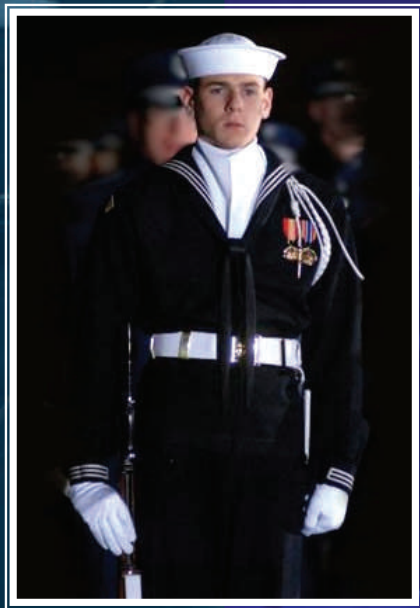


# Naval Air Warfare Center Aircraft Division / Weapons Division Strategic Plan



*Charting Our Course*



April 2008



# *A Message from the Commanders and Executive Directors*

## *Naval Air Warfare Center*

### *Aircraft Division / Weapons Division*



Our Strategic Plan flows from the vision, goals, and guidance of the Chief of Naval Operations and Commander, Naval Air Systems Command (NAVAIR). It also recognizes and addresses the combined strengths, capabilities, and synergies of the Naval Air Warfare Center Aircraft Division and Weapons Division (NAWCAD/WD) organizations that uniquely distinguish our respective roles and responsibilities as core technical providers for the Naval Aviation Enterprise. Our strategic objectives are classified into three broad initiatives: 1) *Winning Today* — sustaining current readiness and helping win today's Global War on Terror, 2) *Securing the Future* — transforming resources into needed future Naval Aviation capabilities, and 3) *Revitalizing the Workforce* — hiring, developing, and retaining



the highest quality workforce in collaboration with National Level 1 Competency Leaders. Operating within the tenets of NAVAIR's Competency Aligned Organization/Integrated Product Team (CAO/IPT) concept, NAWC Aircraft and Weapons Divisions will collaborate to continually enhance our internal relationships, recognize key interdependencies, and identify opportunities for synergy. We will collectively strengthen and strategically leverage our technical, business, and leadership excellence to realize these objectives, and to create a common vision that enables our Sailors and Marines to succeed in every mission and return safely home.

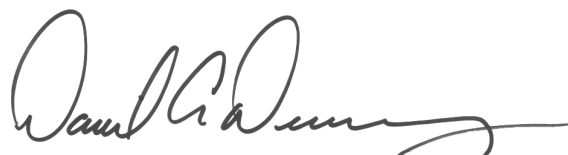


The purpose of this Strategic Plan is to chart the NAWCAD/WD course into the future. The plan articulates our continuing mission execution areas and enduring values. It also serves as an instrument to focus resources, make investments, and prioritize activities for efficient and responsive support to the Naval Aviation Program Executive Officers (PEOs), National Level 1 Competency Leaders, and NAWCAD/WD Commanders. This document reflects the collective contributions of NAWCAD and NAWCWD leaders, customers, and external stakeholders. The resulting strategic framework and objectives are intended to be simple, relevant, and powerful in their ability to guide and to influence our future. NAVAIR's NAWC Aircraft and Weapons Divisions are, and will continue to be, the world's most advanced research, development,



acquisition, test and evaluation centers. NAWCAD and NAWCWD support efficient delivery and lifecycle support of Naval Aviation capabilities required to meet our nation's challenges now and in the future.

