned, there are a few potential encroachment issues that have been highlighted and require attention and assistance. These include:

- **The presence of four ESA (Endangered Species Act) candidate species in the prairies of JBLM and YTC including:**

- Taylor's Checkerspot Butterflies
- Mardon Skipper Butterflies
- Streaked Horned Lark
- Mazama Pocket Gopher

These species will require the acquisition and management of additional native, nearby prairie parcels in order to ensure their long-term survival and protection. A partnership between the DOD, State and interested Private entities should be formed to pursue acquisition of adequate parcels to ensure the species' survival, as well as mitigating any adverse impact on training at JBLM and YTC.

- The Northern Sector of the McChord Field Clear Zone (CZ) is being affected by the presence of private parcels in the Clear Zone (CZ) which are not eligible for purchase (an estimated $60M project) under the DOD's Readiness and Environmental Protection Initiative (REPI) Program. This issue should be pursued aggressively by the City of Lakewood, County and State to ensure that a definitive plan is developed with the objective of voiding the CZ of any and all properties that are not compatible with safe aviation operations.

- The construction of the Cross Base Highway (SR 704) should also be closely monitored to ensure that there is no negative impact to the Southern CZ of McChord Field.

- With the influx of rotary-wing aviation assets associated with the stationing of the 16th Combat Aviation Brigade (CAB), there have been noise complaints that are being properly addressed through an Environmental Assessment which has been requested by the JBLM Garrison Commander. This process will ensure that all aspects of the approved flight paths will be properly dealt with and will receive public input during the scheduled review and comment periods.

BRAC /Force Structure Implications

BRAC 2005: To determine JBLM's performance in the BRAC 2005 proceedings, it will be necessary to view both the Army and Air Force's analytical results. A detailed outline of the Air Force BRAC study process will be given in the Fairchild AFB section; however, the results for McChord AFB are shown below. A description of the Army's analytical process and the results for Fort Lewis are also described below.

The Army, based on document research and input from senior leader interviews, developed six Military Value (MV) capabilities which included:

1. **Training:** Support Army and Joint Training Transformation.
2. **Power Projection**:Project Power for Joint Operations.
3. **Materiel and Logistics:** Support Army Materiel and Joint Logistics Transformation.
4. **Well Being:** Enhance Soldier and Family Well-Being.
5. **Cost:** Achieve Cost-Efficient Installations.
6. **Future:** Maintain Future Stationing, Surge, and Joint Stationing Options.

These six capabilities then had key attributes (the 40 attributes selected are listed below) applied to them for evaluation; this served as the basic structure of the Army model.

ARMY ATTRIBUTES LISTING			
#	Attribute	#	Attribute
1	Direct Fire Capability	21	Munitions Production
2	Indirect Fire Capability	22	Ammunition Storage Capacity
3	Airspace	23	Interservice & Partnering Workload
4	Heavy Maneuver Area	24	Maintenance Manufacturing
5	Light Maneuver Area	25	Supply & Storage Index
6	Airspace	26	Crime Index
7	General Instructional Facilities	27	Employment Opportunities
8	Applied Instructional Facilities	28	Housing Availability
9	Air Quality	29	Medical Care Availability
10	Noise Contours	30	In-State Tuition Policies
11	Soil Resiliency	31	Workforce Availability
12	Water Quantity	32	Joint Facilities
13	Mobilization History	33	Area Cost Factor
14	Force Deployment	34	C2 for Focus Facilities
15	Material Deployment	35	Installation Unit Cost Factor
16	Operational / Admin Facilities	36	Buildable Acres
17	Accessibility	37	Brigade Capacity
18	Connectivity	38	Environmental Elasticity
19	RDT&E Mission Diversity	39	Urban Sprawl
20	Test Range Capability	40	Critical Infrastructure Proximity

Source: Department of the Army Analysis and Recommendations, BRAC 2005 (Volume III)

The end result of the Army's evaluation indicated that Fort Lewis was the Number Two installation overall among the 97 evaluated. Fort Lewis' scores in the six MV Capability areas are shown below:

Fort Lewis		
MV Capability	**Score**	**Ranking (Out of 97)**
Training	6.56	8/97
Power Projection	8.29	1/97
Materiel and Logistics	1.87	14/97
Well-Being	3.28	59/97
Cost	6.57	16/97
Future	5.87	9/97
Overall Score / Ranking	5.76	2/97

Source: Department of the Army Analysis And Recommendations, BRAC 2005 Volume III)

McChord AFB's Mission Capability Index (MCI) rankings in the eight mission areas evaluated by the Air Force are also shown below:

McChord AFB		
Mission Area	**MCI Score**	**Ranking (154 total)**
Fighter	60.73	28/154
Bomber	43.63	54/154
Tanker	69.09	29/154
Airlift	57.95	25/154
SOF / CSAR	47.80	37/154
C2ISR	73.97	33/154
UAV's	69.04	49/154
Space	43.90	67/154

Source: Department of the Air Force Analysis and Recommendations, BRAC 2005

Force Structure Implications: The Air Force's recent (FY13) attempt at implementing their recommendations to change the force structure, albeit unsuccessful at this time because of political concerns, would have had minimal impact for JBLM.

Likewise, the upcoming Army "Force Mix / Force Design" study should have minimal impact on the forces stationed at JBLM. The Army had intended to have an early fall announcement of the preliminary findings of their study, to include the installations that would be affected (either gainers or losers), as well as the threshold numbers for the gainers and losers. This announcement was delayed until mid-December. Given the focus on budget discussions and the holiday season, the announcement could well be delayed again until early 2013.

Because of the tremendous growth that JBLM has experienced over the past decade and its lack of additional expansion space, it appears that there would be minimal growth at the base in the near future. Conversely, given its strategic location and importance as a Power Projection Platform (PPP) site, it would certainly appear that there would be little, if any, decrease in the number of service members assigned to the base.

U.S. NAVY NAVAL BASE KITSAP

Installation / Organizational Facts

Naval Base Kitsap has responsibility for the majority of the Navy's operations in the Puget Sound area, where the Navy's third-largest fleet concentration is located.

Personnel:
NBK's population encompasses 36,700 service members, government employees and contractors:

- Military Population: 13,500
- Civilian Workforce: 13,700
- Family Members: 9,500

Size (Acreage):
Approximately 11,200 acres across four counties - - Kitsap, Island, Snohomish, and Jefferson

Major Entities:
The Base has 71 geographically distinct components and 1853 buildings under anagement.

Economic Impact:
$6.1B in Total Annual Economic Impact

U.S. NAVY

NAVAL BASE KITSAP

Mission

Naval Base Kitsap (NBK) provides base operating services to five main installations: three bases - Naval Base Kitsap – Bangor, Naval Base Kitsap – Bremerton, and Naval Base Kitsap – Keyport, as well as a housing area and a naval fuel depot.

Naval Base Kitsap – Bangor

The primary mission of Bangor, a deepwater facility, is to provide the West Coast basing and support for the Navy's component of the triad deterrence systems - - the submarine-launched TRIDENT ballistic missile system. Sixty percent (60%) of the U.S. ballistic missile submarine force is based at Bangor.

Among Bangor's attributes are:

- A dry dock capable of handling an Ohio-class ballistic missile submarine.
- The Strategic Weapons Facility Pacific - - one of two sites where the Navy stores its strategic warheads.
  - A Marine Corps Security Force Battalion of about 700 personnel, which provides security for strategic weapons in storage and while being loaded/unloaded on ballistic missile submarines.
- All piers are offset from the shore to allow the salmon to run as part of environmental sensitivity and accommodation of Tribes.
  - Construction began in September 2012 on a second explosives-handling wharf at Naval Base Kitsap - Bangor.
  - The wharf will extend 600 feet from the shoreline and is projected to cost $715 million. Ships homeported at Bangor are:

USS Henry M. Jackson (SSBN-730)
USS Alabama (SSBN-731)
USS Nevada (SSBN-733)
USS Pennsylvania (SSBN-735)
USS Kentucky (SSBN-737)
USS Nebraska (SSBN-739)
USS Maine (SSBN-741)
USS Louisiana (SSBN-743)
USS Ohio (SSGN-726)
USS Michigan (SSGN-727)
USS Jimmy Carter (SSN-23)

Of these ships:

- Eight are ballistic missile submarines (SSBNs); the Ohio-class SSBNs carry 24 long-range Trident missiles with up to eight warheads per missile.
- Two are guided missile submarines (SSGNs); converted from Ohio-class submarines, these submarines can carry up to 154 Tomahawk cruise, other land-attack, missiles, as well as support operations by Navy SEAL special operations forces.
- One is an attack submarine (SSN) of the Seawolf-class; the Jimmy Carter (SSN-23) is unique in the Navy in having a 100-foot hull extension that enhances payload capability, enabling it to accommodate: the development and testing needs for a new generation of weapons and sensors; a Remotely Operated Vehicle; and, support operations by Navy SEAL special operations forces.

Naval Base Kitsap - Bremerton

Bremerton became the Navy's newest homeport in 1998. Bremerton serves as homeport for:

USS John C. Stennis (CVN-74)
USS Seawolf (SSN-21)
USS Connecticut (SSN-22)
USS Ronald Reagan (CVN-76)

Of these ships:

- Two are nuclear-powered aircraft carriers (CVNs).
  - The USS John C. Stennis (CVN-74) is a Nimitz-class carrier that was commissioned in December 1995, currently deployed to the Middle East.
  - The USS Ronald Reagan (CVN-76), also Nimitz-class, was commissioned in July 2003. Homeported in Bremerton as of January 2012, the Reagan is undergoing a year-long period of maintenance and repairs, a Docked Planned Incremental Availability (DPIA) at the Puget Sound Naval Shipyard.

- Two are attack submarines (SSN) of the Seawolf-class, deep-diving submarines which are extremely quiet even at high speeds underwater.

Puget Sound Naval Shipyard & Intermediate Maintenance Facility (PSNS & IMF)

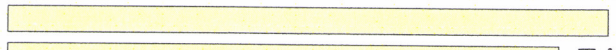
The Puget Sound Naval Shipyard & Intermediate Maintenance Facility is (PSNS & IMF) located next to NBK -Bremerton. It is capable of handling nuclear-powered ship maintenance, and is one of only four naval shipyards. One of the dry docks can accommodate an Ohio-class SSBN, and one dry dock is the only government facility capable of accommodating a Nimitz-class carrier on the West Coast.

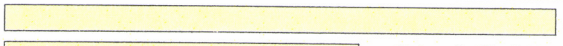
Puget Sound Naval Shipyard also accommodates a portion of the Navy's reserve fleet, including four aircraft carriers: the USS Independence, the USS Constellation, the USS Ranger and the USS Kitty Hawk.

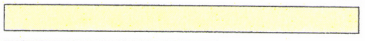
PSNS & IMF roles include:

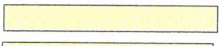
- Regional Maintenance Commander
- West Coast Naval Nuclear Propulsion Work
  - CVN Overhauls and Upkeeps
  - Trident/SEAWOLF/Refuelings/Overhauls
- Trident Class Maintenance Plan Refits
- Depot-level Overhaul of TRIPER (Trident Planned Equipment Replacement) Items
- Support Surface Ships in Everett/Bremerton
- Fleet Training
- Ocean Engineering
- Emergent Fleet Support
- Reactor Compartment Disposal
- Nuclear Powered Ship Recycling

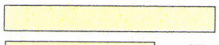
The major portions of the PSNS & IMF workload for FY12 were divided among:

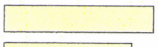

Aircraft Carriers.....37%

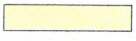

Trident/OHIO submarines.....31%


Attack Submarines.....15%


Inactivations.....6%


Fleet Support.....6%


Engineering Services.....3%


Surface Ships.....2%

As an industrial facility, PSNS & IMF has a large share of the NBK work force and economic impact:

- Personnel (civilian and military).....14,800
- Total Payroll.....$822.0 million
- Material Purchases in WA.....$59.1 million

Naval Base Kitsap – Keyport

Keyport is host to the Naval Undersea Warfare Center (NUWC), a repair and maintenance facility for torpedoes and undersea mobile targets, as well as a research center facility to develop and apply new technologies for future undersea warfare needs.

Its facilities include a 3-D underwater tracking range for undersea test, training and evaluation ranges in nearby areas of the Sound. Only about 30 people at Keyport are naval personnel; the remainder are contractor personnel.

Naval Hospital Bremerton

Naval Hospital Bremerton offers primary care, emergency care and a broad range of medical and surgical specialties to naval personnel, dependents and retirees in the Northwest. The Hospital has 36 beds (capability to double capacity in emergency), and is a graduate medical education facility.

- **The Hospital has staff of almost 1,500 personnel (military, civilian, contractors and Red Cross) with three Branch Health Clinics (BHC's) located at:**
  - BHC Bangor
  - BHC PSNS
  - BHC Everett

- **It is one of two Naval Hospitals in the Puget Sound area (other is located at NAS Whidbey Island).**

- **The Hospital has three primary missions:**
  - Providing exceptional care to warfighters (past and present) and their families – anytime, anywhere.
  - Shaping military medicine through training, research and graduate medical education.
  - Preparing our forces for deployment.

- **Its scope of services include:**
  - 40 Bed Inpatient Community Hospital
  - Family medicine Residency Program
  - Primary Care
  - Specialty Clinic
  - Surgical Specialties
  - Dental
  - Ancillary Services (Lab, Pharmacy, Physical Therapy Radiology, Blood Bank
  - 24/7 Emergency Department

- **Average "Daily" Care Delivered:**
  - 1,325 Medical Outpatient Visits
  - 135 Dental Outpatient Visits
  - 2,100 Prescriptions Processed
  - 9 Surgery Cases
  - 2 Babies Delivered
  - Average Daily Census: 16 Patients

- **No trauma level care provided – Trauma Level 1 available at Harbor View Hospital in Seattle.**

- **When asked about ability to handle expansion of military presence in area, Hospital Commander indicated that it would not be an issue inasmuch as there is a 50% reduction in the in-patient footprint every 10 years, due to advancements in medical care.**

Installation Strengths And Attributes

General Observations: As stated in the Command Briefing materials, Naval Base Kitsap is the Navy's most complex base.

The base also has a significant economic impact on Kitsap County and the immediate area. As part of the Command Briefing at the base, it was stated that according to a Washington State Office of Financial Management study, 54% of every meal in Kitsap County is paid for by Base wages/purchases.

The interests of Naval Base Kitsap are very well represented by the Puget Sound Naval Bases Association (PSNBA). PSNBA has taken a lead role in shaping the Navy's presence at Naval Base Kitsap from facilitating the arrival of nuclear work at PSNS & IMF, to supporting the creation of a homeport at Bremerton which now hosts the USS John Stennis.

Strategic Location: Naval Base Kitsap's location in the northwest corner of the continental United States is very strategic, with access to deep water, direct and unobstructed routes to Asia, and proximity to the Arctic Ocean areas that are of increasing interest. The Puget Sound is a natural choice to locate both strategic naval forces, such as the Pacific-based ballistic missile submarine component of the US Strategic Triad, and the power projection capability represented by the aircraft carriers and their supporting ships and submarines homeported in Bremerton and Everett

Infrastructure Considerations: Naval Base Kitsap has received over $1.1 billion in Military Construction since BRAC 2005. Among the funded improvements are two piers at Bremerton capable of supporting nuclear aircraft carriers, and housing for the crew of both the carrier homeported at Bremerton and the crew of the carrier at the Shipyard for maintenance work.

One of the largest military construction projects in the DOD budget is currently underway at Naval Base Kitsap, Bangor's second Explosives Handling Wharf (EHW-2). The construction of a second EHW was necessitated by the increase to eight SSBNs being assigned there; in March 2011 the Chief of Naval Operations testified that a second munitions wharf was "critical to nuclear weapons surety and our national security." A $715 million project, EHW-2 received $78 million in FY12 Milcon funding; $280 million was requested for the second phase of the project for FY13.

Notable at Kitsap is the fact that there is no encroachment on base facilities. Security reasons have helped this, but the Base administration has been very proactive and promotes a cooperative approach toward growth issues with the neighboring communities.

Also notable are Naval Base Kitsap's energy savings initiatives, such as designing new buildings to LEED (Leadership in Energy and Environmental Design) standards.

A new Energy Savings and Performance Contract (ESPC) is being undertaken at Keyport and Bangor that will combine the installation of energy-savings devices such as geothermal heat pumps and high-efficiency lighting and air conditioning systems with innovative energy management practices; after an expected construction period of a year, the ESPC is expected to reduce energy use by 33 percent in the areas where it is installed.

Related to the issue of infrastructure is the fact that Naval Base Kitsap works extensively with Native American tribes (a total of ten identified) on actions that impact fishing rights on Navy

property and in the waterways used by the ships and submarines. The Base has been very successful in working with these entities on innovative solutions such as piers which are offset from the shore to allow salmon to run, which has also enhanced the Base's overall environmental ratings; nevertheless, the tribes are formally sovereign entities, and negotiations are made more complex by their Government-to-Government nature.

Quality of Life Considerations: Naval Base Kitsap, denoted as 'The Homeport of Choice' in its Command Briefing, has scored high on the Navy's Quality of Life criteria, which include considerations such as: Base / Community Cooperation; Cost of Living; On-Base/Off Base Housing Availability; Healthcare; Education; Recreation; Employment; and, Child Care Facilities.

One example of the excellent base/community cooperation and outreach is the Starbase Atlantis program which seeks to attract grade school students to the science, technology, engineering and math (STEM) area. The program supports fifth-grade students from the Bremerton, Central Kitsap, North Kitsap and Chimacum school districts; its curriculum covers subjects ranging from astronomy and model rocketry to the physics of flight and foundational scientific principles such as Newton's laws of Motion. More than 6500 students have participated in Starbase Atlantis since its inception in 2001.

Similarly, the relationship of the hospital with the local medical community is very good. Memoranda of Understanding (MOUs) are in place to facilitate mutually supportive treatment / trauma care options. The Hospital has received several awards for their medical, academic and policy implementation accomplishments, as well as community partnership recognition awards.

