



NAVAL SURFACE WARFARE CENTER DAHLGREN, VA REALIGNMENT ISSUES

FOR

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BY

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Objectives

To discuss and gain clarification on decisions relative to:

- Relocating guns and ammo RD&A from Dahlgren, VA to Picatinny Arsenal, NJ
- Relocating non-medical Chem/Bio RD&A from Dahlgren, VA to Aberdeen, MD

Issue 1: Guns and Ammo

DoD Recommendation

- Realign NSWC Dahlgren by relocating Guns and Ammo RD&A to Picatinny Arsenal, NJ
 - 1 of 8 gun and ammo realignments to Picatinny

DoD Justification

- Realigns and consolidates Gun & Ammo facilities in W&A in RD&A
- More Robust Joint Center for Guns & Ammo at Picatinny
- Picatinny – greatest concentration of military value
- Promotes Jointness, enables technical synergy
- Positions DoD to exploit Center-of-Mass Scientific, Technical, & Acquisition Expertise

Guns and Ammo

To Guide Analysis & Recommendations,
Technical Joint Cross Service Group (TJCSG)

Established Two Principles:

- Provide efficiency of operations by consolidating technical facilities to enhance synergy and reduce excess capacity

- Retain at least 2 geographically separated sites, each of which would have similar combination of technologies and functions to:
 - Maintain competition of ideas, and
 - Provide continuity of operations in the event of unexpected disruption

■ DoD

- Identified Dahlgren as a specialty site for Naval Surface Warfare (Surface Ship Combat System Integration)
 - Unique to the Services
 - Centroid for Navy Surface Ship Developments

Concerns

- TJCSG did not follow their own principles
- Made conflicting recommendations
- Loss of technical and engineering capacity
- **NEGATIVE IMPACT ON MILITARY VALUE**

TJCSG Did Not Follow Their Own Principles

- Efficiency of operations diminished when Dahlgren gunnery and ammo personnel transferred to Picatinny while their test site, a unique over the water gun range, stays at Dahlgren

- Single siting Gunnery at Picatinny fails to retain two sites for critical National Function. Sites needed to:
 - Maintain competition of ideas
 - Continuity of operations (backup)
 - Accommodate mobilization and surge requirements

DoD Made Conflicting Recommendations

- Realigning Naval gunnery and ammo at Picatinny is in conflict with identifying Dahlgren as specialty site for surface warfare (surface ship combat system integration)
 - This removes from Dahlgren a critical element of the combat system to be integrated
 - Greatly increases difficulty of ship system integration task
(Critical design tradeoffs between guns, weapons, sensors and control systems needed to meet ship performance goals)

Loss of Technical and Engineering Capacity

- Only ~20% of the Dahlgren gunnery and ammo experts identified to move to Picatinny are expected to do so
 - Cobra calculation using 75% retention is unrealistic
 - Major time and cost implications to reconstitute Navy gunnery work force
 - Anticipate major degradation in the Navy gunnery capability similar to the Navy loss of ASW capability after closure of White Oak, MD in BRAC 95

Comments

- Future of Navy Gun RDAT&E focused on electric ship applications
 - Navy going to electric ships (DDX,CGX)
 - Available electric power allows Navy to move from propellant driven to electric driven gun systems
- Requires Highly Integrated Ship System
 - Ship Electric Power Management System
- Need Gun RD&A at Integrated Ship Site (Dahlgren) to facilitate move to the future mission capability
 - Movement to electric system evolutionary

NEGATIVE IMPACT ON MILITARY VALUE

- **Moving Navy Gun and Ammo RD&A to Army, Away from Dahlgren, the ship integration site, will seriously impact ability to meet current & future mission capabilities**
- **Ability to accommodate contingency, mobilization and surge requirements are severely impacted by single siting gunnery at either Picatinny or Dahlgren**

Recommendations

- Do not realign NSWC, Dahlgren by relocating gun and ammo RD&A to Picatinny
- Follow TJCSG stated principle and improve military value by creating two specialty sites:
 - RDATE&E for small arms and non maritime guns and ammo at Picatinny
 - RDATE&E for maritime guns and ammo at Dahlgren