  
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# STRATEGIC VISION

*SAILORS AND MARINES ARMED WITH CONFIDENCE BECAUSE WE DEVELOP, DELIVER, AND SUSTAIN AIRCRAFT, WEAPONS, AND SYSTEMS, ON TIME AND ON COST WITH PROVEN CAPABILITY AND RELIABILITY SO THEY SUCCEED IN EVERY MISSION AND RETURN SAFELY HOME.*

## STRATEGIC OVERVIEW

The NAWCAD/WD Strategic Plan is intended to guide workforce activities and priorities now and throughout the Future Years Defense Plan. This Strategic Plan is aligned with higher authority strategic guidance, while also being tailored to specific NAWCAD/WD mission tasking and needed future capabilities. NAVAIR National Level 1 Competency Leaders will define the specific requirements for capability and capacity in the Warfare Centers.

The NAWCs will operate similarly using a construct of Technical Competency, Integrated Product Team (IPT) and Warfare Centers balance. Competencies are responsible for technical authority, technical process, and personnel training in support of programs. IPTs are empowered by DOD acquisition directives in the execution of Congressionally allocated funds. The Warfare Centers are geographical organizational elements that provide community and political interfaces, human capital management functions, and the designated economic functions of the Warfare Center. Competency personnel will support programs via IPTs and provide a constructive tension between technical conscience of the Competency with the cost, schedule, and performance constraints inherent in acquisition programs. National Competency interests in the execution of IPT programs are a priority over local Warfare Center interests. However, local concerns will be given full consideration and accommodated whenever possible to ensure the present and future economic viability of the NAWCs.



The Warfare Centers comprise more than 19,000 civilian, military, and contractor support personnel and facilities aligned to National Competencies operating out of facilities at Patuxent River, Maryland; Lakehurst, New Jersey; Orlando, Florida, and China Lake and Point Mugu, California, with a total business base of approximately \$4 billion. NAWCAD/WD personnel serve on IPTs and Externally Directed Teams (EDTs) for other customers, which provide the expertise to develop, test, acquire, and sustain critical Naval Aviation assets throughout the acquisition lifecycle. We also support the interests of



national security in the Global War on Terror, and are stewards of some of the nation's most valuable laboratory and test and evaluation assets. NAWCAD/WD leadership is responsible for aligning all aspects of operations with the goals of DOD, the Navy, Naval Aviation Enterprise (NAE), and NAVAIR, as well as Base Realignment and Closure (BRAC) law. NAWCAD/WD is a preeminent technical resource for our Naval Aviation forces. Our focus on the Sailor and Marine will provide an overarching sense of direction as we implement our three strategic objectives – *Winning Today, Securing the Future, and Revitalizing the Workforce*.

### *Winning Today*



The Warfare Centers will collaborate with National Competencies and IPTs to be continually responsive to immediate Warfighter capability and reliability needs. We will implement a model of fast-reaction responsiveness that leverages NAVAIR's unique facilities and expertise against emerging threats and uses rapid prototyping capabilities to their fullest. We will enhance safety and weapons effectiveness and enable the attainment of Fleet goals for Aircraft Ready for Tasking at reduced costs. We will continue to focus on areas of core mission responsibility, including: manned and unmanned aircraft research, development, acquisition, test, and evaluation

(RDAT&E); modeling and analysis; RDAT&E/integration and in-service engineering of air-launched and tactical weapons; ship-shore-air interoperability; training systems development; and operational sustainment.

### *Securing the Future*

The NAWCs will enhance Naval Aviation technical capabilities and promote technological innovation. Our primary contribution toward future capabilities is made through RDAT&E support to Naval Aviation and DOD acquisition programs, including the accelerated application of science and technology (S&T) and support for DOD initiatives. We will facilitate the interoperability of Naval Aviation systems in a network-centric battlespace. Additional areas of emphasis for technology advancement will include: sensor/intelligence fusion; advanced electronic warfare; targeting/fuzing; nanotechnology; advanced energetics; directed-energy effects on air platforms; threat simulation; use of non-metallic structures; non-petroleum based fuels; acoustics; electro-magnetics; new rotorcraft drive systems; human behavior modeling; and immersive training environments. While our focus will remain on Warfighter needs, we value innovative ideas and concepts which may not be defined by an established





requirement. To this end, we will explore new technology with the goal of developing advantages over current and future adversaries. We will rely on strategic partnerships to achieve Naval Aviation science and technology objectives. We will meet the requirements of new tactics and missions, such as persistent intelligence, surveillance and reconnaissance, adding focus and definition to unmanned systems capabilities. Tomorrow's programs will rely on our mission facilities and competency expertise to ensure delivery of needed capabilities – on time, on cost, with the reliability and capability our Fleet needs and deserves.