The Base has also been active in setting up classes to help local businesses in bidding on Navy and other federal contracts; currently local businesses hold $87 million in contracts.

Installation Opportunities And Issues

Opportunities: The local community stated that a second carrier homeported in Bremerton would be beneficial both economically and offer value to the Navy.

Issues for Consideration: The Future Years Defense Plan (FYDP) contains $539.6 million in military construction projects / funding for Naval Base Kitsap; perhaps the most pressing issue for the base and communities is to ensure this funding is protected.

A further question is the impact on the Base that is brought about by the focus of the DOD on the Asia-Pacific region that was highlighted this spring and summer. The Navy has not provided clear insight into how the announced 60/40 ratio between Pacific- and Atlantic-based ships will be attained; ships could be transferred to West Coast homeports, or the new force ratio could be achieved through the retirement of ships homeported on the East Coast.

Related to this are workload issues for PSNS & IMF. The preeminence of the Atlantic fleet and specific provisions in law and Navy regulations, such as the "guaranteed man-day policy," have given the Norfolk Naval Shipyard priority in terms of workloading. The 60/40 focus will mean

more ships (and attendant maintenance and repair workload) in the Pacific. A review of the Navy's policies, regulations, and Title 10 provisions affecting how ship maintenance workloads are addressed should be undertaken to ensure practices more appropriate in the past do not negatively impact on the future deployments and ship repair sustainment under the realignment to the Asia-Pacific region.

Finally, one issue was raised at the Bremerton Naval Hospital. The Commanding Officer, noted that licensing requirements prevented military doctors from issuing medical prescriptions under Medicare which would be part of their normal duties. He stated that it would be helpful both administratively and in the delivery of care to patients if military physicians were not required to go through a separate State registration process to work with Medicare/Medicaid patients.

BRAC / Force Structure Implications

BRAC 2005: The components of Naval Base Kitsap (Bremerton, Bangor, Keyport, and PSNS & IMF) fared well in the reviews leading up to BRAC 2005 and no major decisions that negatively impacted the installations were made by the Department of Defense or the Base Closure Commission.

Operations - Surface/Subsurface		
Ranking	**DON - Active Bases**	**Military Value (100 TOTAL)**
1	NS Pearl Harbor HI	74.50
2	NS NORFOLK VA	67.51
3	SUBASE KINGSBAY GA	63.51
4	NS BREMERTON WA	63.25
5	SUBASE BANGOR WA	62.98
6	NS SAN DIEGO CA	61.43
7	NAS NORTH ISLAND CA	59.68
8	SUBASE SAN DIEGO CA	58.29
9	NAB LITTLE CREEK VA	55.90
10	NS MAYPORT FL	55.71
11	NS EVERETT WA	50.68
12	SUBASE NEW LONDON CT	50.68
13	COMNAVMARIANAS GU	47.67
14	NS INGLESIDE TX	42.23
15	WPNSTA COLTS NECK NJ	39.07
16	NS PASCAGOULA MS	37.08

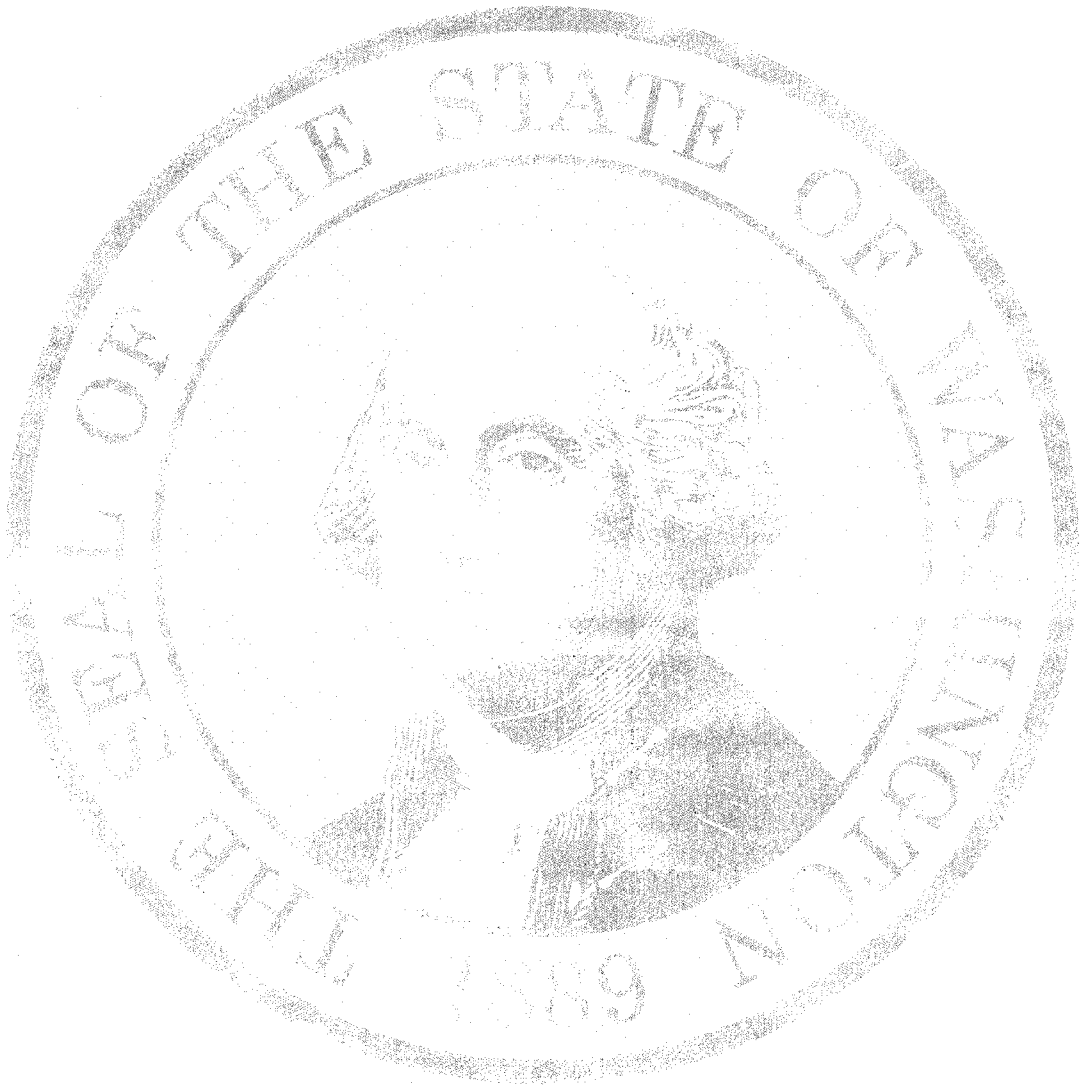
Source: Department of the Navy Analyses and Recommendations (Volume IV), May 2005

Naval Undersea Warfare Center - Keyport Technical Joint Cross Service Group (TJCSG)	
CATEGORY	**MV RANKING**
Human Systems D & A	25/87
Human Systems Research	57/65
Human Systems T&E	20/49
Materials & Processes D&A	1/43
Materials & Processes Research	17/46
Materials & Processes T&E	12/44
Sea Vehicles D&A	21/33
Sea Vehicles Research	19/36
Sea Vehicles T&E	2/33
Sensors, Electronics, and EW D&A	74/103
Sensors, Electronics, and T&E	43/72
Weapons Technology D&A	15/78
Weapons Technology Research	20/60
Weapons Technology T&E	6/70

Source: TJCSG Final Military Value Report, Appendix B, May 19, 2005

Industrial Joint Cross-Service Group Ship Overhaul and Repair		
Ranking	**DON – Shipyards / Shipyard Detachments**	**Military Value (10 Total)**
1	NAVSHIPYD_PUGET_SOUND_WA	0.7480
2	NAVSHIPYD_NORFOLK_VA 0	.7339
3	NAVSHIPYD_PORTSMOUTH_NH 0	.6444
4	NAVSHIPYD_AND_IMF_PEARL_HARBOR_HI	0.6208
5	NNSY_DET_NAVFOUNDRYPROPCEN_PHIL_PA	0.2220
6	NAVSHIPYD_PUGET_SOUND_DET_BOSTON_MA	0.0872
7	SUBMEPP_PORTSMOUTH_NH 0	.0630
8	NNSY_DET_NAVPESO_ANNAPOLIS_MD 0	.0555
9	NNSY_DET_NAVSHIPSO_PHIL_PA 0	.0546

Source: Industrial JCSG Final Report - May 10,2005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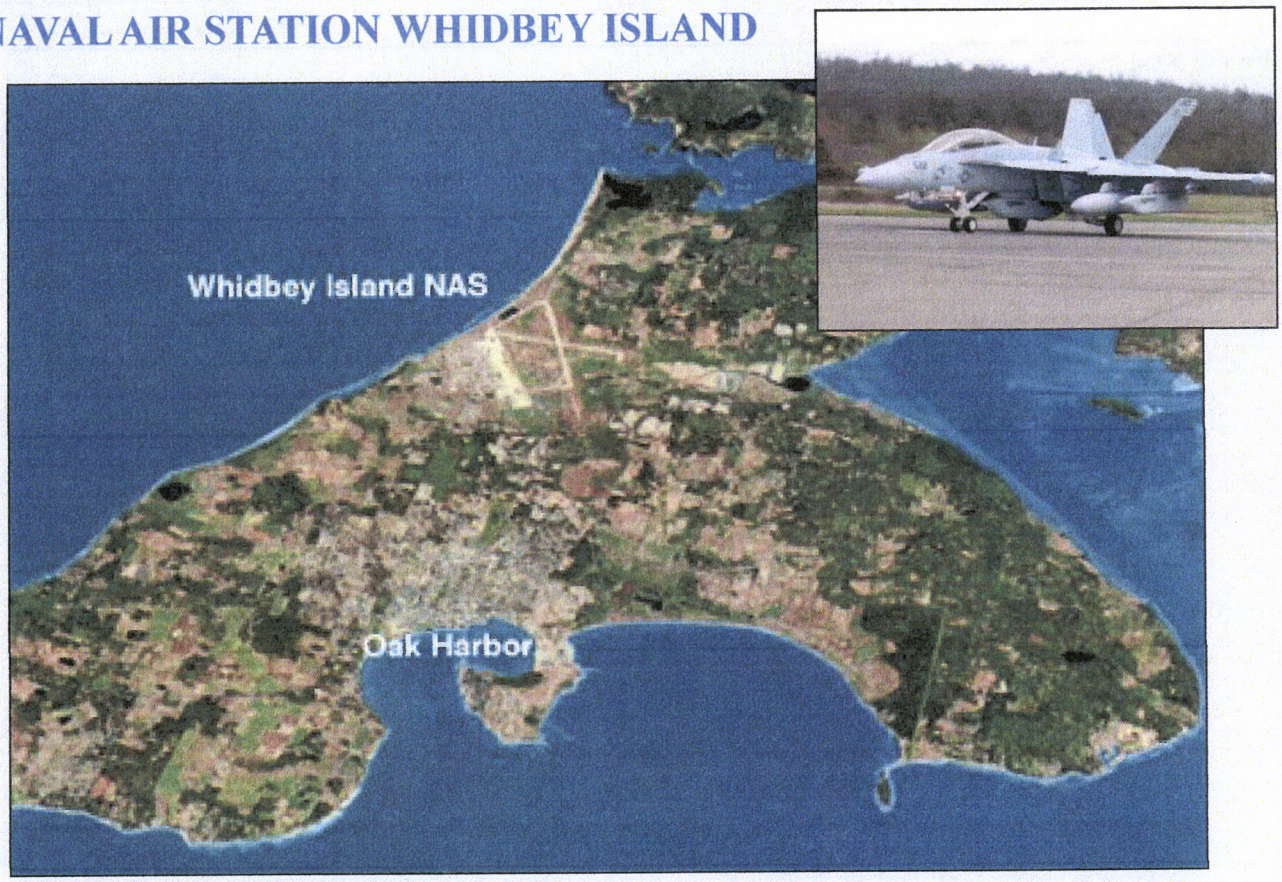
NAVAL AIR STATION WHIDBEY ISLAND



Installation / Organizational Facts

NAS Whidbey Island is the sole naval aviation asset in the Pacific Northwest.

Missions are performed with the following aircraft assigned to the NAS:

- **EA-6B Prowler** – electronic warfare aircraft which provides protection for strike aircraft, ground troops and ships by jamming enemy radar, electronic data links and communications.
- **EA-18G Growler** – sophisticated electronic warfare suite which was built to replace the EA-6B Prowler.
- **P-3C Orion** – anti-submarine and maritime surveillance aircraft. Surveillance of the battle-space either at sea or over land.
- **EP-3E Aries** – Navy's only land-based signals intelligence (SIGINT) reconnaissance aircraft.
- **C-9 Skytrain** – Provides cargo and passenger transportation, as well as forward deployment logistics support.
- **SH-60 Seahawk** – Medium lift utility helicopter used for search and rescue (SAR) missions.

Personnel:
Base population of 9,470
(7,050 military and 2,420 civilian / contractors).

Size (Acreage):
Main Operating Base, Ault Field – 4,253 acres.
Total Acres under NAS management – 55,605 acres

Primary Units:
Electronic Attack Wing
Pacific (CVWP)
Patrol and Reconnaissance Wing 10

Major Tenants:
Marine Aviation Training
Spt Group (MATSG-53)
Fleet Readiness Cmd NW
Navy Operational Support Center (NOSC)
Fleet Reserve Logistics Squadron (VR-61)
Naval Hospital Oak Harbor
Maritime Expeditionary Security Squadron NINE
Navy Information Operations Command (NIOC)
Naval Ocean Processing Facility (NOPF)
Center for Naval Aviation Technical Training (CNATTU)

Economic Impact:
$592M Annual Impact.

NAVAL AIR STATION (NAS) WHIDBEY ISLAND

Mission

Main aviation missions for NAS Whidbey Island are maritime patrol, maritime reconnaissance, electronic attack and aviation support (search & rescue and fleet logistics support). The Station is the home of all Navy tactical electronic attack squadrons, flying the EA-6B Prowler and EA-18G Growler. Adding to the depth and capability of the air station are four Maritime Patrol squadrons, two Fleet Reconnaissance squadrons, and four Fleet Logistics Support squadrons.

Installation Strengths And Attributes

General Information: The local community installation support group in the City of Oak Harbor and Island County are very supportive of the base and its military personnel and families. The relationship was summed up at the 70th anniversary of the base with the following comments:

- **Air Station Commanding Officer Capt. Jay Johnston praised the City of Oak Harbor and Island County for their outstanding support of the base and for developing what he called "the best zoning practices in the nation."**

- **"Over the past 70 years, the city of Oak Harbor has partnered with NAS Whidbey in many ways," said Oak Harbor Mayor Scott Dudley, one of the guest speakers for the anniversary. "Our relationship with the base is special, it is unique. We're not just neighbors, we're family."**

NAS Whidbey has consistently been recognized as the "Most Desired" duty station in the Naval Air community, and Oak Harbor and Island County have taken extreme measures to ensure that NAS Whidbey Island can continue to conduct its aviation missions without fear of civilian encroachment. The community's publication, NAS Whidbey "The Future is Here" – 2005, clearly articulates the community's involvement in supporting the military personnel and families assigned to the NAS.

Strategic Location: With the new strategic guidance focusing on the Asia-Pacific Region, NAS Whidbey's geographic location provides perfect positioning for the conduct of maritime reconnaissance/patrol, as well as electronic attack from both operational mission and training perspectives. The unencumbered airspace and favorable weather conditions allow for 24/7 electronic warfare development and training of the aircrews. NAS Whidbey's location is viewed as the "Cornerstone for Supporting Pacific and Arctic" missions which include:

- Strategic Sealift
- Maritime Presence
- Maritime Security Operations
- Ensuring Freedom of Navigation and Over-flight

Infrastructure Considerations: The Base is made up of the three major areas which include:

- Ault Field – Main Operating Base
- Seaplane Base – Primarily Community Support
- Coupeville Outlying Landing Field (OLF) – Used for Field Carrier Landing Practice (FCLP).

NAS Whidbey Island has surge capacity/expansion capabilities including the following additional hanger and apron parking capacities:

- Hanger Space: 375,551 sq.ft. (surge capacity)
- Apron Parking: 194,856 sq.yd. (surge capacity)

The community can support the surge/expansion with available affordable housing, utilities, water and sewer, etc.

Since 1996, $140.5M has been invested in new and/or renovated facilities:

- New Aircrew Water Survival Training Facility
- New Airfield Control Tower
- New Aircrew Survival Training Facility
- New/Renovated Base Housing Units
- New Youth Center
- New P-3 Support Building
- New Navy Lodge
- New Commissary Expansion and Upgrade
- New Security Fencing
- New Aircraft Refueling Facility
- Gymnasium Renovation

Of the above mentioned investments, over 80% have been made since BRAC 2005, and the Future Years Defense Plan (FYDP) calls for additional out-year investments which could total upwards of $50M.

80% of the military families live off-base, many in the PPV (Public Private Venture) housing which is approximately 89% occupied.

Training Capabilities: NAS Whidbey Island is void of encroachment due to the community's adoption of a Comprehensive Land Use Plan with aggressive city and county zoning and development constraints.

NAS Whidbey Island airspace and electronic training environments are unique. There is no other location in the continental US where active jamming training can be conducted with little or no effect on civil aviation or other civil emissions (i.e. TV, radio, communications, etc.). This, combined with an extremely close working relationship with the base, provides an ideal environment for day / night training which is completed by the following training assets:

- The Special Use Airspace (e.g. Military Operating Areas, Offshore Warning Areas, Restricted Areas, Low Level Training Routes, etc.) that is available in and around the NAS is used for joint training with US Forces, as well as Canadian Forces. It would be virtually impossible to duplicate the extent and variety of this training area anywhere in the US. It provides high value training in a low congestion environment with diverse capabilities (i.e. water, land and airspace).

- Coupeville OLF, used for Field Carrier Landing Practice (FCLP), is ideal for night conditions with very little ambient light; it increases the total training available with Ault Field.