Issue 2: Navy Chem/Bio Defense at Dahlgren

■ DoD Recommendation

- Realign NSWC Dahlgren by relocating Non-medical Chemical Biological Defense Research and Development and Acquisition to Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD

■ DoD Justification

- Increase synergy, focus on joint needs, and efficient use of equipment and facilities by co-locating Tri-Service and Defense activities performing function in chemical-biological defense
- Military's most robust infrastructure supporting research utilizing hazardous chemical agents
- Reduces the use of leased space within the National Capital Region
- Increases the force protection posture of realigning activities

Comment

Current Chem/Bio Defense at Dahlgren has been joint since 1995 (Public Law)

- Dahlgren has joint lead for collective protection and is the Navy's major Chem/Bio RDT&E location
 - All RDT&E Procurement funds already go through JPEO-CBD
 - DL personnel currently work and coordinate extensively with Edgewood

Concerns – Loss of:

- **Connectivity to the Fleet**
 - Being relocated to Army base removes organization from Navy Ship and Fleet focused environment

- **Navy Technical Expertise**
 - Only ~20% of personnel will move

- **Unique Shipboard CB Defense Test Environment**
 - Overwater range for chemical detection only one of its kind in U.S.; shipboard environment unique; specialized expertise in Navy ship systems essential

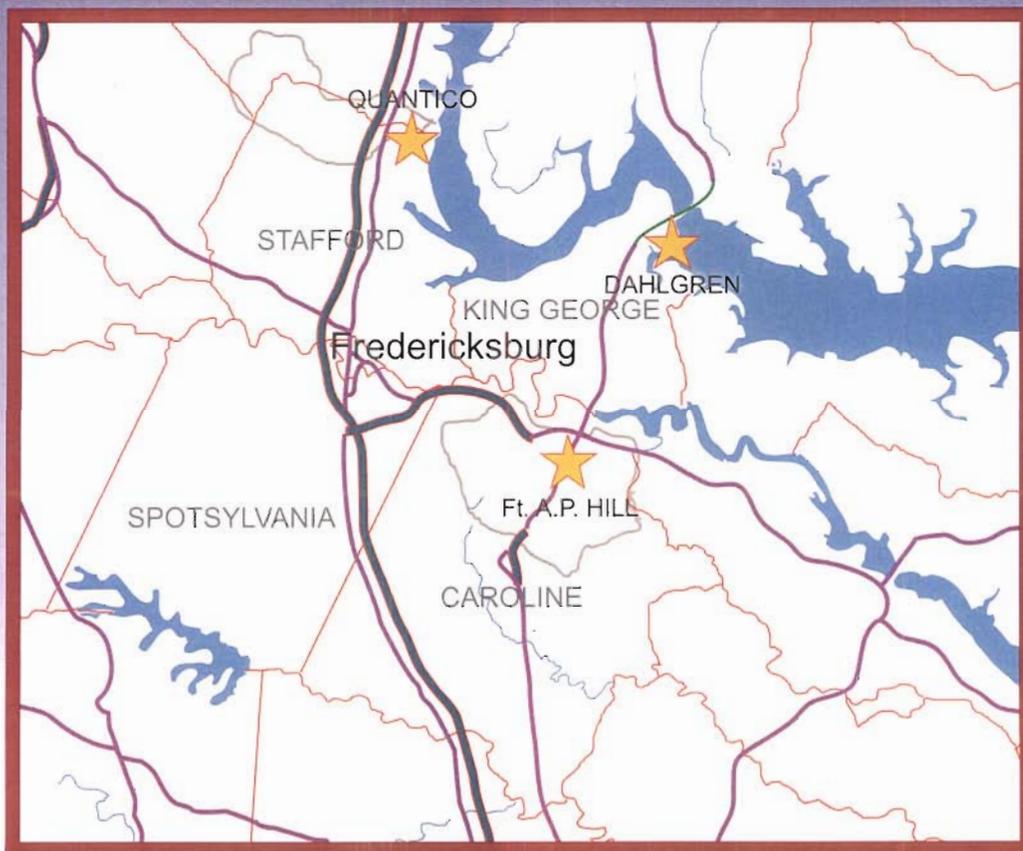
- **Specialized Dahlgren Facilities**
 - Completed 38K sq.ft. bio-safety level 3 certified laboratory in FY 02 with 19K sq.ft. addition added in FY 05