### *Revitalizing the Workforce*



The NAWCs operate in support of NAVAIR's Total Force – an integrated military, civilian, and contractor force aligned to national competencies with the right balance of business acumen, technical expertise, innovation, and agility to succeed in dynamic times. NAVAIR must continue to attract, develop, and retain a diverse workforce to continue performing our mission effectively. To do this, we will work with national Level 1 competency leaders to revitalize our technical capabilities in the sciences. We will emphasize continuous education, advanced degree programs, and partnering with other technical and educational organizations for the development of vital professional knowledge and skills. The workforce must be equipped with the tools, processes, and facilities needed to excel. Business processes will be lean, fast, flexible, and responsive, evolving as required to meet changing needs. We will actively employ enterprise operations with national competencies, to avoid needless duplication and costs, and to speed capability delivery to the Warfighter. We will expand this theme of partnering to include local communities in workforce revitalization, environmental stewardship, and other mutual priorities.

## STRATEGIC OBJECTIVES

Strategic objectives are numbered for ease of reference in discussions and implementation. Under *Winning Today*, four Current Readiness objectives are numbered C1 through C4; under *Securing the Future*, eight Future Capability objectives are numbered F1 through F8; and under *Revitalizing the Workforce*, four Revitalization objectives are numbered R1 through R4.

### WINNING TODAY

- *C1: Successfully Support Fleet Needs for In-Service Support*
- *C2: Implement Fleet-Oriented Operating Model for Accelerated Solutions*
- *C3: Sustain and Evolve State-of-the-Art Ground and Flight Test Capability to Meet Navy and DOD Requirements*
- *C4: Sustain and Enhance National Assets and Centers of Technical Excellence*

**T**he NAWCs will continue to serve the Sailor and Marine by effectively meeting today's capability needs and by meeting reliability, cost, and other targets of the NAE and other warfare enterprises.

## C1

### Successfully Support Fleet Needs for In-Service Support



Our Warfare Centers make the support of current readiness a priority and provide critical expertise to the Operations and Support (O&S) phase of Naval Aviation systems life cycle support. In-service expertise will serve IPTs, Fleet Readiness Centers (FRCs), and the Fleet by providing technical solutions to acquisition and sustainment programs, including: design and development engineering, production line technical support, engineering investigations, mishap investigations, provisioning services, flight line technical support, and other in-service engineering or logistics support services.

## C2

### Implement Fleet-Oriented Operating Model for Accelerated Solutions

NAWCAD/WD will enhance responsiveness to immediate Fleet needs through three basic initiatives: 1) facilitating NAVAIR's Distant Support Initiative, 2) connecting with the Fleet, and 3) enhancing rapid prototyping capabilities.

#### Facilitating NAVAIR's Distant Support Initiative

We will leverage existing NAWCAD/WD distant support capabilities to support NAVAIR's Distant Support Initiative, to include improved processes to identify, prioritize and resource the needs of the Warfighter. We will also increase Fleet awareness of NAWCAD/WD support capabilities and appropriate entry points for the authoritative source-of-support provider. In implementing this initiative we will consider all available distant support processes and tools to ensure rapid reactive, proactive, and predictive distant support opportunities to execute appropriate coordination, tracking and rapid resolution of emergent Warfighter issues.



#### Connecting with the Fleet

NAWCAD/WD will establish liaisons with strategically selected customer organizations (e.g., other Systems Commands; Commander, Naval Air Forces; and Combatant Commander staffs). These individuals will be selected based on their communications skills and knowledge of NAVAIR and of Joint and combined operations, to assure greater responsiveness to joint warfighter and Fleet priorities.