- Unmanned Aerial Vehicle (UAV) and Unmanned Combat Aerial Vehicle (UCAV) training could also be effectively conducted in this training environment inasmuch as it contains all the necessary parameters to meet and exceed the training requirements – dedicated training airspace, no conflicts with civil or other aircraft operations, access to target areas, close proximity to coastal areas, designated low level route structures and distant from major population centers.

Quality of Life Considerations: One of the most sought after naval aviation assignments because of the unique mission and training environments combined with an exceptional quality of life. Several of the factors that attribute to the exceptional quality of life include:

- **Base / Community Cooperation** – One of key contributing factors to the community cohesiveness amongst the military personnel, their families, and the local community is the spirit of cooperation. The City of Oak Harbor's and Island County's Comprehensive Plans have a specific section that is dedicated to supporting NASWI. The plans recognize the importance of NASWI friendly zoning (to preclude encroachment), the bases's economic importance, the Navy's commitment to enviromental protection and need for transportation. Another interesting collaborative effort is the base's tour program. Members of the community spend a half day on the base being briefed and touring the facilities. Last year there were 60 tours for 2,000 members of the community.

- **Cost of Living** – Very reasonable when compared to competitive NAS's located in California, Florida, Virginia, etc.

- **Housing** – 80% of military families live off-base in PPV-provided Navy housing; the community also has an adequate supply of affordable housing available for military families.
- **Healthcare** – Naval Hospital Oak Harbor (12 bed hospital) is one of three rural community hospitals within 40 mile radius.

- Whidbey General Hospital, 25 beds, Coupeville, WA - 14 miles
- Island Hospital, 43 beds, Anacortes, WA - 20 miles
- Skagit Valley Hospital, 137 beds, Mt Vernon, WA - 29 miles

- **Transit** – There is a free county-wide transit system that is currently seeking access to the base.

- **Education** – Military dependant enrollment is down in numbers; however, the local community has renovated and modernized all schools within the last 15 years, led by their flagship high school which was completed in 2010. The high school has been the recipient of numerous awards including the first ever recipient of the Navy's Junior Reserve Officer Training Corps (JROTC) Area 13, "Pennant for Excellence," as well as other business, marketing and artistic awards.

- **Utilities** – The Base receives its electrical power independent of the City grid. The Community provides water, waste water treatment and animal control services.

- **Recreation** – Deception Pass is the most visited state park in Washington and only eight miles from the base. An abundance of recreational opportunities exist within 20 miles of the base such as four marinas, six state parks, an underwater diving park, salmon fishing, shellfish digging, crab fishing, whale watching, surfing, and biking on specially widened roads. The area also has events like the Whidbey Marathon, Tour de Whidbey, Coupeville Arts and Crafts Festival, Langley Mystery Weekend and dozens of other events.

- **Employment** – The City and County work with the base to enhance spousal employment opportunities. An example given was the collaboration in recruiting 170 call-center jobs at the Waste Management Call Center. Employment is also possible at electronics manufacturer Technical Services Inc., medical device manufacturer IDEX and with hundreds of local businesses.

- **Safety / Crime** – Island County enjoys the lowest crime rate in the State of Washington and one of the lowest in the nation.

- **Child Care** – Base has two child development centers and community has a Toddler Learning Center.

Installation Opportunities And Issues

Opportunities: One of the biggest opportunities raised in the meeting with the local community dealt with the transition of aircraft at the base into newer model aircraft, with a particular emphasis on the P-3C Orion transition to the P-8A Poseidon.

- **The platform transitions discussed at NAS Whidbey involved the following:**
  - EA-6B Prowler → EA-18G Growler
  - P-3C Orion → P-8A Poseidon / Broad Area Maritime Surveillance (BAMS) UAV's -

(2 BAMS mission control stations).
- EP-3 Aries → EP-X (TBD)
- C-9 Skytrain→ C-40 Clipper

- **Regarding the P-8A replacement for the P-3C Orion, the community indicated that this program was a priority and that every effort should be made to get as many of the platforms as possible.**

  - A recent decision by the Navy to conduct a study of three alternatives to its 2008 Record of Decision (ROD) on the issue puts the stationing of the new aircraft back in play. Initially, the 2008 ROD called for the stationing of the P-8A replacement aircraft at three established maritime patrol home bases (NAS Jacksonville – five fleet squadrons; NAS Whidbey Island – four fleet squadrons; and NAS Kaneohe Bay – three fleet squadrons).

  - The new Supplemental Environmental Impact Statement (EIS) will look at the option of dual-basing (NAS Jacksonville and NAS Whidbey Island) as opposed to the original concept of utilizing three bases. At the completion of the Supplemental EIS, the SECNAV will decide whether to stay with the original proposal or adopt the new dual-stationing alternative.

  - What this could mean for NAS Whidbey is possibly an approximate doubling in the number of aircraft from 24 to 49. This issue will need to be closely watched from the standpoint of monitoring the process and inputting at the appropriate decision points.

  - Another aspect of the issue that needs to be carefully monitored is accurate and comprehensive input into the process from the standpoint of additional resource requirements associated with accommodating the additional aircraft, equipment and personnel, as well as the community's ability to handle and welcome the expansion. Close coordination with the base will be required to ensure a smooth and comprehensive implementation of the recommendations.

  - The incorporation of the Broad Area Maritime Surveillance (BAMS) UAV's into the maritime reconnaissance and patrol equation will also possibly open opportunities for the stationing and operation of the UAV's from NAS Whidbey although the current plan is only for placement of mission control stations at the base.

Issues for Consideration: There were no major issues raised in the sessions with the community and the base personnel; however, there were a few minor considerations that warrant some discussion:

- **The community expressed a desire to bring more commercial development to the areas around the base in order to offer more selection and choices for the military and their families which is now not present.**

- **Another issue raised on the base that warrants scrutiny is the construction / proposed construction of wind farms in the vicinity of Boardman Bombing Range (OR) and the**

low-level routes used to ingress and egress the range area. The obvious concerns deal with safety and possible encroachment concerns that would limit or inhibit the use of any of the currently available facilities.

BRAC / Force Structure Implications

BRAC 2005: The Navy's process for determining the Military Value of its 35 Naval Aviation facilities was to analyze and evaluate five major attributes each consisting of several components. The five major attributes and their components are outlined below:

1. **Operational Infrastructure**
   - Runways and Arresting Gear
   - Hangers / Ramps
   - Navaids / Lighting
   - Munitions Storage
   - Intermediate Maintenance
   - Unique or Specialized Capabilities / Missions

2. **Operational Training**
   - Outlying and Auxiliary Fields (OLFs)
   - Proximity to Training Airspace
   - Aircrew Training Facilities
   - Simulator Facilities

3. **Airfield Characteristics**
   - Operational Location
   - Airfield Restrictions
   - Weather
   - Anti-Terrorism / Force Protection
   - Locality Cost

4. **Environment and Encroachment**
   - Encroachment
   - Air Quality
   - Accident Potential Zone I and II
   - Clear Zones
   - Noise
   - Zoning
   - Waste Disposal
   - Potable Water

5. **Personnel Support (Quality of Life)**
   - Medical
   - Housing
   - Non-Military Education
   - Employment

- Fleet and Family Services
- Morale, Welfare & Recreation (MWR)
- Follow-On Tour Opportunities
- Metropolitan Area Characteristics

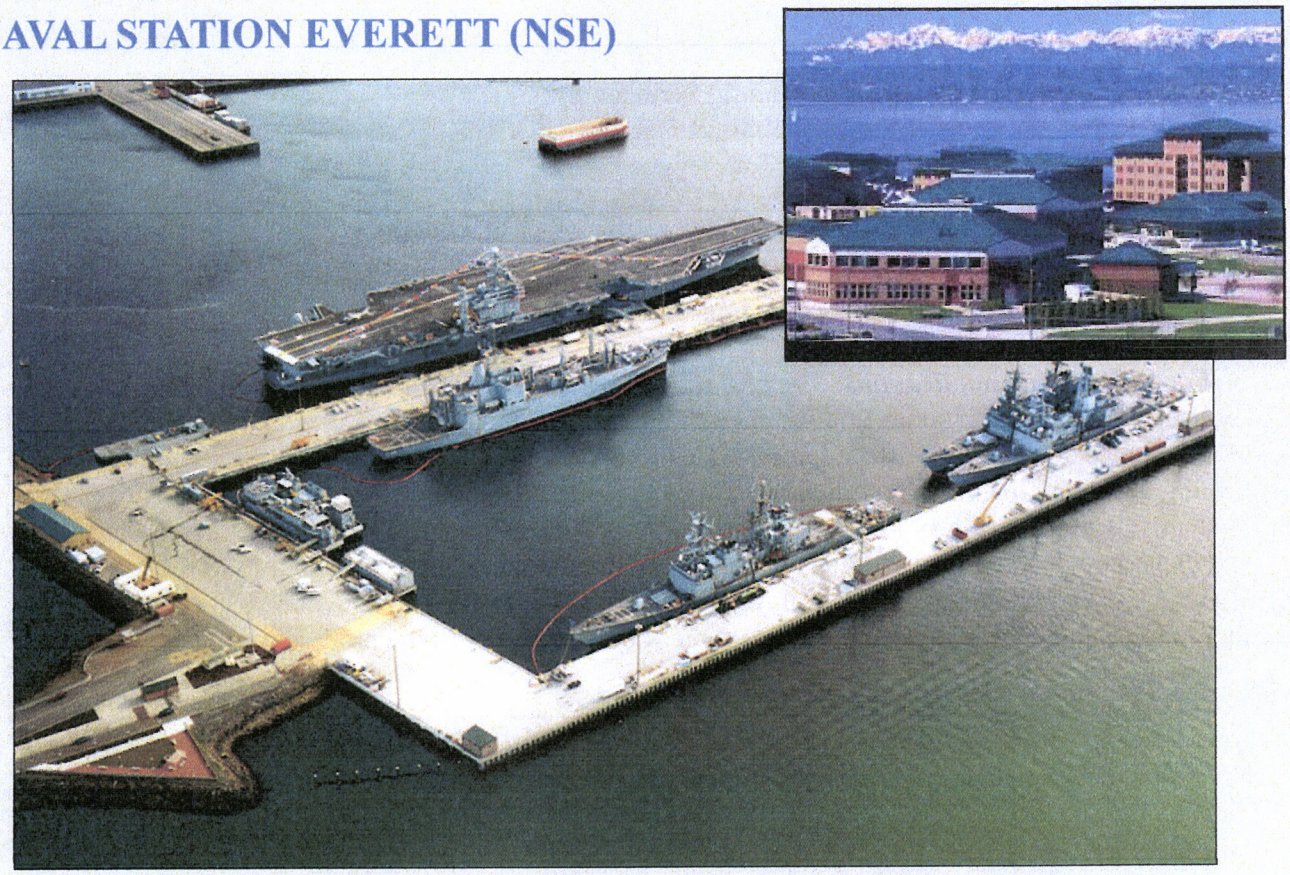
Although NAS Whidbey did rank high (4 of 35) in the BRAC 2005 Military Value rankings, an in-depth analysis of possible areas of improvement would be beneficial.

Force Structure Implications: The recent visit by the Chief of Naval Operations, Admiral Greenert, to NAS Whidbey and his commitment to ensure that the planned aircraft platform transitions do take place in the future, bodes well for the base. Additionally, the recent announcement to conduct a Supplemental EIS to ascertain the possible implementation of the dual-site alternative for the stationing of the P-8A Poseidon aircraft is very encouraging as the attendant personnel gains could compensate for any possible losses resulting from the reductions associated with the Budget Control Act. These force structure actions will be based on several future basing decisions and do definitely merit close scrutiny as the process continues.

NAS MILITARY VALUE		
RANK	BASES	MILITARY VALUE (100 TOTAL)
1	NAS Jacksonville	71.62
2	NAS Pensacola	69.49
3	MCAS Cherry Point	69.19
4	NAS Whidbey Island	67.13
5	MCAS Miramar	67.00
6	NAS Oceana	66.18
7	NAS North Island	65.23
8	NAS Whiting Field	64.00
9	NAS Corpus Christi	63.69
10	MCAS Beaufort	61.73
11	NAS Meridian	61.41
12	NS Norfolk	61.08
13	NAS Patuxent River	61.01
14	NAS Lemoore	60.56
15	NAS Fallon	60.34
16	NAS Kingsville	59.25
17	NB Ventura City / Point Mugu	59.22
18	MCAS New River	58.89
19	NAS Key West	58.79
20	NAWS China Lake	57.31
21	NS Mayport	57.10
22	MCAS Yuma	56.36
23	MCAS Camp Pendleton	55.78
24	NAS JRB New Orleans	54.06
25	NAF Washington	53.62
26	MCB Hawaii	52.52
27	NAF El Centro	52.48
28	NAS Brunswick	50.85
29	NAS JRB Ft. Worth	47.42
30	NAS JRB Willow Grove	45.12
31	MCAS Quantico	45.12
32	NAES Lakehurst	44.50
33	NAS Atlanta	43.25
34	HMLA 775 DET A	29.73
35	MAG 49 DET B	28.03

Source: Department of the Navy, Analysis and Recommendations, (Volume IV), May 2005

NAVAL STATION EVERETT (NSE)



Installation / Organizational Facts

Naval Station Everett is the United States Navy's most modern facility, being dedicated in April 1994.

Personnel:
5,800 Direct Jobs, 11,000 Countywide

Size (Acreage):
5,111 Total Acres (Everett – 150 acres; Pacific Beach – 9 acres; Jim Creek – 4,900 acres; Smokey Point – 52 acres).

Home to Carrier Strike Group 11 and Destroyer Squadron 9. Currently homeport for six Navy ships and two US Coast Guard Cutters:

- USS Nimitz (CVN-68)
- USS Momsen (DDG-92)
- USS Shoup (DDG-86)
- USS Ingraham (FFG-61)
- USS Rodney M Davis (FFG-60)
- USS Ford (FFG-54)

- USCGC Henry Blake (WLM-562)
- USCGC Blue Shark (WBP-87360)

Major Tenants:
Reserve Component Command Navy Region Northwest
Regional Support Organization
Navy Computer Telecommunications Area Master Station Pacific
Afloat Training Group PACNORWEST
Regional Maintenance Center Detachment Everett
Branch Medical Clinic Everett
Maritime Expeditionary Security Squadron NINE
Navy Operational Support Center Marysville
Naval Ocean Processing Facility Pacific Beach
Port Security Unit 313

Economic Impact:
Approximately $475M Total Annual Economic Impact

NAVAL STATION EVERETT (NSE)

Mission

Enhance our Nation's ability to accomplish strategic objectives, by providing superior shore station support to United States Naval and Coast Guard forces, while ensuring readiness and quality of life for Sailors, Civilians and their families.

Strengths And Attributes

General Observations: A linkage of Community-Military liaisons from the original Homeport Northwest, to the Everett Area Chamber of Commerce Military Affairs Committee; the City of Everett Impact Coordinating Council and ad hoc BRAC committees; and now the Economic Alliance Snohomish County Military Affairs Committee have done an outstanding job providing community support to NSE since the base's establishment in April 1994. These committees and councils have been an integral part of the support structure to the base's military personnel and family members. They have assisted in numerous areas to include transportation, education, health care, housing, and recreational support to name a few. Additionally, the Everett Snohomish County Impact Coordination Council has been instrumental in actively and effectively advocating for the base.

These coordinating committees have transitioned from base-development advocacy in the 1980s to sustained collaborative efforts during initial base operations, multiple ship deployments and reassignments, installation growth, and community-installation representation through five BRAC rounds. The committees and councils have assembled comprehensive documentation outlining the economic impact and the key benefits of the base in the areas of military value and cost-effective operations, among these being:

- "Economic Impact of Naval Station Everett on Snohomish County"
- "BRAC 2005 Naval Station Everett"

These documents no doubt came into play during the BRAC 2005 deliberations during which NSE was one of five bases reviewed for a possible closure analysis by the Department of the Navy (DON) Analysis Group and the Infrastructure Evaluation Group. These Groups ultimately recommended three closure actions which did not include NSE because of the risks associated with closing the irreplaceable asset that is an existing deep-water, nuclear-powered carrier

homeport. NSE has been coined the "Most Modern" and the "Sailors Choice" amongst the Navy's facilities because of its beneficial and unique attributes.

Strategic Location: With the recent emphasis in strategic guidance advocating a re-balance of resources and a shift of focus to the Asia-Pacific Region, NSE is geographically and strategically located in an ideal position to contribute to the implementation of this "Pacific Pivot." With the the Secretary of Defense's proclamation to re-balance the Navy's resources from a "50-50" Atlantic-Pacific to a "60-40" Pacific-Atlantic posture, as well as NSE's proximity to the Arctic Ocean and strategic Bering Straits, it would appear that NSE is well-positioned for the future. However, the re-balance could be achieved in a number of ways to include the shifting of resources and the elimination of ships in a severe budget constrained environment. Therefore, it would be advisable to remain vigilant and proactive. The greatest strategic asset to complement the geographical location and tremendous infrastructure improvements is the direct access to open ocean provided by this deep-water port which is not limited by tides or the need for dredging maintenance.

Infrastructure Considerations: In addition to being the Navy's newest and most modern facility, the following infrastructure characteristics make NSE an irreplaceable asset:

- Plant replacement value of $888M.
- Since BRAC 2005, approximately $85M in Milcon funds have been invested in NES; however, it appears the Future Years Defense Plan (FYDP) has minimal funding programmed.
- Facilities (operational, industrial, logistical, administrative, quality of life, training, housing, medical, family support services, etc.) are all configured and aligned to comply with the Chief of Naval Operations (CNO's) Vision 2035.
- Navy's newest nuclear aircraft carrier (CVN) pier facility. Single story CVN pier with a clean top (i.e. utilities are built in vaults under the pier – Pier Alpha).
- Natural deep-water port provides direct access to open ocean

  - One of two West Coast deep-water ports
  - East side of Pier Alpha (CVN side) is as deep as 60 feet.
  - One CVN-length from the pier the water is 210 feet deep.
  - No obstacles prevent CVN from getting underway ASAP.
  - Expandable berthing capacity provides capability to berth any Navy ship, regardless of draft or size. Capability exists to berth a second carrier.
  - Availability of Logistics Support capability for day-to-day operations:

    -Intermediate Maintenance Facility (IMF)
    -Port operations; the Port of Everett is recognized as a port of State-wide significance.
    -Rail: access to BNNSF mainline allows flexibility

- Deep, unobstructed waterway from pier to shipping lanes provides superior defense against any attempt to block ship passage.
- No maintenance dredging required due to 50 foot low-tide water depth and lack of siltation.
- Water-quality control provided by extensive oil/water separator systems.