Recommendations

- **Create Joint Center of Excellence for Chem/Bio Defense**
- **Make Dahlgren Chem/Bio Team Joint Center detachment**
- **Keep Joint Center presence at Dahlgren:**
 - Supports Virginia State First Responders when necessary
 - Create two site concept for critical functions
- **Take advantage of new Dahlgren facilities and highly specialized, effective team**

Moving Activity Will Destroy Capability When Needed Most

FREDERICKSBURG REGION DEFENSE COMMUNITY



*PROVEN EXCELLENCE IN JOINT TRAINING, TESTING
AND ENGINEERING FOR THE FUTURE*

FUTURE | PROTECTING OUR HOMELAND, SHARPENING OUR COMBAT EDGE, SECURING OUR
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SHARPENING OUR COMBAT EDGE, SECURING OUR FUTURE | PROTECTING OUR HOMELAND

MARINE CORPS BASE QUANTICO "CROSSROADS OF THE MARINE CORPS"

SITE INFORMATION

Since its establishment in 1917, Marine Corps Base Quantico has been on the frontline of innovation, and has been the initial training ground for thousands of Marines. Whether it was training Marines to enter World War I, refining new amphibious tactics prior to World War II, developing new helicopter tactics during the Korean and Vietnam conflicts, or leading the way in urban tactics into the new century, Marine Corps Base Quantico – the "Crossroads of the Marine Corps" has provided invaluable service to the Nation's military might.

Situated 35 miles south of Washington, D.C. along the Potomac River, MCB Quantico covers 60,000 square acres, employs 13,000 military and civilian personnel, and has an annual operating budget of \$132 million. There are 54,000 acres of range and training area that can accommodate all weapons normally found in an infantry battalion, plus artillery and aviation ordnance.

MCB Quantico serves as the focal point for Professional Military Education (PME) within the Marine Corps.

The Expeditionary Force Development Center of the Marine Corps Combat Development Command coordinates the development of war-fighting concepts, doctrine, training, personnel structure, and equipment that will ensure that the Marine Corps is ready for future challenges.

MCB Quantico is host to several tenant activities including the Marine Corps Systems Command, the Marine Security Guard Battalion, the Helicopter Squadron One (HMX-1), the Naval Medical Clinic, and HQMC Manpower and Reserve Affairs Department. In addition, MCB Quantico is host to other government agencies such as the Federal Bureau of Investigation (FBI) Academy and Laboratory, the Drug Enforcement Administration (DEA) training facility, the Central Intelligence Agency (CIA), and the Capital Police.

MISSION

To optimize readiness by providing operational and training support, infrastructure, and community services that are responsive to Marine Corps, Marine Corps Combat Development Command, and tenant requirements, and the needs of our military members, families, and civilians within a safe and secure environment.

COMMANDS ABOARD MARINE CORPS BASE QUANTICO

1. **Marine Corps Combat Development Command's** mission is to develop Marine Corps warfighting concepts and to determine associated required capabilities in the areas of doctrine, organization, training and education, equipment, and support facilities to enable the Marine Corps to field combat-ready forces; and to participate in and support other major processes of the Combat Development System. MCCDC is comprised of Training and Education Command, Expeditionary Force Development Center, Marine Corps Warfighting Laboratory, Marine Corps Base Quantico, and Marine Corps National Capital Region Command.

2. **Training and Education Command's** mission is to develop, coordinate, resource, execute, and evaluate training and education concepts, policies, plans, and programs to ensure Marines are prepared to meet the challenges of present and future operational environments.