## Enhancing Rapid Prototyping Capabilities

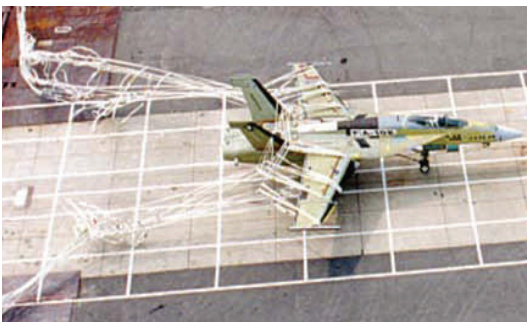
As enemy tactics evolve at an accelerated pace and the life cycle of many Warfighter products shortens, we will see a growing demand for rapid prototyping capabilities, to include modifications to currently fielded systems. NAWCAD/WD will fully utilize its robust rapid prototyping facilities and enhance related technical capabilities to meet customer needs. We will enhance these capabilities through the advanced Aircraft Prototype Facility Military Construction (MILCON) project and by applying industry best practices and tools in our rapid prototyping operations.

### **C3** Sustain and Evolve State-of-the-Art Ground and Flight Test Capability to Meet Navy and DOD Requirements

NAWCAD/WD will continue to enable the Test and Evaluation (T&E) competency to safely and efficiently conduct all aspects of flight testing and flight operations, to include aircraft launch and recovery. Airfield facilities, test ranges, targets, threat simulation systems, and telemetry will be up and available for use. T&E engineers, pilots, and maintainers will be trained and ready. Additionally, we will reduce program technical risk and accelerate delivery of needed capabilities to the Warfighter. We will accomplish this through early integration of T&E with research, development, and acquisition activities, networking of ranges, and effective use of simulation, ground testing, and other risk management practices. We will manage encroachment through a program of active community engagement. This will be accomplished collaboratively and in coordination with the Commander, Naval Installations Command. We will ensure that critical investments and repairs to physical infrastructure align with the evolving nature of systems tested, and that those investments receive the prioritization and resourcing support required to perform the mission.



### **C4** Sustain and Enhance National Assets and Centers of Technical Excellence



There are several Major Range and Test Facility Base (MRTFB) national asset facilities and laboratories resident at NAWCAD/WD sites. These support competency centers of technical excellence serving Naval Aviation and other national security needs. Working with national Level 1 leaders, we will act as responsible stewards of these assets to make the investments needed for their continued effectiveness. For example, MILCON prioritization, while often tied to Naval Aviation acquisition programs promising



essential future capabilities, also reflects our responsibility to assure continued value of national assets and centers of technical excellence to the armed services and the Department of Homeland Security (DHS). We will thus utilize our skills and facilities to enable the competencies' greater jointness in RDAT&E. Additionally, this will enable the NAE and DOD to realize the cost savings and other benefits associated with jointness and interoperability. Several of these areas of unique technical excellence, listed below, have been formally recognized through the Defense BRAC process as Joint Centers and/or previously designated as DOD Lead centers under Project Reliance. Additional detail on these centers is contained in Appendices A and B.

#### **Centers Recognized in the 2005 Defense BRAC Decision for Manned and Unmanned Air Platforms:**

- Joint Center for Rotary Wing Air Platform RDAT&E
- Center for Fixed Wing Air Platform RDAT&E
- Center for Aircraft Launch & Recovery Equipment (ALRE)/Support Equipment (SE)
- Center for a Naval Integrated Weapons and Armament RDAT&E
- Center for Fixed Wing Air Platform Survivability Live Fire T&E