- Excellent maneuverability for both ships and land vehicles; 120 foot pier width provides ample turning radius for semi-trucks; deepwater turning basin for ships and rail access in close proximity.
- Ready access to naval nuclear shipyard, ship refueling facilities and ammunition resupply (within 50NM).
- Base has advanced IT infrastructure with expansion capability for new "net-centric" technology enhancements.
- New Fleet Regional Readiness Center (FRRC) provides for on-site training of shipboard Sailors:
  - Support Inter-Deployment Training Cycle
  - Facilitates establishment of AEGIS Readiness Training Detachment at NSE
  - Local training improves Quality of Life for shipboard Sailors. Eliminates need to travel to San Diego or Norfolk for training.

- Numerous "Green Base" initiatives conducted on base:
  - Two LEED Gold certified facilities.
  - Fully benchmarked facilities using DOE Energy Star Portfolio.
  - Environmental excellence has been built into all aspects of the facility.

- NSE is viable candidate to meet all SECNAV Green Fleet targets.

- NSE off-site locations include:
  - The Jim Creek Naval Radio Station, which provides essential Very Low Frequency (VLF) communications to the Pacific submarine fleet and is one of only three VLF facilities in the Navy.
  - The Naval Support Complex located in Marysville which includes the Commissary and Base Exchange facilities.

Training Capabilities: In addition to the FRRC facility mentioned above, NSE's location has several other advantages to offer from the critical perspective of providing convenient, effective and joint training capabilities. The unencumbered airspace and training areas located in the Puget Sound Region provide for all the necessary operational and joint training requirements necessary to maintain the highest readiness levels. These include:

- 12 Military Warning Areas off the WA & OR coasts (30,206 sq.mi.).
- Admiralty Bay Mining Range.
- Darrington Electronic Warfare Complex.
- Boardman Bombing Range.
- Nanoose Underwater Range.
- Naval Ocean Processing Facility at NAS Whidbey Island.
- Over 4,000 miles of low-level flying routes.
- NSE located approximately 600NM from the Fallon/Nellis (NV) training areas which provide comprehensive Air Wing training capabilities.

Quality of Life Considerations: NSE has been coined the "Sailor's Choice" given high retention levels and reassignment requests for the Station and ships home-ported there. Contributing to this are the outstanding amenities and support services provided by the City of Everett and Snohomish County. Partnering with the community is part of the fabric of NSE. Community support and cooperation are found in a number of areas to include:

- **Housing** – Adequate and affordable housing is available in the local area. Military housing is also located in the local communities at two major Public/Private Venture (PPV) housing sites – Carroll's Creek Landing in Marysville and Constitution Park in Lake Stevens. Occupancy rates are 90% and 97% respectively.
- **Healthcare** – As the healthcare center for Alaska, Idaho, Montana, Wyoming, and Washington, the Puget Sound area offers a comprehensive selection of outstanding facilities and services ranging from a Level 1 trauma center to local clinics serving military personnel and their families. The Providence Regional Medical Center -Everett is only a few blocks away from NSE and has two campuses serving the community. The Everett Clinic, which is nationally recognized for its innovative approach to patient care does provide services to Navy personnel and their dependents.
- **Transit** – The City and County-owned transportation system provides Navy personnel and their families with easy access to their housing, employment, education, recreation and entertainment. The City promotes the fact that auto ownership is not a necessity in Everett.
- **Education** – On-base colleges and universities at NSE, along with numerous other educational institutions in the area afford the opportunity for baccalaureate and advanced degrees in a number of disciplines.
- **Utilities** – Water and sewer service to NSE are provided by the City of Everett; power is provided by the Snohomish County Public Utility District.
- **Recreation** – The City of Everett provides nearly 1,600 acres of regional and waterfront parkland, trails and playgrounds in 40 beautiful parks, and NSE is within easy reach of all the recreational opportunities the Puget Sound and Cascade Mountain area has to offer.

Installation Opportunities And Issues

Opportunities: There are several opportunities that need to be considered, further vetted, and appropriately supported if pursued. These include:

- A detailed analysis of costs and capabilities for additional expansion at NSE. The Economic Alliance Snohomish County Military Affairs Committee has indicated that there is expansion capacity at NS Everett for an additional CVN, additional cruiser/ destroyer class ships, and additional U.S. Coast Guard assets. A detailed analysis of modifications required and associated costs should be conducted in order to determine exactly what is cost-effectively feasible and operationally supportable. This detailed data could then be used to support the operational readiness enhancements and requests for additional funding. As a part of this expansion analysis, the proposed swap of the currently assigned three frigates (FFG) for three destroyers (DDG) needs to be incorporated into the study

and closely monitored to ensure that it takes place as scheduled.

- As an adjunct to the expansion capability at NS Everett, another opportunity is presented by the closed Kimberly-Clark facility immediately adjacent to the base. The Port of Everett has been evaluating the property and there have been suggestions that the procurement of this land would provide several benefits. It could feasibly provide additional berthing capability for NS Everett, as well as provide the necessary space for a contractor to establish a maintenance and repair facility which could service both commercial and Navy vessels. This proposal merits further consideration by the City, Snohomish County and State as it would provide added flexibility and surge capability to NS Everett, while offer the economic benefits of a thriving, commercial shipyard.

- Another opportunity is the Navy's pursuit of alternate fuels. The Navy is currently evaluating a site for a test bed / model base for bio-fuel use. The community met in the past with the Assistant Secretary of the Navy (Energy, Installations & Environment) to discuss this issue and subsequently hosted a series of roundtables; however, the Assistant Secretary has departed this post and there appears to be a gap in the pursuit of this initiative. With Washington State University establishing a bio-fuel project in Everett, it appears that this may be the time to reinvigorate the initiative with the Navy, academia, local and state officials, as well as the Defense contractor community.

Issues for Consideration: Discussions with the community identified an area which needed further attention:

- The first concerned the transportation of Navy personnel during scheduled maintenance (e.g. the daily movement of Navy personnel from NS Everett to Puget Sound Naval Shipyard & Intermediate Maintenance Facility in Bremerton). Maintenance undertaken on NS Everett vessels in the shipyard in San Diego is addressed simply by requiring the crew to go TDY (Temporary Duty) from NS Everett for the duration of the repairs. When a ship is assigned to PSNS & IMF, however, the Navy does not assign the crew to TDY. The transportation of the ship's crew utilizing various forms of transportation (i.e. bus, ferry, etc.) has proven to be problematic based on time-of-travel during congested periods. A further study of transportation alternatives between NS Everett and Bremerton, or use of TDY designation, to resolve this issue would be very useful in order to reduce the daily transit times to and from NS Everett, thereby improving the quality of life for the sailors and their families.

BRAC / Force Structure Implications

BRAC 2005: The first step in the Navy's BRAC 2005 process was to categorize the installations by unique functions. The four major areas were: 1) Operations, 2) Education and Training, 3) Headquarters and Support Functions, 4) Other Activities.

The Operations Area was further divided into four specific functions which included:

- Surface/Subsurface
- Aviation
- Ground
- Munitions Storage and Distribution

To determine the Military Value of these functions, the Navy scoring plan included the following five attributes:

- Operational Infrastructure
- Operational Training
- Port Characteristics
- Environment and Encroachment
- Personnel Support / Quality of Life

The final Military Value scoring of the 16 Active Surface / Subsurface Bases is listed in the table below:

Operations- Surface/Subsurface		
Ranking	**DON - Active Bases**	**Military Value (100 Total)**
1	NS Pearl Harbor HI	74.50
2 N	S NORFOLK VA	67.51
3	SUBASE KINGSBAY GA	63.51
4	NS BREMERTON WA	63.25
5	SUBASE BANGOR WA 6	2.98
6	NS SAN DIEGO CA	61.43
7	NAS NORTH ISLAND CA	59.68
8	SUBASE SAN DIEGO CA	58.29
9	NAB LITTLE CREEK VA	55.90
10 N	S MAYPORT FL	55.71
11	NS EVERETT WA	50.68
12 S	UBASE NEW LONDON CT	50.68
13	COMNAVMARIANAS GU	47.67
14 N	S INGLESIDE TX	42.23
15 W	PNSTA COLTS NECK NJ	39.07
16 N	S PASCAGOULA MS	37.08

Source: Department of the Navy Analyses and Recommendations (Volume IV), May 2005

While the nuclear-capable assets of NS Everett removed it from further consideration in the BRAC 2005 process, its ultimate Military Value rating was in the bottom third of the Surface/ Subsurface category. Since then, there has been renewed interest in the Arctic region, and the Asia-Pacific shift in the new strategic guidance. It would also seem logical that one of the East Coast CVN's could be considered for repositioning to the West Coast. With San Diego currently saturated (albeit press reports indicate they believe they could handle additional CVN's and surface ships), an alternative would be to place another CVN in the Puget Sound area, with NS Everett being considered as a candidate to accommodate this asset. Promoting NS Everett as the location for additional Navy and Coast Guard assets and capitalizing on the Kimberly-Clark property are opportunities that should be proactively pursued to improve Everett's competitiveness in the increasingly volatile budget environment.

Force Structure Implications: The Navy has announced that its planned force structure reductions, brought about as a result of the Budget Control Act, would entail a reduction of approximately 2,000 personnel in FY13 and an overall reduction of 5,000 by FY18. Although this could have a potential impact, these numbers pale in comparison to the Army's planned reduction of 80,000 by FY18. Again, it is an issue that bears close scrutiny and should be factored into the overall favorable implications of the re-balancing of Navy assets due to the shift to the Asia-Pacific region articulated by the new strategic guidance.

FAIRCHILD AIR FORCE BASE

Installation / Organizational Facts

Fairchild Air Force Base is part of Air Mobility Command (AMC). AMC provides worldwide cargo and passenger delivery, air refueling and aeromedical evacuation. The Command also transports humanitarian supplies to hurricane, flood and earthquake victims both at home and around the world.

Personnel:
4700 Military Members and 1100 Civilian Employees - 305 Airmen Currently Deployed to 27 Locations

Size (Acreage):
Approximately 4,300 Acres

Primary Units:
Classic Association – Active Duty / Air National Guard
92d Air Refueling Wing, Air Mobility Command - Eighteenth Air Force
141st Air Refueling Wing, Washington Air National Guard

Major Tenants:
336th Training Group - Survival, Evasion, Resistance, and Escape (SERE), Air Education and Training Command
Joint Personnel Recovery Agency (JPRA)
509th Weapons Squadron,
USAF Weapons School, 57th Wing
262nd Network Warfare Squadron - 194th Regional Support Wing, Washington Air National Guard
Armed Forces Reserve Center

Economic Impact:
$461 Million in Direct Economic Impact Annually

U.S. AIR FORCE

FAIRCHILD AIR FORCE BASE

Mission

Support the US Air Force Global Reach through Air Refueling and Airlift as well as Expeditionary Combat Support.

Installation Strengths & Attributes

General Observations: The local community installation support group, Forward Fairchild, is a committee of Greater Spokane Incorporated, Inc., and its membership of regional leaders works to protect and advocate for Fairchild AFB, the largest employer in Eastern Washington.

Forward Fairchild has been actively involved in the conduct of a Joint Land Use Study (JLUS) with the objective of mitigating any local development from adversely impacting on the mission of the base. Additionally, the group has advocated for the assignment of the Air Force's new refueling tanker, the KC-46A, at Air Mobility Command (Scott AFB), and Headquarters, United Stated Air Force, in Washington, DC. The objective of their advocacy efforts is to have Fairchild AFB designated as the preferred site for the assignment of the Main Operating Base #1 (MOB #1).

The group has authored several key publications that have articulated the advantages of the base and its units, as well as its significant positioning for future growth and support of DOD's new strategic guidance. Key publications by Forward Fairchild include:

- An Analysis of Fairchild Air Force Base (October 2012)
- Positioned for the Future
- Basing the KC-46A Tankers at Fairchild AFB

Strategic Location: With the new strategic guidance focusing on the Asia-Pacific Region, and the continued concern to monitor the Arctic Region from a military, economic, and environmental perspective, Fairchild is geographically positioned to maximize this support.

Key considerations include:

- Fairchild AFB is the only active, Tier-One Tanker Base west of the Rocky Mountains.
- The 92nd Air Refueling Wing is one of the largest Air Refueling Wings in the USAF with its classic association (Active Duty / Air Guard) with the 141st Air Refueling Wing.
- It is within close proximity to 15 established air refueling routes.
- It is ideally located to support state-side and global refueling missions, and co-located with critical Homeland Security assets such as the Expeditionary Medical Support (EMEDS) and Chemical, Biological, Radiological, Nuclear, and High Yield (CBRNE) support packages.
- It has unrestricted airspace and favorable weather conditions for continual ease of flight operations.
- It has surge capability to support mobilization and combat missions throughout the world.

Infrastructure Considerations: **Our site visit at the installation revealed the following positive attributes concerning the base:**

- $44M runway replacement completed in November 2011.
- More than $400M in Military Construction (Milcon) funds have been invested at the base since 1981.
- Since the Base Realignment and Closure Round of 2005, approximately $70M has been invested in the base.
- Runways and aprons have the capacity to handle up to 100 conventional and strategic aircraft. New 13,901 foot runway completely rebuilt in 2011. Airfield has apron capacity of 230 acres.
- Jet fuel supply with redundant feed routes and simultaneous air-refueling ground system capable of refueling 50 aircraft.
- Base has conventional and special weapons maintenance, testing and storage facilities.
- Base has three sets of Expeditionary Medical Support (EMEDS) equipment in storage.
- Base also has two sets (150 personnel) of Disaster Relief Bed-down Sets stored for Homeland Defense / Disaster Relief.
- A Chemical, Biological, Radiological, Nuclear, High Yield Explosive (CBNRE) team (566 personnel) with troops and equipment are located on the base.
- Base also houses the 336th Training Group which runs the Air Force's only Survival, Escape, Resistance & Evasion (SERE) school utilizing dormitories, mess halls and training facilities (pool, classrooms, etc.) on the base. School has trained over 14,000 students at Fairchild on a 600K acre training facility covering four states (WA, OR, ID & TX). 42 different permits and leases are required and the school maintains over 450 miles of roads on the training site. This facility could not be cost-effectively duplicated anywhere in the US.

Quality of Life Considerations: The City of Spokane and the surrounding communities have an exceptionally good relationship with the base and provide an exceptional quality of life experience for the war-fighters and military retirees residing in the area. Fairchild AFB is the second most requested air base in the USAF for assignment. Key quality of life considerations are:

- **Community Support** - Began in 1940 with the purchase of 1,400 acres for $125,000 by the Spokane business community and its citizens. Title for the land was presented to the War Department in 1942, which is now the core complex of Fairchild AFB. Numerous community programs have been developed to recognize and support the military such as:
  - Operation Spokane Heroes.
  - Armed Forces Committee of the Spokane Chamber of Commerce.
  - Annual Lilac Festival culminating in the Armed Forces Torchlight Parade.
  - Co-Commander Program which links approximately 80 local business people with officers and their families at the base.
  - Implementation of plans to construct the Aerospace Museum to further honor the relationship between the military, the City of Spokane, and the surrounding communities.
- **Education** - The five higher education universities offer educational opportunities for military personnel and their families on base at times convenient to their schedules. The universities also collaborate with the base on specific R&D opportunities.
- **Healthcare** - The Spokane area has one of the largest medical centers in the Northwest and is home to four full-service hospitals providing emergency care to military personnel.
  - Spokane is home to the Veterans Affairs Medical Center and the Spokane Veterans Home.
  - Housing is adequate and affordable off-base. 20% of the military personnel live on-base and 80% off-base.
- **Education** - With over 300 miles of fiber and the largest HotZone in the US, Spokane has been designated as an "Intelligent Community", and is currently securing a Gigapop connection with the University of Washington in Seattle which will allow connectively with Asia. Numerous educational opportunities are available on-base and in the community for under graduate and advanced degrees.
- **Employment** - With the manufacturing, aerospace and educational opportunities in the Spokane area, there is ample opportunity for spousal employment.
- **Recreation** - Spokane offers some of the best outdoor recreation in the nation with five ski resorts within a two-hour drive, and more than 70 regional lakes, as well as the two largest state parks (Mt. Spokane State Park and Riverside State Park) in the vicinity.

Installation Opportunities & Issues

Opportunities: An imminent opportunity is the selection of a preferred alternative for the Air Force's first Main Operating Base (MOB #1) for the KC-46A Tanker. The Governor, Congressional Delegation, and the local communities should continue their efforts to promote the ultimate selection of Fairchild AFB.

- Fairchild AFB meets all the USAF Criteria for selection as the Base Active Duty-Led Classic Association (MOB #1) – Enterprise, Mission, Capacity, Environmental, and Costs.
  - **Enterprise** – Classic Association (Active Duty / Air National Guard)
  - **Mission** – Only Active AF Tanker Base west of the Rocky Mountains, within 100 nautical miles of 15 Tier-One established military air-refueling routes.
  - **Capacity** – 13,901 foot runway replaced in November 2011 at a cost of $44M; 230 acres of paved apron space can accommodate 100 aircraft; simultaneous ground refueling capacity for 50 aircraft; redundant jet fuel supply.

- **Environmental** – Environmental excellence has been built into the maintenance of the base; state laws passed to preclude encroachment; Joint Land Use Study (JLUS) completed in 2009 and is being adopted by local communities; Spokane area officially declared in attainment of air quality standards.
- **Costs** – Low-cost electricity, natural gas and water rates compared with other western states; favorable Construction Cost Factors and Area Locality Costs.