3. **Expeditionary Force Development Center's** mission is to integrate processes and functions that produce integrated capabilities that meet the needs of the Marine Corps and joint warfighter. The EFDC continuously examines and evaluates current and emerging concepts and capabilities to improve and sustain the Marine Corps.

4. **Marine Corps Warfighting Laboratory's** mission is to conduct concept-based experimentation to develop and evaluate tactics, techniques, procedures, and technologies in order to enhance current and future warfighting capabilities.

5. **Marine Corps Base Quantico's** mission is to optimize readiness by providing operational and training support, infrastructure, and community services that are responsive to Marine Corps, Marine Corps Combat Development Command, and tenant requirements, and the needs of our military members, families, and civilians within a safe and secure environment.

6. **Marine Corps National Capital Region Command's** mission is to coordinate anti-terrorism/force protection (AT/FP) and emergency response for the Marine Corps in the National Capital Region.

7. **Marine Corps Systems Command's** mission is to serve as the Commandant's principle agent for equipping the operating forces to accomplish their warfighting mission.

8. **Manpower and Reserve Affairs's** mission is to assist the Commandant by planning, directing, coordinating, and supervising both active and reserve forces.

9. **Marine Corps Recruiting Command's** mission is to procure qualified individuals in sufficient numbers to meet the established personnel strength levels, officer and enlisted, of the Marine Corps and Marine Corps Reserve, and to perform such other additional missions as may be assigned by the Commandant of the Marine Corps.

10. **Marine Corps Intelligence Activity (MCIA)'s** mission is to provide intelligence and services that support operating forces during all phases of military operations for intelligence products and services assigned for satisfaction by the theater, other service, or United States intelligence community; the development of service unique doctrine, force structure, training and education, and acquisition policy and programming; and the Commandant of the Marine Corps (CMC), and his staff as a member of the Joint Chiefs of Staff (JCS).

COMMANDS ABOARD MARINE CORPS BASE QUANTICO (con't)

11. **The Joint Non-Lethal Weapons Directorate's** mission is to provide warfighters a family of Non-Lethal Weapon systems with a range of optional non-lethal capabilities across the full spectrum of threats and crisis. Non-Lethal weapons are defined as "weapons that are explicitly designed and primarily employed so as to incapacitate personnel or material, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment."

12. **Marine Helicopter Squadron One (HMX-1)'s** mission is to provide vertical lift transportation and contingency support for the President of the United States, Vice President of the United States, and other dignitaries as directed; to provide planning, execution, and reporting for independent operational test and evaluation of assault support vertical lift and related systems; and to provide support as directed by the Deputy Commandant for Combat Development for student demonstrations and indoctrinations.

13. **Marine Security Guard Battalion's** mission is to provide internal security services at designated U.S. Diplomatic and Consular facilities to prevent the compromise of classified information and equipment vital to the national security of the United States of America. The secondary mission of the Marine Security Guards is to provide protection for U.S. citizens and U.S. Government property located within designated U.S. Diplomatic and Consular premises during exigent circumstances, which require immediate aid or action.

14. **The Marine Corps Network Operations Security Command (MCNOSC)'s** mission is to provide global network operations and computer network defense of the Marine Corps Enterprise Network (MCEN) in order to facilitate seamless information exchange in support of Marine and Joint Forces operating worldwide. The MCNOSC concurrently provides technical leadership for service-wide initiatives that utilize the enterprise capabilities delivered by the MCEN.

15. **Marine Corps Operational Test and Evaluation Activity (MCOTEA)'s** mission is to support the material acquisition process by managing United States Marine Corps Operational Test programs for Acquisition Category I through Acquisition Category IV (except the Operational Test of manned aircraft) and to perform such other functions as may be directed by the Commandant of the Marine Corps.

16. **Company D, 4th Light Armored Reconnaissance Battalion's** mission is to conduct reconnaissance, security, and economy of force operations and, within its capability, conduct limited offensive or delaying operations that exploit the unit's mobility and firepower.