#### **Other DOD Centers of Excellence/U.S. National Assets:**

- DOD Center of Excellence for Precision Approach Landing Systems /Combat Identification (CID)/Air Traffic Control (ATC)/Air-Ship Integration
- DOD Electromagnetic Environmental Effects (E3) Center of Excellence
- U.S. Naval Test Pilot School (USNTPS)
- Subscale Subsonic Aerial Targets, Supersonic Missile Targets, Sea-Surface Vessel Targets, and EO/IR/RF Threat Simulation Payloads for Targets

## **SECURING THE FUTURE**

- *F1: Enhance Integration and Interoperability among Naval and Joint Systems*
- *F2: Emphasize Development of Network-Centric Warfare Capabilities for Joint and Coalition Warfare*
- *F3: Enhance Future Unmanned Air Systems (UAS) Capabilities*
- *F4: Better Leverage Science and Technology*
- *F5: Provide World Class Modeling, Simulation, and Analysis (MS&A) of Aircraft and Other Systems in the Joint Battlespace*
- *F6: Establish and Leverage Partnerships and Alliances to Meet Customer Needs*
- *F7: Develop a Laboratories, Ranges and Facilities Investment Strategy*
- *F8: Provide a Full Range of Innovative Products and Services that Generate Complete Training Solutions*

**N**aval Aviation's future capabilities depend on successful acquisition programs. NAVAIR and the Naval Aviation Program Executive Officers (PEOs) are jointly committed to program success. Effectively enabling that commitment is NAWCAD/WD's foremost responsibility — proactively addressed below relative to major influences and management priorities.

## F1

### Enhance Integration and Interoperability among Naval and Joint Systems

The need for interoperability will grow in importance as the government assumes a greater role in prime systems integration within an increasingly complex system-of-systems battlespace. NAWCAD/WD will meet these integration and interoperability challenges by enabling “net-ready” technical interfaces aligned with established joint architectures and interoperability standards. Competency personnel resident at NAWCAD/WD will engage in the cross-program, cross-service coordination essential to fielding systems that are interoperable with the Navy’s joint and coalition partners. We will help strengthen NAVAIR systems engineering expertise, and work with national competency leaders to invest in needed physical infrastructure and skill sets for advanced technical capabilities in system-of-systems modeling, simulation, and analysis (MS&A), weapons systems and component interfaces, human systems integration, and hardware-in-the-loop development.

## F2

### Emphasize Development of Network Centric Warfare Capabilities for Joint and Coalition Warfare

NCW is a key enabler for persistent Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR), Time Critical Strike, and joint interoperability. Competency expertise at NAWCAD/WD will conceive, develop, test, integrate, and deploy tactical, communications, surveillance, and other mission systems to successfully enable the performance of manned and unmanned systems in the joint networked battlespace. This includes a strong emphasis on electronic warfare, advanced information warfare, and advanced information operations. Facility development programs will promote interoperability and open systems concepts and standards. They will interface with the Global Information Grid (GIG), air-ship-shore C4I networking, and sensor/intelligence fusion within the battlespace (including logistical/maintenance support systems). We will work with national competency leaders and the Naval Aviation PEOs toward the development of joint test capabilities and strategies that enable cross-service interoperability with Naval Aviation assets. Pursuit of this objective will also require partnering with the Office of the Deputy Chief of Naval Operations for Communication Networks (N6), the Space and Naval Warfare Systems Command (SPAWAR), Naval Network Warfare Command (NETWARCOM), and other naval and joint organizations.



## F3

### Enhance Future Unmanned Air Systems (UAS) Capabilities



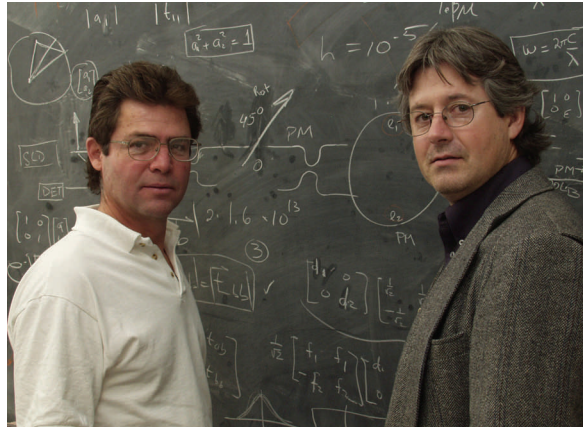
Future Naval Aviation missions will involve complex roles for unmanned systems and payloads. NAWCAD/WD will collaborate in developing associated avionics, platforms, weaponization, tactics, concepts of operations, and integration techniques and standards that enable successful UAS operations in the manned/unmanned battlespace.