Issues for Consideration: With the impending codification of the JLUS recommendations the following issues should be rectified as soon as possible:

- Fairchild AFB had 58 assigned KC-135 aircraft and 30 assigned B-52 aircraft as recently as 2003; however, the base currently has only 35 assigned KC-135s, so existing facilities and infrastructure could accommodate significant future mission growth.
- A mobile home park has long been located in the Accident Potential Zone II. Consideration is currently being given to move the structures; however, the estimated costs are approximately $21M, and a determination has not yet been made on sources for the funding.
- There is potentially an issue with the proposed construction of a casino on tribal land near the base, which is apparently inside the Military Influence Area. While the Air Force remains neutral on the issue, the Spokane Tribe has commissioned an independent study to ascertain whether the proposed structure would be problematic for base operations. The four local municipal entities affected by JLUS recommendations are currently working toward adoption of uniform or complimentary growth management and zoning restrictions.
- The Spokane International Airport Authority has proposed a development project that could be complimentary to base infrastructure; however, care should be taken to ensure that such development would not adversely impact base operations either during construction or after occupancy.

BRAC / Force Structure Implications

BRAC 2005: The USAF's approach in BRAC 2005 was to follow three rules in evaluating its 154 installations. First, Military Value (DOD Criteria 1-4 of a total of 8), both facts and judgment, were the primary consideration. Second, treat all bases equally. Third, do not judge installations solely on the mission(s) they currently perform.

Therefore, every base was rated on its ability to host eight major mission areas which included:

1. Fighter
2. Bomber
3. Tanker
4. Airlift
5. Special Operations / Combat Search and Rescue
6. Command, Control, Intelligence / Surveillance / Reconnaissance
7. Unmanned Aerial Vehicles
8. Pace Operations

To determine each bases ranking in these eight mission areas, the USAF analyzed seven categories of installation attributes which included:

1. Operating Environment
2. Geo-locational Factors
3. Key Mission Infrastructure
4. Operating Areas
5. Mobility / Surge
6. Growth Potential
7. Cost

As a result of the analysis, the Mission Capability Index (MCI) rank order for Fairchild AFB in the eight major mission areas is indicated in the table below:

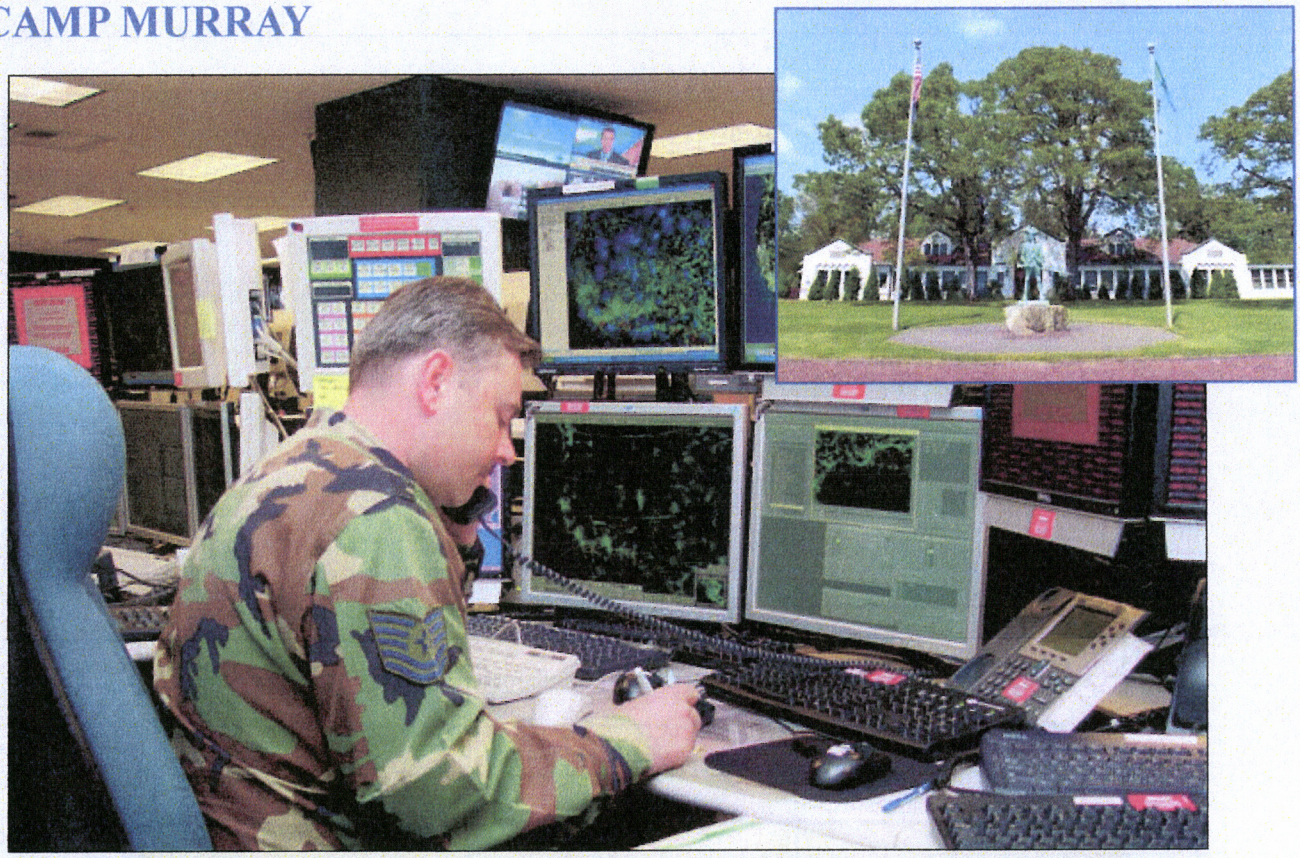
FAIRCHILD AFB		
Mission Area	**MCI Score**	**Ranking (154 total)**
Fighter	60.32	29/154
Bomber	52.78	33/154
Tanker	77.09	16/154
Airlift	64.22	14/154
SOF / CSAR	45.83	42/154
C2ISR	85.25	12/154
UAV's	74.12	30/154
Space	79.80	26/154

Source: Department of the Air Force, Analysis and Recommendations BRAC 2005, Volume V, May 2005

Fairchild AFB ranked highest in the C2ISR, Airlift and Tanker categories substantiating its mission as a Tanker Base. Further insight into the detailed BRAC analysis would provide beneficial data in order to determine the specific strengths highlighted and the potential shortcomings found.

Force Structure Implications: The $487M reduction in the DOD budget over the next 10 years imposed by the Budget Control Act of 2011 has forced the Services to evaluate potential reductions in their force structure to reduce overall costs. The USAF determined that a reduction of approximately 9,900 would be their going-in position on the potential reductions. Additionally, the USAF's FY13 budget submission outlined a number of aircraft and personnel reductions for the FY13 time-frame. Although the FY13 reductions in USAF aircraft and personnel were put on-hold by the Secretary of Defense, the effect on Fairchild AFB was minimal with a -1% proposed change in personnel and no aircraft eliminations. However, with the hold on the FY13 actions; the current "fiscal cliff" budgetary discussions; the need for resolution on the sequestration debate, etc., it would be advisable that the on-going force structure proposals / actions be carefully monitored for possible adverse impact on the base.

CAMP MURRAY



Installation / Organizational Facts

NATIONAL GUARD OF THE UNITED STATES
CAMP MURRAY

Personnel:
8400 Military Members (2200 Air National Guard and 6200 Army National Guard) and 330 Civilian Employees

Size (Acreage):
Approximately 295 acres in Pierce County

Facilities:
3,015,101 total GSF under management

- 313 buildings in 31 communities throughout the state
- 9 leased facilities that are recruiting stations

Major Organizations / Units
Air National Guard:
- 141st Air Refueling Wing (Associate to 92nd ARW at Fairchild AFB)
- 194th Regional Support Wing
- Western Air Defense Sector (WADS)

Army National Guard:
- 81st Brigade Combat Team (Heavy)
- 66th Theater Aviation Command (TAC)
- 96th Troop Command
- 205th Regiment (Leadership)

Economic Impact:
- $519,572,437 contributed to State annually in salaries, constructions, and operations and maintenance funding

- Army National Guard share - $408,549,434
- Air National Guard share - $101,023,003

NATIONAL GUARD
OF THE UNITED STATES

Mission

Camp Murray is the home of the Joint Forces Headquarters of the Washington National Guard (JFHQ-WA) and the State Emergency Operations Center (EOC); the mission of these entities is protect the citizens of Washington, their property and the environment on a twenty-four hour basis. The Washington National Guard also provides trained military units in support of civil authorities for domestic emergencies and in support of federal combatant commanders for national defense and homeland security missions.

The National Guard of the United States is rooted in the militias established by the thirteen colonies and is provided for in the U.S. Constitution. It is a military force composed of fifty-four organizations one for each state, territory (Guam, Virgin Islands) and commonwealth (Puerto Rico), and the District of Columbia.

The National Guard operates both as a federal and a state entity. At the state level, National Guard forces are under the authority of the governor acting as the State Commander-in-Chief and are directly commanded by an adjutant general who reports to the Governor. Operating at the state level under either state statures or pursuant to Title 32 of the U.S. Code (USC), the National Guard may be called upon for active duty for law enforcement support and crisis management, such as responding to hurricanes, floods, and earthquakes in their home state or in support of other states and territories. National Guard forces in a state are commanded by an adjutant general, who reports to the governor. The Washington National Guard is a part of the Military Department of the State of Washington, and is commanded by Major General Bret D. Daugherty.

National Guard forces can also be called to federal active duty to supplement the regular armed forces of the United States; when activated for federal service, the National Guard operates under Title 10 USC and is commanded by the President as the federal Commander-in-Chief who, in turn, acts through the Secretary of Defense. At the national level, the National Guard is administered by the National Guard Bureau; the Chief, National Guard Bureau is a 4-star general who is member of the Joint Chiefs of Staff. The current Chief, National Guard Bureau is General Frank J. Grass.

Washington State National Guard

Camp Murray

Camp Murray is located across I-5 from Joint Base Lewis-McChord and is the Headquarters of the Washington Military Department, the Washington National Guard and the Washington State Guard.

Emergency Preparedness and Crisis Response

The Washington National Guard plans, trains, and deploys organized units to mitigate the effects of civil emergencies in the State of Washington and throughout Federal Emergency Management Agency (FEMA) Region X (WA, OR, ID and AK).

Operations for the Washington National Guard are conducted through the Joint Force Headquarters (JFHQ) and its Joint Operations Center (JOC); for emergency preparedness and disaster response operations, these entities work through the State Emergency Operations Center (EOC). Through the EOC, and other state and federal Operations Centers to which it is linked, a synchronized civil – military response to natural disasters and other emergencies is assured.

The Washington National Guard has twelve core competencies which are provided in support of civil authorities in responding to domestic emergencies:

- Command and control
- Engineering
- Ground transportation
- Medical support
- Logistics
- Chemical, Biological, and Radiological (CBR)
- Detection
- Communications
- Aviation
- Security
- Maintenance
- Cyber

Four specialized units within the Washington National Guard transfer these core competencies into action.

10th Civil Support Team (CST)

- Supports civil authorities at a domestic CBRNE (Chemical, Biological, Radiological, Nuclear and high-yield Explosives) incident site
- Responds to suspected Weapons of Mass Destruction (WMD) hazards, advises civilian responders on appropriate actions, and facilitates the arrival of additional state and federal military forces
- Deploys to an incident site within 3 hours of notification (can be moved by road, air, rail, commercial line haul or ship) with a secure communications-equipped Command Suite and an Analytical Laboratory System vehicle (containing a full suite of analysis equipment to support the characterization of the hazard)
- Staffed by 22 full-time, Title 32 Active Guard Reserve (AGR) Army and Air National Guard personnel
- Activated through JFHQ-WA at the request of local, state, or federal agencies

Homeland Response Force (HRF) for FEMA Region X

- Region X HRF responds to a Chemical, Biological, Radiological, and Nuclear (CBRN) incident from local, state, tribal, and federal agencies
- Provides a scalable capability to bridge a gap between initial National Guard response and full multi-state (State Active Duty and/or Title 32) and/or federal responses (Title 10), conducting casualty search and extraction, medical triage, decontamination, and internal force protection in a high-threat CBRNE environment
- Staffed by roughly 560 National Guard personnel
- Activated by the request of the State Emergency Management Division through the Joint Operations Center when all local, commercial, and other State agency resources have been committed or are unavailable to respond to or ameliorate the emergency

Counter Drug Task Force (CDTF)

- Conducts a full spectrum campaign in the fight against illicit drugs and transnational threats such as drug-smuggling
- Provides support to local, state, and federal law enforcement and community-based Counterdrug operations at all levels to anticipate, deter, and defeat threats posed by illegal drugs
- Equipped with OH-58 helicopters and RC-26 aircraft for air support to ground reconnaissance units and day and night aerial surveillance
- Activated by the request of the State Emergency Management Division through the Joint Operations Center when all local, commercial, and other State agency resources have been committed or are unavailable to respond to or ameliorate the emergency

National Guard Reaction Force (NGRF)

- A temporary task force designed to respond to an incident ahead of other larter responding state and/or federal assets with the capability of being logistically self-sustaining for up to 48 hours
- Provides an initial force package that can arrive on scene within four to eight hours
- Washington National Guard has two response task forces of 250 personnel each under the NGRF program
- Can be activated by the Governor through the adjutant general

Air National Guard:

The Washington Air National Guard has two mission areas, state and federal:

- **State**
  - Provide protection of life and property, and preserves peace, order and public safety
  - Missions include disaster relief for earthquakes, hurricanes, floods and forest fires; search and rescue; protection of vital public services; and support to civil defense
- **Federal**
  - Provide operationally-ready combat and combat support units and qualified personnel for active duty in the Air Force to fulfill war-time and contingency commitments

- Six specific areas of expertise make up the Federal mission support: air refueling; air sovereignty; air support operations; combat communications; cyber and information operations; and, precision guided munitions targeting.

The 2200 personnel of the Washington Air National Guard are organized into two Wings (the 141st Air Refueling Wing at Fairchild Air Force Base and the 194th Regional Support Wing headquartered at Camp Murray) as well as the Western Air Defense Sector (operating at Joint Base Lewis-McChord).

Western Air Defense Sector (WADS)

The Western Air Defense Sector is one of two sectors (the other is in Rome, NY) that detects, identifies, and tracks aerial traffic over the United State every day, 24 hours a day. Operationally, Western Air Defense Sector reports to the U.S. Air Force's Air Combat Command (ACC) and to North American Aerospace Defense Command (NORAD), a joint U.S-Canadian organization responsible for providing aerospace warning and aerospace control for North America.

The Sector's area of responsibility is all of the airspace from east of the Mississippi River to the Pacific Ocean, covering over 2.2 million square miles and 73 percent of the continental United States. WADS airmen track all flying objects in this vast airspace andscramble fighters to intercept unknown or threatening airborne objects.

The Western Air Defense Sector receives its radar data from joint-use Federal Aviation Administration (FAA) ground-based radars, mobile radars, U.S. Air Force Airborne Warning and Control Systems (AWACS) aircraft, and the U.S. Navy. If needed, WADS can scramble fighters to intercept unknown or threatening airborne objects.

Located at Joint Base Lewis-McChord, the Western Air Defense Sector is manned by 330 personnel, 280 of which are Air National Guard members.

141st Air Refueling Wing

The 141st Air Refueling Wing (141 ARW) is stationed at Fairchild Air Force Base and has over 1000 personnel. It is an associate wing to the U.S Air Force's 92d Air Refueling Wing. It is equipped with KC-135R Stratotanker and RC-26B Metroliner aircraft.

In its federal role, the 141st Air Refueling Wing supports the 92 ARW and is tasked by the Air Force's Air Mobility Command (AMC); the unit provides aerial refueling capability for Air Force, Air Guard, Navy, and Marine aircraft, as well as assisting in the transport of military supplies and equipment and carrying air cargoes and aeromedical evacuationequipment and personnel.

As a unit of the Washington National Guard, the aircraft, ground equipment and personnel of the wing can be directly activated and utilized by the governor to provide protection of life and property and preserve peace, order and public safety. Members of the wing serve on state active and/or Title 32 duty to provide relief from and mitigate the effects of wildfires, floods, and severe storms.

141 ARW is organized into four task-oriented units:

- **Operations Group (141 OG)**
  - Air Refueling Squadron (116 ARS)
  - Operations Support Flight (141 OSF)
- **Maintenance Group (141 MXG)**
  - Maintenance Generation Squadron (141 MXMS)
  - Maintenance Squadron (141 MXM)
- **Mission Support Group (141 MSG)**
  - Civil Engineering Squadron (141 CES)
  - Security Forces Squadron (141 SFS)
  - Services and Communications (141 SVF, 141 CF)
- **Medical Group (141 MDG)**

194th Regional Support Wing

The 194th Regional Support Wing (194 RSW) is headquartered at Camp Murray and has over 1000 personnel. 194 RSW was the nation's first non-flying operational wing and includes the Air Guard's first intelligence squadron; it provides a range of support functions, to include expertise in transformational areas such as kinetic (actions in the battlespace that involve direct fires, indirect fires and other resources specifically intended to violently kill the enemy) and non-kinetic (actions in the battlespace that shape the environment without directly engaging target audiences with violent weaponry) capabilities and missions in the cyber domain.
194 RSW is organized into five task-oriented units:

- **Intelligence Group (252 IG)**
  - Three Cyber Squadrons (143 IOS, 256 IS, 262 NWS, 256 IS)
  - Engineering and Installation Squadron (215 EIS)
  - Intelligence Squadron (194 IS)
- **Air Support Operations Group (194 ASOG)**
  - Air Support Operations Squadron (111 ASOS)
  - Air Support Operations Squadron (116 ASOS)
- **Medical Group (194 MDG)**
- **Mission Support Group (194 MSG)**
- **Weather Flight (116 WF)**

Army National Guard:

The Washington Army National Guard (WA ARNG) has 6200 members; like the Air National Guard, it participates in state emergency operations at the direction of the Governor and as a part of the State emergency response community. The Washington Army National Guard is also fully integrated into the national defense missions of the U.S. Army.