17. **Federal Bureau of Investigation Academy's** mission is to uphold the law through the investigation of violations of federal criminal law, to protect the United States from foreign intelligence and terrorist activities, and to provide leadership and law enforcement assistance to federal, state, local, and international agencies, and to perform these responsibilities in a manner that is responsive to the needs of the public and is faithful to the Constitution of the United States.

18. **The Drug Enforcement Agency's** mission is to enforce the controlled substances laws and regulations of the United States and bring to the criminal and civil justice system of the United States, or any other competent jurisdiction, those organizations and principal members of organizations involved in the growth, manufacturing, or distribution of controlled substances appearing in, or destined for, illicit traffic in the United States; and to recommend and support non-enforcement programs aimed at reducing the availability of illicit controlled substances on the domestic and international markets.

TRAINING

Quantico Range and Training Area complex, located west of I-95, encompasses more than 50,000 acres. This land is subdivided into 13 training areas holding 41 live-fire ranges, three demolition ranges, 67 landing zones, and three-drop zones as well as special facilities such as Combat Town, the Raid Facility, and Military Operations on Urban Terrain (MOUT) Facility.

Training facilities include indoor simulated marksman trainer, MOUT facility, Infantry Officer Course (IOC) Village, Raid Facility, night integrated training, Night Vision lab, Urban Patrolling capabilities, gas chamber, live fire ranges, and many other ranges.

MISSION FACILITIES

Unique mission facilities are the Night Simulation Lab, Joint Non-Lethal Weapons Facility, DEA Clandestine Lab School, Leadership Reaction Course, Indoor Simulated Marksmanship Training Facility, Marine Corps Warfighting Laboratory Facilities, and HMX-1 Facilities.

INTER-AGENCY SUPPORT

Department of Justice units located at MCBQ include the Drug Enforcement Administration, FBI Laboratory Division, Critical Incident Response Group, and the Hostage Rescue Team (all major assets for Homeland Defense).





NAVAL DISTRICT WASHINGTON WEST AREA DAHLGREN MILITARY COMPLEX: "ADVANCING SCIENCE AHEAD OF NATIONAL MILITARY NEEDS"

SITE INFORMATION

Dahlgren is located approximately 68 miles south of Washington, D.C. between the Potomac and Rappahannock Rivers. Commands located at the Dahlgren site are steeped in Joint or Coalition Warfare development, operations, and leadership. The current trend for Joint operations and technologies has a decade-long history at the Dahlgren facilities.

NDW West Area Dahlgren consists of approximately 4,500 acres and employs approximately 4,000 civilians, 1,000 military, and 3,500 badged contractors. It has an operating budget of approximately \$1 billion.

MISSION TENANTS

Naval Surface Warfare Center, Dahlgren Division (NSWCDD) - Provides Research, Development, Test and Evaluation, and Fleet Support through Systems Engineering.

AEGIS Training and Readiness Center (ATRC) - Provides AEGIS Combat System Training to the U.S. Fleet and Allied Forces.

Joint Warfare Analysis Center (JWAC) - Provides Effects-Based Precision Targeting Options for Selected Networks and Nodes to the Joint Staff and Unified Commands.

Naval Network & Space Operations Command (NNSOC) - Provides essential information and capabilities to Naval forces via space technologies.

MAJOR PROGRAMS/CRITICAL CAPABILITIES

Joint Interoperability - Dahlgren is the only facility in the United States that can design, develop, and support a totally integrated ship. Dahlgren provides broad systems expertise and specialized support facilities and infrastructure to develop advanced systems concepts and to design and deliver fully integrated systems to the Fleet.

Dahlgren is the primary node in the national Distributed Engineering Plant (DEP) that develops data link engineering and training procedures for each Carrier and Amphibious Strike Group. Dahlgren is responsible for readiness of each Battle Group data link command and control system for Joint and Naval interoperability.

Joint Distributed Engineering Plant (JDEP) provides Joint Network-Centric warfighting support to Naval forces through satellite and space technology, and combat systems operational and maintenance training for the largest class of ships in the Navy.