Recognizing the unique capabilities that unmanned air systems provide, we will support Naval Aviation's overarching strategy and roadmap for UAS capabilities enhancement and interface/integration with all type/model/series aircraft.

## **F4** Better Leverage Science and Technology (S&T)

NAWCAD/WD has witnessed a general decline in S&T funding, which threatens our ability to adequately prepare our Sailors and Marines for tomorrow's conflicts. NAWCAD/WD, in support of national competency leaders, will become increasingly involved in S&T work tied to the projected needs of Naval Aviation future capabilities. We do not have the technical facilities or the technical workforce to actively pursue all relevant fields of enabling technology. Therefore, our strategy includes leveraging work at universities, industry, and other government laboratories. That involvement must *provide advanced*



*technologies with better opportunity to transition into operational use by our warfighters and assist in the recruitment, development, and retention of technically knowledgeable NAWCAD/WD scientists and engineers (S&Es).* Toward that end we will reinvigorate our postdoctoral fellowship program, our summer faculty program, and our involvement with the Naval Research and Engineering Internship Program. To develop in-house NAWCAD/WD S&E expertise and attract greater S&T workload, NAWCAD/WD will work closely with the Office of Naval Research (ONR), the Defense Advanced Research Project Agency (DARPA) and other OSD agencies such as the Defense Threat Reduction Agency (DTRA) and Strategic Environmental Research and Development Program/Environmental Security Technology Certification Program (SERDP/ESTCP). Partnerships with academia, industry, and other federal laboratories are strongly encouraged. We will work with the Fleet and Combatant Commanders to infuse a user/Warfighter perspective into technology development and transition efforts. NAWCAD/WD will respond to high priority technology vectors, articulated by the NAVAIR Chief Technology Officer (CTO), that provide a critical warfighting edge to the Sailor and Marine.

## **F5** Provide World-Class Modeling, Simulation, and Analysis (MS&A) of Aircraft and Other Systems in the Joint Battlespace



The NAWCs will provide world-class MS&A of platforms, weapons, sensors, and other systems in the joint battlespace. MS&A tools are critical for decision-makers during all mission phases including concept exploration, prototype design, analysis of alternatives, weapons integration studies and analysis, logistics analysis, manning studies, training systems, and Tactics, Techniques, and Procedures (TTP) development. MS&A is also fundamental to creating a virtual "net-centric" environment and a realistic but safe arena to prepare for missions of the future. We will build on advanced MS&A facilities and



competency expertise in viewing MS&A as part of the toolset of sound systems engineering practices. We will continue to invest in relevant, leading-edge technologies and expertise across the broad range of MS&A activities. We will also seek out opportunities for synergistic MS&A collaboration among RDAT&E, experimentation, training, and joint operational communities.

## **F6 Establish and Leverage Partnerships and Alliances to Meet Customer Needs**

The NAWCAD/WD will continue to strengthen work with national competency leaders to recognize and develop RDAT&E capabilities essential to core mission areas while strategically leveraging—through partnerships and alliances—the technical expertise resident in other organizations. Enterprise partnerships enable us to increase the speed and effectiveness of response to our Warfighter customer needs. The