The Washington Army National Guard's major subordinate commands include:

- 81st Brigade Combat Team (Heavy)
- 66th Theater Aviation Command (TAC)
- 96th Troop Command
- 205th Regiment (Leadership)
- Joint Forces Headquarters (JFHQ)

Since September 2001, nearly 12,000 members of the Washington Army National Guard have been mobilized. Personnel from four commands will be mobilized in 2013: 66 TAC will mobilize 21 soldiers in March; 81 BCT will send 845 soldiers to Kuwait in June; 29 soldiers from 96 TC will mobilize to Kuwait and Afghanistan in June; and, 36 soldiers will mobilize from JFHQ in April to serve as advisors in Afghanistan.

Washington National Guard Strengths & Attributes

General Observations: In the emergency management / response arena, the joint forces Homeland Response Force (HRF) which responds to CBRN incidents is unique to the State and FEMA Region X, and the Expeditionary Medical Support (EMEDS) packages (3 sets at Fairchild) maintained by the WA Air National guard are one of only three such operations in the U.S.

Strategic Location: With their location in the northwestern corner of the continental U.S., the Washington Air and Army National Guard are well-positioned to play a key role in the focus on the Asia-Pacific Region called for in the updated strategic guidance, Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, issued by the President in January 2012.

Easy access to maritime ports of embarkation, such as Tacoma and Seattle, and to airlift at Joint Base Lewis-McChord and SeaTac Airport, further positions units of the Washington Air and Army National Guard for use in projecting power in and throughout the Pacific region.

Similarly, the location of 141 ARW at Fairchild AFB places it within close proximity to 15 established air refueling routes and affords the unit unrestricted airspace and favorable weather conditions for continual ease of flight operations.

Infrastructure Considerations: The Washington National Guard Installation Management Team (IMT) conducted a comprehensive review that covered military construction (MILCON) successes, future MILCON requirements, and future NON-MILCON issues.

- Monitor the Future Years Defense Plan (FYDP) to ensure that the Yakima Training Center (YTC) barracks and the Thurston County Reserve Center are still viable and do not get shifted/cut from the FYDP, and support the inclusion of the Pierce County Reserve Center on the Fiscal Year (FY18) FYDP.

- New Sensitive Compartmented Information Facilities (SCIF's) have been/are being constructed at JBLM and Camp Murray which will support the Guard's activities in these classified areas. The IO Readiness Center at JBLM will be one of the largest SCIF's west of the Mississippi.

- UH-60A's in the 66th TAC need to be modernized by securing the newer UH-60M models. Current aircraft are quite old (1979 & 1980 airframes) and the maintenance costs are extremely high as a result of the age of the aircraft. Current aircraft do not have search & rescue capability.

***Quality of Life Considerations*:** Washington Youth Academy (WYA) is part of the National Guard Youth Challenge Program. It is recognized as one of the premier Youth Challenge programs in the nation devoted to reclaiming the education and employment potential of 16-18 year old at-risk youth.

Washington National Guard Opportunities & Issues

Opportunities:

- When discussing the cyber capabilities and missions within the WANG, it was suggested that a state-wide strategy be developed for the establishment of a cyber "Center of Excellence" in the State because of its critical attributes which include:

  - The 194th RSW has three cyber squadrons conducting a full range of cyber activities with citizen airman that are IT professionals with requisite technical expertise and industry leadership skills.
  - A vast number of employers in the State that have a pool of available talent to join the units.
  - There are a large number of academic, industry and state/federal agency partners whose resources would complement a Center of Excellence and staff it with some of the country's premier cyber experts.

- This cyber initiative would also complement the direction that the DOD and all of its Services and service components are currently undertaking to expand their cyber capabilities to include both offensive and defensive operations.

- The State also has a critical mass of systems design and operational control experts in the SCADA (supervisory control and data acquisition) cyber arena, as well as a critical mass of industrial and military facilities needing this expertise.

- An initiative has also been proposed to station a Stryker BCT in Washington with its three battalions aligned across the West Coast – one each in WA, OR and CA.

Issues for Consideration: There is potentially an issue with the proposed construction of a casino on tribal land near the base, which is apparently inside the Military Influence Area. While the Air Force remains neutral on the issue, the Spokane Tribe has commissioned an independent study to ascertain whether the proposed structure would be problematic for base operations. The four local municipal entities affected by JLUS recommendations are currently working toward adoption of uniform or complimentary growth management and zoning restrictions.

- Another initiative being pursued by the WANG is a Tactical Unmanned Aircraft Systems (TUSA) training site for Western Regional use (all Services and all components). Criteria used by the NGB did not take the Army Total Force or DOD Joint Force considerations into their evaluation and only considered site use for UAS-equipped ARNG units.
  - As a result, Camp Shelby (LA) come in first. The status of the action should be investigated and inquiries made as to the rationale for the lack of Total Force considerations.

- Consideration should also be given to building great cyber force structure within the WAARNG to take advantage of Washington State's rich pool of information technology activities. This can best be done by "trading"/converting excess military truck driver slots into new "sunrise" cyber domain slots.

BRAC/FORCE STRUCTURE IMPLICATIONS

BRAC 2005:

As noted at the beginning of this section, the National Guard is both a federal and a State entity; Guard facilities that are entirely state-owned are outside the purview of the BRAC process. Sites leased for U.S. government-related responsibilities and fee-owned sites, however, remain subject to the BRAC law, Section 2687 of Title 10 U.S. C.

In the 2005 BRAC, the BRAC Commission approved a series of changes to Reserve Component facilities (which are entirely federal in terms of personnel, units, and infrastructure) in Washington, closing four Army Reserve Centers and an Area Maintenance Support Activity, and realigning one Army Reserve Center. The construction of three multi-component, multi-functional Armed Forces Reserve Centers capable of accommodating both Reserve and National Guard units were approved.

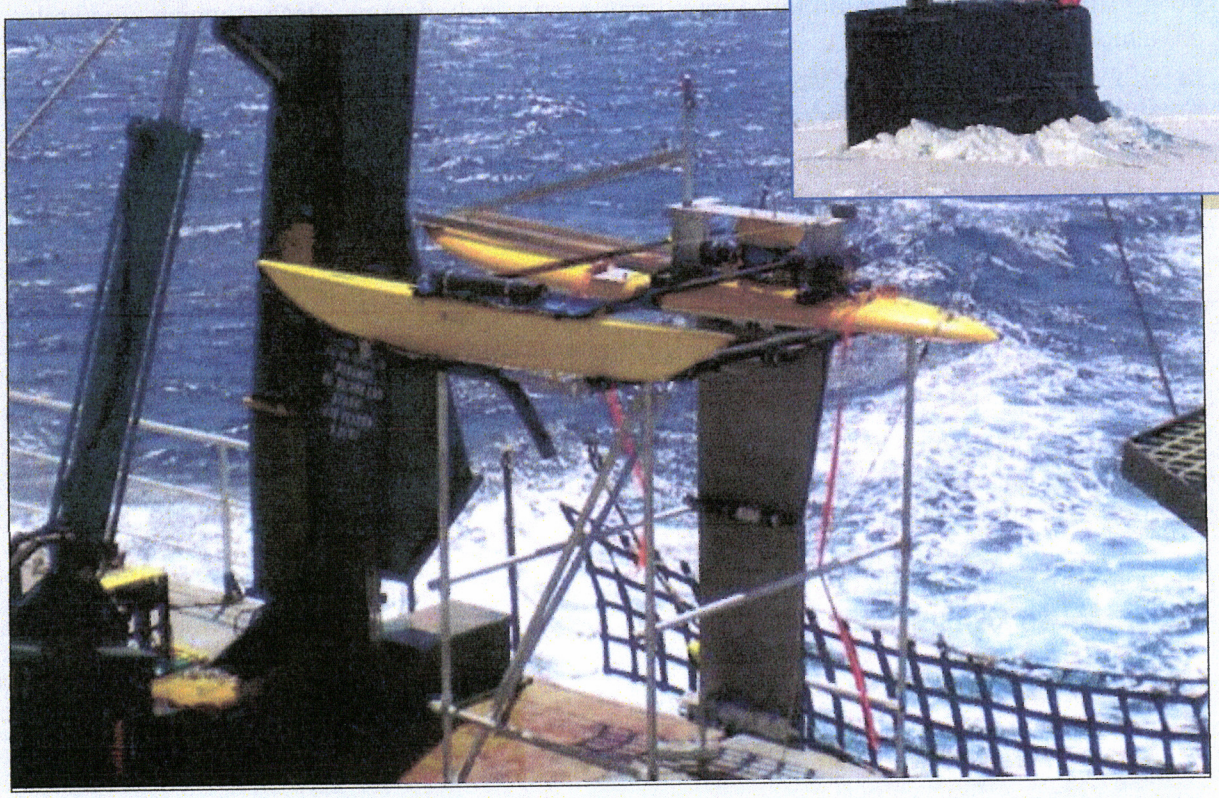
The Commission identified which Guard units/facilities could be accommodated by the new Centers, but in its recommendation deferred to the State on the assignment of those units to the Centers. For example, it stated that the new Armed Forces Reserve Center in the Everett area "shall have the capacity to accommodate units from the following Washington ARNG facilities: Washington ARNG Everett Readiness Center and Snohomish Readiness Center, if the state decides to relocate those units."

Being subject to Title 10 authorities and receiving federal funding, however, also makes the Guard subject to changes in military force structure and the budgeting process, which ultimately have more impact than BRAC. As outlined in the section on Fairchild Air Force Base, changes in policy by the Air Force leadership and budget pressures due to reduced levels of future funding resulted in the announcement of a Force Structure Adjustment (FSA) in February 2012. Across the Air Force, the FSA envisioned eliminating 9,900 airmen, including 3,900 active duty personnel, 5,100 Air Guardsmen and 900 Air Force Reservists in FY13; it would also have retired 227 aircraft, primarily from the Air National Guard and Air Force Reserve structures. (The FSA would have meant a minimal personnel reduction in Washington, -0.4% in FY13, and the loss of one Guard aircraft in FY15.)

Both the Congress and the State Governors, however, argued the entire package of changes was unacceptable, as it disproportionately targeted Guard and Reserve personnel and equipment. It should be noted that Governor Gregoire, appointed by the President as the co-chair of the Council of Governors, played a crucial role in the discussions between the Air Force, all U.S. governors, and the Congress on this issue.

The decision on implementing the Air Force FSA was placed on hold, and will need to be resolved by the Administration and the Congress in 2013. The Army, however, is conducting a "Force Mix/Force Design" study that will redefine its force structure, and affect the Army Guard; the results of this study are expected to be announced in early 2013.

APPLIED PHYSICS LABORATORY
UNIVERSITY OF WASHINGTON (APL-UW)



Installation / Organizational Facts

APPLIED PHYSICS LABORATORY - UNIVERSITY OF WASHINGTON (APL-UW)

Installation:
The Applied Physics Laboratory at the University of Washington (APL-UW) is one of five Navy-managed University Affiliated Research Centers (UARCs) in U.S.

Personnel:
About 300 full-time staff.

Economic Impact:
Approximately $67 million in annual federal contracts

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APPLIED PHYSICS LABORATORY
UNIVERSITY OF WASHINGTON (APL-UW)

Mission

The APL-UW mission is to advance scientific discovery and invention and enhance national security by being a premier center for basic and applied research, engineering and technology development, and advanced education.

Organization Attributes And Issues

Organization Attributes: The Applied Physics Laboratory was founded in 1943 as the Navy's second university-based research center to develop weapons technologies desperately needed for the war effort. Its early work was focused on torpedo-related technologies critical to naval forces in World War II. Later research addressed areas such as unmanned underwater research vehicles and acoustic imaging. The Navy has made extensive use of the Laboratory's knowledge of the ocean environment, coupled with its understanding of Navy operational requirements, to develop Fleet tactics, strategies, and systems.

APL-UW's basic operations are currently funded through a ten-year $257M contract signed with the Naval Sea Systems Command (NAVSEA) in May 2010. Under the contract, the Laboratory will provide research, development, and engineering support to the Navy in seven areas that considered essential to support military programs:

- Experimental oceanography
- Acoustic propagation
- Underwater instrumentation and equipment
- Marine corrosion
- Acoustic and related systems
- Simulations and signal processing; and
- Mission related research and development

Recent work included support for the Navy's ICEX 2011 exercise in March 2012. The Applied Physics Laboratory Ice Station (APLIS), located on thick sea ice 150 miles north of Prudhoe Bay, Alaska, helped support a training exercise for two submarines. The Navy's officer-in-tactical-command at the camp stated, "It is critical that we continue to operate and train today's submarines in the challenging Arctic environment. ICEX 2011 is the latest in a series of Arctic exercises, which are key to ensuring our submarines are trained and ready to support U.S. interests in this region."

APL-UW has also developed new defense programs that are outside of its core mission supporting NAVSEA (such as combat casualty care, countering improvised explosive devices, and cyber-security) and non-defense programs (such as ocean observing systems, ultrasound therapy, marine ecosystems, applied optics, and energy).

The Laboratory has also been very successful in winning research awards from other federal entities; while the Navy provided approximately $35 million in funding in FY2010, approximately $42 million in research contracts were received from organizations that included the:

- National Science Foundation (NSF)
- National institutes of Health (NIH)
- National Aeronautics and Space Administration (NASA)
- National Oceanic and Atmospheric Administration (NOAA)
- Department of Energy (DOE)

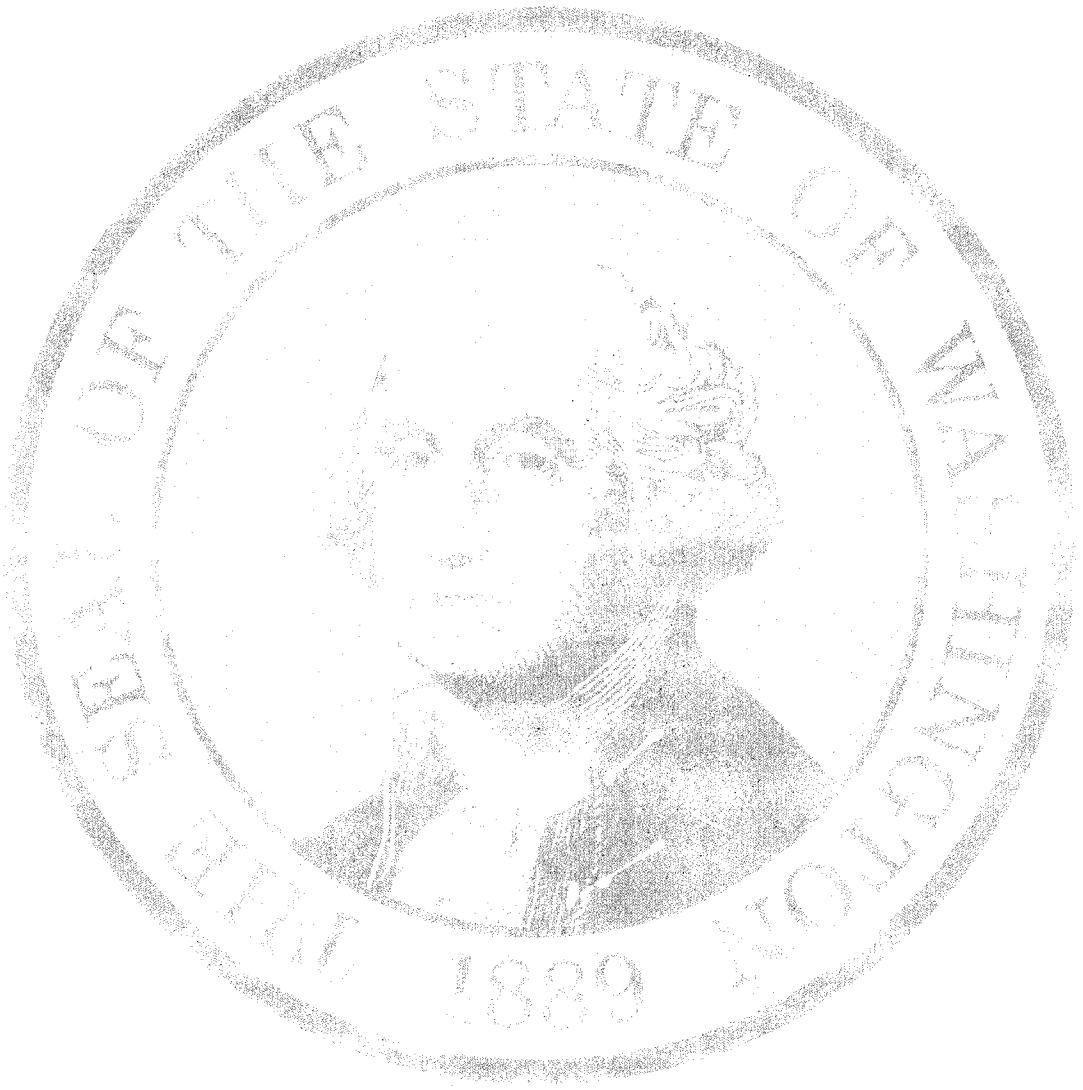
As part of its work for NSF, for example, APL-UW leads the Regional Scale Nodes (RSN) project, a $239 million effort to distribute a high-capacity data and power cable network across, above and below the sea floor within the Juan de Fuca tectonic plate. It will allow real-time measurements from within/under the ocean to be continuously obtained, supplanting current data-gathering from above via satellite or measurements taken at intervals from surface ships or manned/robotic submersibles.

This research often results in added-value to the University and State as researchers in 2009-2010 from APL-UW had 37 invention disclosures, 27 patent applications, 15 patents issued, and 25 commercialization licenses or agreements.

- APL-UW works with the University's UW's Center for Commercialization to align researchers with industry to create new companies/new jobs in the State.