AEGIS - Dahlgren is the Certification agent for the AEGIS Weapon System as well as the AEGIS Combat System. Dahlgren serves as the Lifetime Support Engineering Agent, ensuring that the AEGIS fleet is ready for service to the U.S. Navy when called upon. Dahlgren provides engineering expertise to continue to upgrade ships' capabilities, and to determine and monitor the threat. Dahlgren verifies all AEGIS computer programs before they are installed on any ship and certifies the combat system for every AEGIS ship.

Dahlgren now has a lead role in Navy's new **Open Architecture (OA)**. OA will provide for the conversion of information system protocols and equipment into a modern open architecture so that it can fight as a fleet tightly woven by data networks. It is essential as the Navy moves forward to ensure all combat systems are supportable and upgradeable, and OA was recently cited by Secretary John Young, Assistant Secretary of the Navy (Research, Development and Acquisition), as the future of the Navy.

DAHLGREN'S MAJOR PROGRAMS/CRITICAL CAPABILITIES (con't)

The AEGIS Training and Readiness Center provides both direct and indirect support to forward deployed Strike Groups and the AEGIS ships that will provide ballistic Missile Defense starting in the fall of 2004. This \$2 billion facility was intentionally co-located at Dahlgren with the AEGIS engineering group to provide the critical mass of both operational and engineering talent.

Dahlgren is the Navy's technology and development leader for guns, projectiles, and fuzes.

Dahlgren pioneered the development of fire control and targeting software for strategic nuclear weapons for the United States and United Kingdom submarines and today develops, tests, and certifies all targeting and fire control programs for the Trident Submarines. Dahlgren is the sole source of the SLBM fire control and targeting software.

Dahlgren provides system engineering, development, system verification, and deployment of the TOMAHAWK Weapon Control System Software (TWCS, ATWCS, TTWCS). Dahlgren represents the Navy's knowledge base in TOMAHAWK Weapon System computer programs and has been directly in the loop on these matters in both Desert Storm and Iraqi Freedom.

HOMELAND AND FORCE PROTECTION

Chemical, Biological and Radiological Defense - Naval Forces operating in littoral areas and at fixed sites must defend against chemical, biological and radiological (CBR) threats delivered both by conventional and unconventional means. Dahlgren provides the naval expertise for all aspects of CBR defense.

Critical Facilities/Laboratories - Dahlgren's capabilities in this area span Joint Forces and expand to civil protection and homeland defense. The detection and sensor technology and capabilities that exist at Dahlgren have been used directly in many major events, e.g. Inaugurations, the Super Bowl, and Winter Olympics, in addition to being used in the warfighting theater.

DoD Counter Narco-Terrorism Program Office - Dahlgren is the Department of Defense's Counterdrug Technology Development Program Executive Agent and provides state-of-the-art technology to DoD and civilian forces.

Critical Infrastructure & Mission Assurance - Dahlgren plays the lead role in providing integrated support to the Defense Program Office for Mission Assurance (DPO-MA). The DPO-MA manages, executes, and provides centralized coordination as the Assistant Secretary of Defense (Homeland Defense)'s oversight arm for all of the Department of Defense's Critical Infrastructure efforts.

The National Innovative Technology & Mission Assurance Center (NITMAC) - Through integrated technological capabilities, Dahlgren supports homeland security requirements for current and future global security needs of national leadership and operational forces.

Joint Warfare Analysis Center (JWAC) - Produces products that directly give joint forces Commanders with limited resources the ability to decide which targets to attack and not to attack.