Issues for Consideration: APL-UW states that one of its most challenging issues is one of personnel retention. Salary caps for state employees limit the ability to compensate researchers working on state-of-the-art technologies, resulting in a drain of research talent from UW and a diminishing of IP-related revenues to the school and state.

- UW and the State should investigate the possibility of forming 501c(3) entities which do not use state funding for daily operations to encourage research and the commercialization of new products, and provide a mechanism for compensation flexibility.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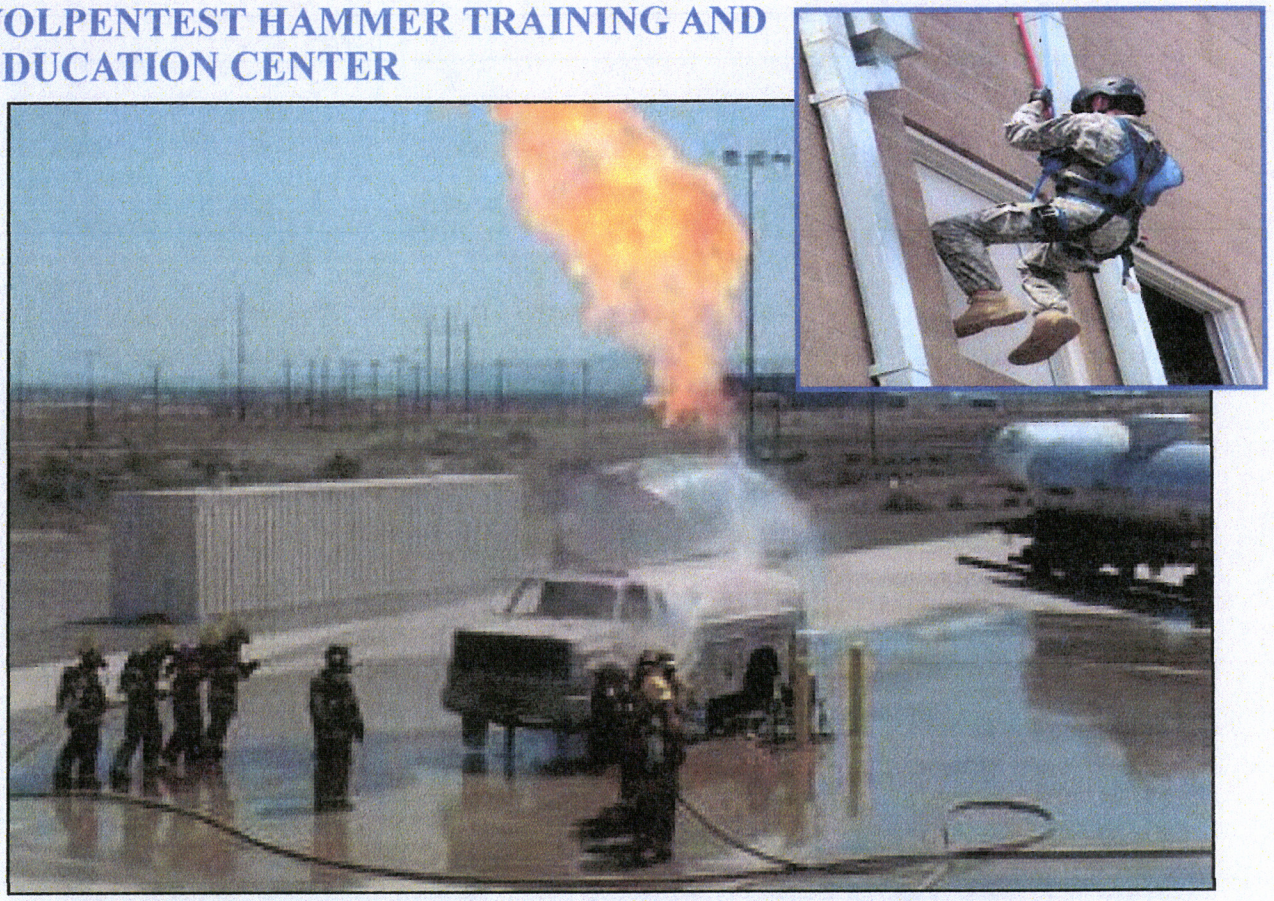
VOLPENTEST HAMMER TRAINING AND EDUCATION CENTER



Installation / Organizational Facts

The Training at Hammer is as Real as it Gets!

Installation: The HAMMER (Hazardous Materials Management and Emergency Response) Center is a Department of Energy facility and is part of the Hanford Site in Richland.

- HAMMER opened in 1997.
- The campus covers 88 acres; a further 75 acres are available for expansion.
- It conducts 55,000 student days of hands-on training on life-size props annually.
- Also access to 10,000 acre law enforcement campus, 70 acre high-risk electrical utility training site, and 10 acre explosive ordnance disposal (EOD) site.
- HAMMER's plant replacement value is over $70 million.

Personnel: The Center employs 105 personnel.

DEPARTMENT OF ENERGY

VOLPENTEST HAMMER TRAINING AND EDUCATION CENTER

Mission

HAMMER's primary Mission is to provide a safe and high-quality training experience to Hanford workers engaged in environmental cleanup activities.

Organization Attributes And Issues

Organization Attributes: The Center has a growing focus on training federal, state, and local government emergency/first-responders for counter-terrorism, non-proliferation/weapons of mass destruction response, fire suppression, hostage rescue, and high-speed pursuit.

- A new program with the State Department provides drug enforcement training to international border patrol agents.

- Its training and administrative facilities include:
  - Administrative and Learning Resource Center
  - Urban Search and Rescue Tower & Building
  - Training Device (Railroad Leak, Tanker Leak, Fuel Truck Burn)
  - Port of Entry Training Facility
  - Waste Tank Training Device
  - Liquid Petroleum Gas Burn Training Device
  - Open Trench / Tunnel Training Device
  - Alm Building (large group/inclement weather training facility)
  - Urban Search and Rescue Confined Space Training Site
  - Pond and Stream Sites
  - Fall Protection Training Device
  - Cultural Awareness Training Site

- The Center also provides the only 'Live Source' radiation training in US.
  - A new collapsed structure/rubble pile facility is funded.

- Work Relevant to WMA Goal includes:

  -Training active duty, reserve, and National Guard personnel in CBRNE tactics, techniques and procedures (TTPs).
  -Particular focus on Chemical Corps (110th Chemical Battalion, JBLM); 145th Chemical Brigade (Fort Hood); Special Operations Command (SOCOM); and Army and Air National Guard Civil Support Teams (CSTs), CBRN Emergency Response Force Packages (CERFPs), and Homeland Response Forces (HRFs) from FEMA Region X and all other western states.

Issues for Consideration: HAMMER was originally established to train the Hanford Site workforce for clean-up activities. This mission is still on-going, but will eventual come to an end. The training facilities that have been established are first-class. HAMMER's training attributes are relevant to the needs of military units across the U.S.

Making military commanders at Washington State's bases fully aware of the range of training that can be conducted for their personnel and forces at HAMMER, and attracting more military training from military units/installations across the country to complement the current emergency management/first-responder and other training programs is a high priority.

Further, many state and local responders and emergency personnel are very much in need of the training that HAMMER can provide but local and state governments cannot afford to provide this level of training. A grant program within the Department of Homeland Security to help the states fund the comprehensive training a facility like HAMMER can offer is very much needed.

THE STATE OF WASHINGTON
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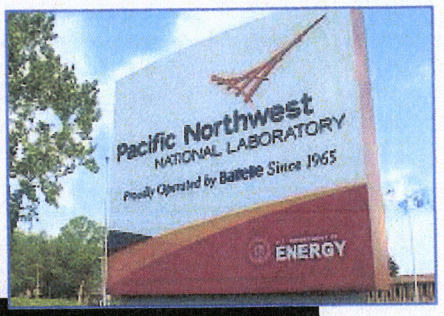
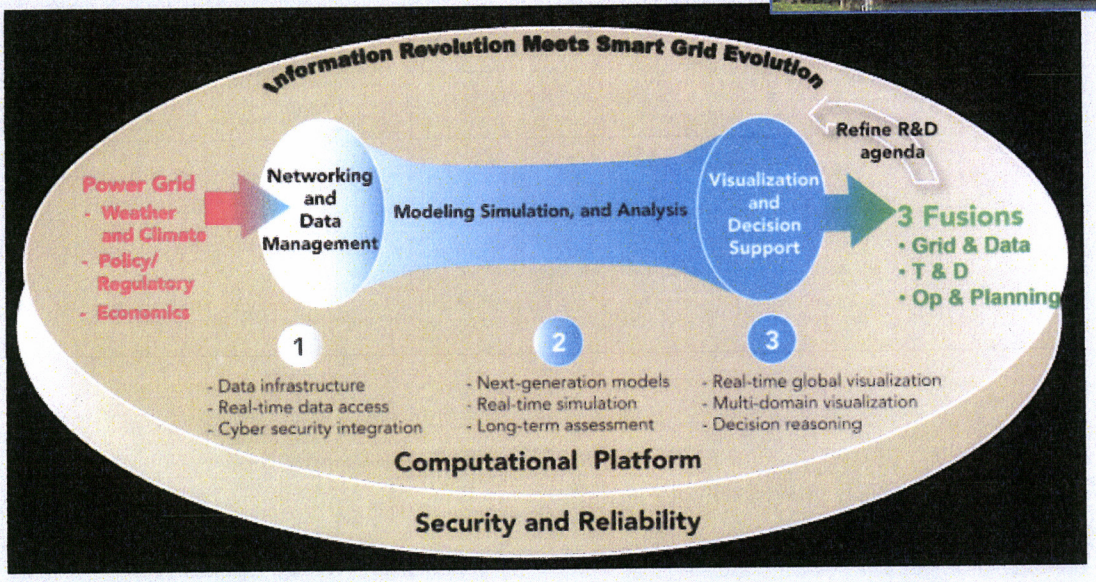
PACIFIC NORTHWEST NATIONAL LABORATORY (PNNL)





Installation / Organizational Facts

The Pacific Northwest National Laboratory (PNNL) is one of ten U.S. Department of Energy (DOE) national laboratories.

Personnel:
PNNL employs 4,800

Focus Areas:
- Energy & Environment
- Fundamental & Computational Sciences
- National Security

Economic Impact:
- $1.2 billion in funding received (Fiscal Year 2011)
- Plant Replacement Value of $409,483,900

DEPARTMENT OF ENERGY

PACIFIC NORTHWEST NATIONAL LABORATORY (PNNL)

Mission

PNNL's mission is to transform the world through courageous discovery and innovation. It operates under the DOE Office of Science which is dedicated to research that advances the science needed for revolutionary energy breakthroughs, to seek to unravel nature's deepest mysteries, and to provide the Nation's researchers with the most advanced large-scale tools of modern science.

Organization Attributes and Issues:

Operated by Batttelle Memorial Institute, PNNL is located in Richland, and has satellite officces in Seattle and Tacoma, as well as a marine research facility in Sequim.

- Its research focus is about 55% National Security and 20% in the Natural Sciences, with a significant effort in Energy & Environment areas.

- PNNL's research has four 'real world' goals:
  - Strengthen the U.S. Scientific Foundations for Innovation
  - Increase U.S. Energy Capacity and Reduce Dependence on Imported Oil
    - This includes a focus in on the electrical grid and a partnership with WSU/ Pullman on biofuels.
  - Reduce Environmental Effects of Human Activity and Create Sustainable Systems
  - Prevent and Counter Terrorism and Proliferation of Weapons of Mass Effect

A significant portion of the work undertaken by PNNL is relevant to the WMA goal. It includes:

- Consulting with Navy NW Region on issues such as
  - Environmental issues
  - Energy conservation and use of alternate fuels
  - The Smart Power Infrastructure Demonstration for Energy Reliability and Security (SPIDERS) project in Hawaii

- Efforts with the Army include a
  - Smart Grid pilot project at JBLM
  - Smart And Green Energy (SAGE) for forward operating bases

- Based on Commercial-off-the-shelf (COTS) technology and scalable (150-2,400 person range).

- Designed to be intelligent power management system at deployed locations that will reduce fuel consumption by between 30%-60% .versus the current baseline. Deliverables are design specifications and contract language suitable for LOGCAP or other contract vehicles.

- PNNL is also conducting energy storage research (i.e. materials sciences and chemistry aspects of fuel cells, batteries) with the University of Oregon's Center of Excellence for

- PNNL led the Preventative Radiological and Nuclear Detection (PRND) Pilot Project in 2007–2010 to develop a small vessel-borne detection system to detect and interdict nuclear material smuggling through Puget Sound ports
  - The Project was conducted with the Coast Guard and the DOE Domestic Nuclear Detection Office (DNDO).
  - PNNL successfully developed the concept of operations (CONOPS), the required training and relevant standard operating procedures for human portable and boat mounted detection of nuclear materials. This CONOPS is still in place.
  - PNNL was the facilitator for the pilot program, which clearly demonstrated the value of unified command, joint operations leveraging State, Local, Tribal and Federal assets.

Opportunities:

PNNL is also very active in the cyber arena, with a focus on security and protection of critical infrastructures.

- The joint PNNL/UW Center for Information Assurance and Cyber Security (CIAC) was designated as a "National Center of Academic Excellence in Information Assurance Research" by NSA/DHS in 2011.

- Resources include:
  - Active SCADA (Supervisory Control And Data Acquisition) platforms (open and closed) and a SCADA Range.
  - A new cyber facility (based on an energy construct) with various SCADA systems which can do research "In Front of the Wall" (with the University of Washington) and "Behind the Wall" (in own facility).

- The active engagement in a closed facility is what's really unique for PNNL in the cyber world.

- PNNL (along with WANG, UW and the utility providers) has an ongoing effort to develop protocols for cyber / physical security vulnerability assessments to ensure the safety and continued viability of the energy sector.

One issue for consideration was capitalizing on an investment in technology.

- PNNL developed the Imaging System for Immersive Surveillance (ISIS) for DHS in 2010 to provide high-resolution 360-degree coverage combined with video analytics
  - Designed for use where surveillance of large open areas is required
  - ISIS was tested successfully at Boston's Logan Airport, but the program did not move forward

- PNNL has identified a real need for the capability with the Navy at NAS Whidbey Island.
  - It could be deployed as a 2nd generation pilot for under $1 million.

DEPARTMENT OF HOMELAND SECURITY
U.S. COAST GUARD - DISTRICT 13

Installation / Organizational Facts

DEPARTMENT OF HOMELAND SECURITY
U.S. COAST GUARD - DISTRICT 13

Personnel:
District 13 is headquartered in Seattle, Washington, and has 1,240 active duty and 441 reserve members.

Size:
District 13 encompasses the states of Washington, Oregon, Idaho and Montana as well as more than 460,000 square miles of Pacific Ocean.

Major Entities:
District 13 is divided into two Sectors (Sector Puget Sound and Sector Columbia River) and one Group / Air Station.

Economic Impact:
Budget allocations for the Coast Guard in the State of Washington for Fiscal Year 2011 were approximately $214.6 million:

- $202,777,606----Operating Expenses
- $8,819,605--------Acquisition, Construction, and Improvements
- $2,766,116--------Boating Safety

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DEPARTMENT OF HOMELAND SECURITY

U.S. COAST GUARD - DISTRICT 13

Mission

The U.S. Coast Guard safeguards the maritime interests of the nation - - in its heartland, in its ports, at sea, and around the globe. It also protects the maritime economy and the environment, defends the U.S.maritime borders, and saves those in peril on the water.

Eleven missions are statutorily established for the Coast Guard: Port, Waterway and Coastal Security; Defense Readiness; Illegal Immigration Control; Search and Rescue; Establishment and Maintenance of Aids to Navigation; Management of Living Marine Resources; Ice Operations; Marine Safety; Marine Environmental Protection; Illegal Drug Interdiction; and, Fish Stock Protection.

Installation Strengths and Attributes

General Observations: The U.S. Coast Guard is a multi-mission, maritime service within the Department of Homeland Security (DHS). Its core role is to protect the public, the environment, and U.S. economic and security interests in any maritime region in which those interests may be at risk. The Coast Guard is one of the nation's five military services; upon the declaration of war or when the President directs, it operates under the authority of the Department of the Navy.

- Headquartered in Seattle, the 3rd largest U.S. port, D13's Vessel Traffic Service function (active monitoring of movements and providing navigational advice for vessels in particularly confined and busy waterways) is the Coast Guard's largest, monitoring 230,000 vessel movements a year over an area of 35,000 square miles. Of particular note within this function is that Seattle is home to the largest ferry system in U.S., carrying 24 million passengers annually. Seattle is also the 3rd largest U.S. port for the cruise ship industry.

- District 13 has a headquarters element located in the Federal Building in downtown Seattle; the majority of its Seattle facilities are located on Pier 36 on the south waterfront, Base Seattle (BSU Seattle). The only substantial military facility left in King County, BSU Seattle also provides key support to over 30,000 local military retirees & family members from all of the armed services.

- There are seven Coast Guard Stations in Washington (Bellingham, Cape Disappointment, Grays Harbor, Neah Bay, Port Angeles, Quillayute River, and Seattle) and one Air Station (Coast Guard Air Station / Sector Field Office Port Angeles).

- District 13 has a wide variety of equipment assigned to it; those assets assigned to Washington stations include 17 cutters, 88 boats and 3 aircraft.
  - 3 HH-65D helicopters are assigned to Air Station Port Angeles
  - One 110-foot patrol boat assigned to Port Angeles
  - Seven 87-foot patrol boats are assigned to the District (one each in Everett, and Port Townshend; two in Bellingham; and, three in Port Angeles)

- Climate and geography frame the Coast Guard's operations in District 13, complicating mission performance with frequent severe storms and an international border that runs through an area of thousands of islands.

- Key to accomplishing this mission is D13's Joint Harbor Operations Center (JHOC) which monitors and coordinates the movement and safety of maritime operations in the Puget Sound area; it is also responsible for facilitating the planning and response to natural disasters, accidents, attacks on ships within Puget Sound or the Sound's waterfront infrastructure. The JHOC is also connected to the State of Washington's Intelligence Fusion Center and the Navy Region Northwest Regional Operations Center.

- D13 also has one of eight current Port Security Units (PSUs), which provide landward and seaward security at strategic port locations. PSU 313 is unique in having the only organic radiation detection capability in the U.S.

Strategic Location: District 13's location gives it great strategic relevance. It has jurisdiction over waters that would be used by naval ships and cargo vessels engaged in projecting U.S. power into Pacific and Arctic regions.

- While District 17 has the responsibility for the Alaskan maritime region, District 13 is a key element of D17's operations; the Districts are integrated in a variety of ways.
  - D13 is the homeport for assets that are Arctic capable and is the hub for commercial industry resources heading to the Arctic, as well as exploration resources.
  - D17 provides back-up resources for the District's Search & Rescue, Arctic and Marine Environmental Protection missions.
  - D13 is also the homeport for the 378's and Polar Breakers that deploy north or south for three months at a time.
  - All assets from D17 come to Washington for their shipyard/maintenance.

- District 13 contributes directly to the strategic mission of Department of Defense forces stationed in Washington; D13 operates the Maritime Force Protection Unit (MFPU) Bangor which provides security for strategic naval assets transiting the Puget Sound and the Strait of Juan de Fuca.

- Formed in 2007, MFPU Bangor protects Fleet Ballistic Missile submarines while they transit on the surface between NBK - Bangor and open waters of the Pacific Ocean. The unit establishes and enforces a security zone which ensures the safety of, and mitigates the

risk of attacks on, the submarines while they are in the waters of the Hood Canal, Puget Sound, and the Strait.

- Because of the international border and geography of District 13, the Coast Guard, the Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), and Canadian law enforcement resources work very closely.

- The Canada-U.S. Shiprider program contributes to security by allowing seamless jurisdiction and operations for personnel of both countries. Under a May 2009 agreement, ships can be jointly crewed by designated Canadian and U.S. law enforcement officers ensuring law enforcement when needed on both sides of the international boundary line. This has a direct effect on military missions in Washington suchas logistic support using commercial shipping lanes. The transport of Stryker vehicles for an overseas Army exercise or deployment, depart using sea lanes in U.S. waters, but return via sea lanes running though Canadian waters.

Infrastructure Considerations: A key issue for the Coast Guard is the age of its vessels and aircraft; there has been insufficient funding to both fully maintain the current fleet of ships and aircraft at optimal levels while also purchasing new ships and aircraft to replace existing equipment when they reach the end of their expected service life. This results in increasing maintenance expenses and diminished availability for aircraft and ships, a problem which District 13 faces.

- District 13 also faces issues with its shore installations. Its facilities at Pier 36 are at maximum capacity and there is no room for expansion in the immediate area.

- As a matter of policy, the Coast Guard tries to place their assets at DOD/DHS facilities for cost-savings and more efficient operations. With the space restriction at Pier 36, the Coast Guard has moved several ships to Naval Station Everett.

- The Navy has indicated a willingness to host further Coast Guard assets at NS Everett. For the Navy, hosting Coast Guard vessels not only helps to defray the cost of operations at the Navy facility, but also this co-location could be perceived as an advantageous factor in future base realignment proceedings inasmuch as it illustrates joint-agency interaction.

- District 13 is also evaluating the establishment of a "Forward Deployment Facility" in the vicinity of the Strait of Juan de Fuca to enhance the performance of its high-value escort missions. The Navy has supported the effort and indicated a willingness to build the facility for Coast Guard use; the facility's estimated (and unbudgeted) cost is about $30-$40 million.

Quality of Life Considerations: The Quality of Life in District 13 for Coast Guard personnel is high. Overall, the Coast Guard prefers to man District 17 at minimum necessary levels given the quality of life for its personnel, as well as reasons of cost and mission flexibility.

Issues for Consideration: District 13 is an operationally effective location for Coast Guard because of the mission flexibility to go north or south, and its proximity to the important and increasing District 17 missions in the Arctic.

- Given its smaller housing needs, the Coast Guard has not looked at the Public-Private Venture (PPV) approach to housing the way the Defense Department has; it has traditionally been well-served by the private sector for housing supply and management.

- The Enhanced Use Lease (EUL) process, as developed and utilized by DOD, would be a very useful way, however, of replacing or enhancing existing Coast Guard facilities and of meeting new facility needs in a time of constrained budgets.

BRAC / Force Structure Implications

As an entity within the Department of Homeland Security, the Coast Guard's facilities are not subject to Department of Defense force structure changes or the base closure process; because the Coast Guard often supports DOD operations, however, Coast Guard missions and facilities can be factors considered in DOD decision-making, such as base closure.

Section 4

Conclusions and Recommendations

The stated overall objectives of this report were to accomplish the following:

- Assess the current national security and national military strategic documents to determine the focus and direction that our nation and its military are taking to ensure the security of the United States and its Allies.
- Determine if the military installations in the Pacific Northwest (specifically in the State of Washington) are manned and equipped to support the changing strategies.
- Visit the military installations to ascertain their compatibility with the new, changing strategy and determine their strengths and attributes, as well as opportunities and challenges to maintain and/or grow their force structure.
- Assess the findings of the analysis and visits to determine any recommendations that could be offered to the Governor to strengthen the military in the State.

Strategy Review and Military Compatibility with State's Military Assets

With the new, changing strategic focus on the Asia-Pacific Region, the installations in Washington are geographically and strategically positioned in an extremely favorable manner to support this strategic pivot. The new, changing strategy calls for joint forces that can accomplish the ten primary missions listed below:

- Counter Terrorism and Irregular Warfare
- Deter and Defeat Aggression
- Project Power Despite Anti-Access/Area Denial (A2AD) Challenges
- Counter Weapons of Mass Destruction
- Operate Effectively in Cyberspace and Space
- Maintain a Safe, Secure, and Effective Nuclear Deterrent
- Defend the Homeland and Provide Support to Civil Authorities
- Provide a Stabilizing Presence
- Conduct Stability and Counterinsurgency Operations
- Conduct Humanitarian, Disaster Relief, and Other Operations

As was mentioned in Section 1, the strategy review portion of this document, the most important element mentioned in the documents is the continued affirmation of the need for military forces

that can project power in a globally integrated operational environment in conjunction with our allied partners. With the State's location in the Pacific Northwest combined with the Army, Navy, Air Force and National Guard resources that are the most likely to be used for these power projection missions, Washington's military presence is perfectly aligned to support and execute these strategic imperatives.

Additionally, JBLM is the Army's number one rated (BRAC 2005) Power Projection Platform that can deliver the joint forces required to this area of operations. In fact, I Corps, located at JBLM, has recently been designated and aligned to specifically support the US Pacific Command, one of the six Combatant Commands. Supplementing this Power Projection capability is the Navy's surface/subsurface and air assets in the Puget Sound Region, along with Air Force refueling and airlift capabilities and a strong and capable National Guard presence that has significant expertise in the homeland security and cyberspace arenas.

In summary, the military installations in the State fit extremely well with the relevant strategy and guidance documents that were reviewed in Section 1 of the report.

Base Visits / Conclusions

All of the major military installations in the State were visited and Section 3 outlined the results of the visits from the perspective of the following:

- Installation / Organizational Facts
- Installation Strengths and Attributes
- Installation Opportunities and Issues
- BRAC 2005 Military Value Rankings/Force Structure Implications

Recognition and thanks are again extended to all the Community Groups and the Commands at the various bases for their time and detailed briefings on the activities and issues affecting their installations. Their cooperation and generosity made the briefings presented to Governor Gregoire and the Washington Military Alliance both comprehensive and beneficial.

Overall, the visits confirmed that the military assets in the State are critical to the new shift in strategy to the Asia-Pacific and revealed some opportunities for possible expansion considering the Secretary of Defense's proclamation that the change in strategy should also result in a shift in the alignment of Navy assets from the typical 50-50 (East Coast – West Coast) to a 60-40 split favoring the West Coast. Albeit consideration needs to be given to the budget reductions that the DOD has (and will continue) to realize as a result of the Budget Control Act of 2011 along with the force structure and program cancellations/reductions that will occur.

On the force structure front, the Air Force's proposed aircraft and personnel reductions for FY13 were met with a "strategic pause" as a result of the controversy that was generated, but will be reviewed again in FY14. The Army is also going to propose reductions in their "Force Mix/Force Design" review which should be announced in the near future. It appears that the impending announcement will indicate the installations to be affected and the thresholds for the gains or losses that could be sustained.

The visits also highlighted the Military Construction (Milcon) investments that have continued to occur at the bases since the conclusion of the BRAC 2005 proceedings. This continued investment, as well as those projected in the Future Years Defense Program (FYDP), confirm DOD's commitment to the importance of the military assets in the region and the necessity to maintain the integrity of the required components of the Power Projection Platform (i.e. strategic ports, rail, roads and airports) that is present in the State. Additionally, investments continue to be made in the naval and air components of the globally integrated operational environment which will be required to promulgate the Joint Forces 2020 strategy.

From a Base Realignment and Closure (BRAC) perspective, the State has been subjected to realignments of some of the units on the bases, but has not sustained any closures over the course of the five rounds that have been conducted (1988,1991,1993,1995 and 2005). In the most recent round, there was an initial recommendation by the Department of the Navy Analysis Group and the Infrastructure Evaluation Group (IEG) that Naval Station Everett be considered for closure in one of their five closure scenarios. The Analysis Group, along with the IEG and senior Navy leadership subsequently eliminated this scenario because of the risks associated with closing an existing deep-water nuclear-powered carrier homeport, as well as the remote likelihood of ever reacquiring this capability. All the other installations in the State were ranked high in their respective categories and were not subjected to any review for closure or realignment actions.

Because of the limited time-frame for completing this report, an in-depth review of the entire BRAC 2005 proceedings was not possible. It would be useful to conduct this type of review in the next phase of these proceedings inasmuch as there is a good possibility of another round of BRAC occurring in the not too distant future.

The visits did produce some installation opportunities which are highlighted below:

- Both NBK-Bremerton and NS Everett (NSE) do have the capability to berth an additional carrier with some modifications required. These modifications were not discussed in detail but would be required in order to pursue either, or both, alternatives. Navy Region Southwest (San Diego) has been actively promoting their capability to homeport two additional carriers and 10 additional surface ships, and a strategy should be developed to counter these activities.

- NS Everett will be replacing its current three Frigates (FFG) for three Destroyers (DDG) between now and 2019; however, its end-state will dip from 6-4-6 over this period. NSE also has capacity for additional USCG ships from District 13 if necessary.

- The Kimberly-Clark facility adjacent to NS Everett would offer a wide-range of additional berthing and maintenance and repair capabilities at NSE. The utilization of this additional berthing and maintenance and repair space would solidify NSE's continued importance as a homeport and would generate substantial, additional activity at the base when the homeported aircraft carrier was deployed.

- NAS Whidbey Island has surge capacity/expansion capabilities in the areas of hangar space and apron parking. Just recently, it has been announced that NAS Whidbey would not only be getting the three squadrons of P-8A Poseidon aircraft that they were initially programmed for, but the Navy has indicated a desire to station aircraft initially designated for Hawaii to be stationed at NAS Whidbey. This could increase the total of P-8A aircraft from 24 to 49.

- Fairchild AFB is currently vying for selection as the first Main Operating Base (MOB #1) site for the new KC-46A tanker. They meet or exceed all the USAF criteria for selection and are awaiting a down-select announcement from the USAF on a short list of candidate sites. Additionally, Fairchild AFB has space for additional aircraft since the departure in 2003 of B-52 aircraft. The base had 58 assigned KC-135 aircraft and 30 B-52 aircraft in the 2003 time-frame and now have 35 assigned KC-135's. The additional space can accommodate the new KC-46A tankers, as well as other aircraft.

- The Carrier Air Wings for the USS Nimitz and the USS Stennis are currently based at NAS Lemoore in Fresno County, California. In order to locate these aircraft closer to the ships assigned, which would ultimately be more cost-effective and decrease the time for the Wings to join the Carriers, it would be useful to undertake a study on reassigning these aircraft to NAS Whidbey Island or Joint Basing them at Fairchild AFB.

- There also appears to be an opportunity to take the cyber resources that are currently located in the Pacific Northwest (military, national lab, academia and commercial) and combine the capabilities in order to offer DOD and all Regional entities with a "Cyber Center of Excellence" that could focus on appropriate offensive/defensive capabilities that would enhance their respective missions and ensure continuity of operations.

- HAMMER Training and Education Center has the capability to expand its military and civilian homeland security and first-responder training to international customers as the military expands it focus to working with and supporting its partner nations in the Asia-Pacific Region. The focus on military partnership training will increase in the future with foreign units coming to train at JBLM, Yakima Training Center, etc. These engagements would also provide the opportunity to capitalize on the availability of the training facilities at HAMMER. Coordination between HAMMER, the State, and the military could maximize the effective utilization of this training and education facility.

Recommendations

These visits and the observed opportunities have led to the formulation of several recommendations for State consideration which have been discussed with the Governor and the WMA and are outlined below:

- The State should appoint a central point of contact within the State's leadership structure that would serve as the Governor's Director of Military Affairs. This individual would serve as the head of the Washington Military Alliance (WMA) and would have the resources and responsibility to handle military policy matters for the Governor, as well as

serving as a coordinating link between the Governor, the community groups, and the leadership of the military installations in the State. The overall objective would be to have someone that looks after the State's military bases which account for an annual economic impact of approximately $13 billion.

- The State leadership should reach out to the leadership of the military installations on a periodic basis with visits to the installations, as well as invitations to visit the State House for military roundtables, etc. Currently, the community groups are very active and effective with their support and out-reach campaigns, but adoption of this recommendation would also add focus at the highest levels of the State government and the leadership of the bases. These periodic visits would also provide the opportunity for the State and the military to update the respective parties on current activities and any issues of concern. The I Corps Public Affairs Office is developing a comprehensive plan to reach out to communities all over the State in order to educate them on the activities of JBLM. The State should participate in the formulation of this plan and, in turn, develop a similar plan to educate the military communities on the activities and the continued support to the military rendered by the State.

- The State should formalize the WMA organization which, in turn, would ensure coordination of activities on a state-wide basis and a more effective utilization of the skills, abilities and contacts residing in these organizations. Additionally, the State should develop some type of grant funding to aid the community groups in the conduct of their activities and the publication of periodic documents which they disseminate promoting the military value and accomplishments of their respective bases. These groups schedule periodic trips to their installation's command headquarters, as well as visits to Washington, DC to update appropriate Pentagon officials and the Washington Congressional Delegation and funding support would insure the continuation of these critical activities.

- The State should also initiate the formation of a working group that would investigate the establishment of Public-Private Partnerships that would focus on needed infrastructure upgrades at the bases that would ultimately benefit all participants. Some of the relevant areas that could be pursued are listed below, but are certainly not all inclusive:

  - Grid Upgrades / Grid Security
  - Wastewater Treatment Facilities
  - Communications Networks
  - Transit Systems (On-Base and Off-Base)

- The State should also consider amending the Public Records Act to exempt sensitive military base analysis information that pertains to specific base recommendations. The rationale is based on not sharing this "competition sensitive" information with bases in other states that have similar missions. There is president for this kind of legislative action as Florida has recently amended their laws to accommodate these type exemptions.

- The State should also consider the development of a "Comprehensive State Plan" in Phase 2 of this study which would include:

  - Updated information on economic impact and growth management plans.
  - In-depth analysis of BRAC 2005 data on each of the installations.
  - Specific strategies for enhancing the Military Value of the installations.
  - Actions to be taken by the various State agencies in support of the installations.
  - Specific strategies for securing new missions for the installations based on the State's unique attributes/capabilities. Areas to be considered would be computer technology/cyber-warfare; aerospace/engineering; medical/bio-technology. With the focus on cyber vulnerabilities and physical infrastructure security, Washington State is uniquely positioned to support the Washington State military facilities with all aspects of their cyber and infrastructure security requirements:

- The combined resources of PNNL, WANG, UW and the utility providers could easily develop/support the protocols necessary to ensure a high level of security (physical and cyber) at all the military installations in the State.

- A pilot project structured similar to the PNNL Puget Sound Small Vessel Preventive Rad/ Nuc Detection Pilot Project would be ideal to accomplish these objectives. PNNL could "broker" cyber related information in a closed network to the entire Northwest Region.

  - Specific strategy to promote Washington State's initiatives and support for its military installations with the installations' command structure, as well as the installations' intermediate commands, and Pentagon leadership at the Service and DOD levels.

Closing Comments

The overall policies and security goals articulated by the national and military strategy documents of the United States are broadly consistent. An evolution in emphasis from heavy military action in South Asia to broader economic interests and the rising prominence of the Asia-Pacific region, however, can be seen over the last two years.

The military installations and force structure in the Pacific Northwest have been integral to effecting these goals. The strategic forces represented by the submarine-based deterrent at NBK Bangor remain a foundation of our security. The military actions in South Asia were ably supported, with Stryker brigades deployed from Joint Base Lewis-McChord taking part in ground actions in Iraq and Afghanistan, with carriers deployed from NBK Bremerton and NS Everett providing air-to-ground support. Airlift and refueling support for U.S. operations were provided by the 62nd Airlift Wing (McChord Field) and the 92nd and 141st Air Refueling Wings from Fairchild AFB.

With the Pacific Northwest bases being one of two Asia-Pacific-facing power projection locations on the West Coast, Washington's bases remain integral to increased operations focused toward that region. The carrier deployments, troop rotations, attack submarine patrols, and airlift

and refueling that support this Asia-Pacific re-balancing of forces will require, and cannot be achieved, without the full and active participation of Washington State bases and units.

As noted in the findings and recommendations above, there are actions that can be taken to improve an already excellent level of support from the State for the installations and forces located there, as well as concerns identified in the strategy and guidance documents (such as vulnerabilities to cyber attacks) for which the State has capabilities well-placed to assist.

In summary, Washington's military presence remains perfectly aligned to project U.S. air, land, sea, and cyberspace power into the Pacific region and to support and execute the United States' strategic imperatives.