ESSENTIAL FACILITIES

- Potomac River Littoral Warfare Test Range
 - Only over-water instrumented test range in world
- Herbert H. Bateman Chemical and Biological Defense Center
 - One-of-a-kind collective protection lab
- AEGIS Training and Readiness Center
 - Efficient single site Officer and Enlisted Training for AEGIS Fleet
 - Co-located with AEGIS Engineering for manual support 172,000sq. ft. facility with \$1.6 billion in equipment
- Human Systems Integration Laboratory
 - Surface Warfare's HSI Focus Center with new state-of-the-art human performance prototype and testing laboratory
- Crisis Operations Center supports special warfare missions

FORT A.P. HILL, VIRGINIA

"WHERE AMERICA'S MILITARY SHARPENS ITS COMBAT EDGE"

SITE INFORMATION

Fort A.P. Hill is an all-purpose, year-round, military training center located in Caroline County, Virginia, 20 miles southeast of Fredericksburg and 45 miles north of Richmond. With 76,000 acres of land, including a 28,000-acre live-fire range complex and training unencumbered by environmental or encroachment constraints, A.P. Hill is used extensively for Army and joint warfighter training exercises, as well as interagency use. It is one of the largest East Coast installations and is the range and training center nearest the National Capital Region. It is one of only two installations in the Northeastern section of the United States capable of training a large maneuver force.

Fort A.P. Hill is the home installation for 65 fulltime soldiers, including those assigned to the garrison, tenant organizations, and nearby units, as well as another 381 National Guard and Reserve Soldiers. Civilians working on the post number 368. In addition, Fort A.P. Hill hosts an average daily training population of 1,628 military personnel. Its total annual operating budgets average around \$22 million.

The installation was an Army Communities of Excellence award finalist for 2003, recognized for its success in facilities management, customer service and support, human resources, and business management practices.

MISSION

To provide realistic joint and combined arms training, logistics and support services and to enable America's Defense Forces to achieve success on the 21st century battlefield.

TRAINING

The installation hosts between 500,000 and 800,000 man-days of training annually, generated by an average of 78,900 military members, including foreign military allies from Canada, the United Kingdom, and Germany.

A new 39-kilometer maneuver corridor allows combat teams to engage a series of objectives and conclude their exercise with a combined arms live-fire event. A new convoy ambush live fire range has been constructed to help military units better prepare for the hazards and dangers associated with convoy operations in Iraq.

The installation offers 38 direct fire ranges and 50 indirect fire ranges capable of accommodating mortar, artillery, and combined running fire, hover fire, and terrain flight aerial gunnery.

The installation is used by Marines from the East Coast Marine Expeditionary units, as well as several elements of the 2nd Marine Division.

INTER-AGENCY SUPPORT

Fort A.P. Hill serves every component of the U.S. Armed Forces, Active and Reserve, and several other agencies of the U.S. government, including the Bureau of Alcohol, Tobacco and Firearms, Immigration and Naturalization Service, and State Department. The ATF has located its National Center for Explosives Training and Research at Fort A.P. Hill and is now conducting 30 - 40 classes annually. The ATF recently began a partnership with the Department of Defense and is teaching post-blast investigation procedures to military explosive ordnance experts - training that will be employed in the Global War on Terrorism.

TENANTS

Army's Night Vision and Electronic Sensors Directorate (NVESD), Naval Special Warfare Group Two, Company B, 3rd Battalion, 2nd Special Forces Group, the 80th Division Drill Sergeant School.

NATIONAL SUPPORT

Fort A.P. Hill provided rapid assistance to Pentagon recovery efforts following the September 11, 2001 terrorist attacks and currently serves as a regional provider for military rations and ammunition. The Federal Emergency Management Agency staged from A.P. Hill during Hurricane Isabel in 2003.

The Department of Defense, under provision of Public Law, provides support every four years to the National Scout Jamboree, the premier event of the Boy Scouts of America (BSA).

FREDERICKSBURG REGION ECONOMIC IMPACT OF DEFENSE PERSONNEL AND DOLLARS

MILITARY ECONOMIC IMPACT EXCEEDS _____ \$1.2B

CIVILIAN/MILITARY PERSONNEL _____ 21,886

ADDITIONAL JOBS PROVIDED _____ 9,936

TOTAL JOBS PROVIDED _____ 31,822
(32% of entire regional workforce)

EMPLOYEE COMPENSATION AND PURCHASES MADE _____ \$94.3M

ANNUAL TAX REVENUE FOR COMMONWEALTH OF VA _____ \$70M

For further information, contact:



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BAE SYSTEMS

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