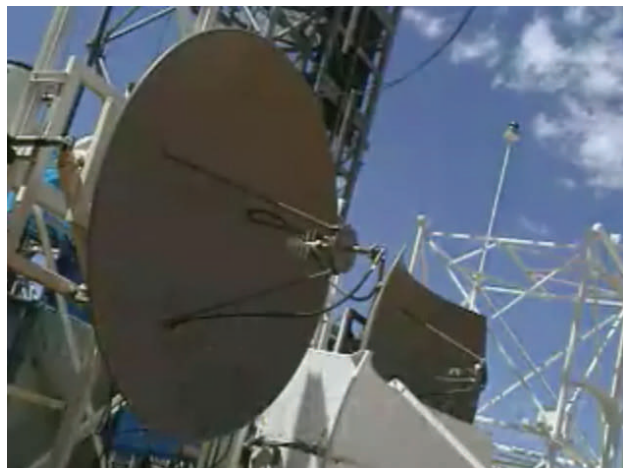


NAWCAD/WD's partnering organizations include the Naval SYSCOMS, joint services, DOD and federal agencies, Combatant Commanders, foreign military relationships, industry, and academic institutions and organizations. NAWCAD/WD will coordinate technology development in mutual support of Naval Aviation RDAT&E programs and other mission-required DOD RDAT&E programs. Close coordination among competencies is essential to reduce wasteful duplication in capital investments when performing work relating to UAS, NCW,

directed energy, interoperability, evolving warfare concepts, and other efforts. We will also promote the use of Cooperative Research and Development Agreements and Commercial Service Agreements to speed development of new Warfighter technologies and optimize critical infrastructure. We will encourage educational partnerships to provide the workforce at NAWCAD/WD with access to an expanded knowledge base and pioneering research findings. This partnership goal is sufficiently important to stand as a separate strategic objective while also serving as a NAWCAD/WD strategy for the successful implementation of every other objective contained in this Strategic Plan.

## **F7 Develop a Laboratories, Ranges and Facilities Investment Strategy**

The NAWCAD/WD will set priorities for strategic investments in our laboratories, ranges and facilities, to keep pace with advanced technologies essential to mission excellence. The NAWCAD/WD Investment Strategy encompasses all sources of capital investment financing impacting the NAWCAD/WD infrastructure. It will be directly linked to Naval Aviation programs and related S&T requirements as specified in the NAVAIR Commander's Guidance for 2007. Sources of funding addressed in the Investment Strategy will include Major Range and Test Facility Base, Improvement and Modernization, Capital



Improvement Program, and MILCON. NAWCAD/WD investments contained in official Command budget estimates will be traceable to the current NAWCAD/WD Investment Strategy.

## **F8**

### **Provide a Full Range of Innovative Products and Services that Generate Complete Training Solutions**

Training systems are fundamental to helping our Sailors and Marines operate safely and effectively in air, surface, subsurface, and cross-warfare domains. NAWCAD/WD's Training Systems Division, Integrated Battlespace Simulation and Test Department, and the Threat/Target Systems Department will deliver training systems that incorporate relevant technology advances and integrate the science of learning with performance-based training and measures of effectiveness. We will continually engage with our Sailors and Marines to better understand their challenges and capability needs. We will respond with comprehensive, cost-effective training solutions.

## **REVITALIZING THE WORKFORCE**

- *R1: Enable Technical Excellence*
- *R2: Enable Leadership Excellence*
- *R3: Enable Business Excellence*
- *R4: Attract and Retain the Nation's Best and Brightest Personnel*

**N**AWCAD/WD will work with national competency leaders to revitalize the workforce and equip people with the knowledge, facilities, tools and processes essential to future excellence.

## **R1**

### **Enable Technical Excellence**

NAWCAD/WD will promote technical excellence and grow subject matter expertise in every discipline essential to the acquisition and support of capable and reliable air and weapon systems. This will be accomplished in support of NAVAIR's total workforce goals and objectives. Technical excellence will be nurtured through highly selective hiring, effective education and training programs, and aggressive retention policies. We will implement an advanced degree program within the USNTPS, and will provide more advanced degree opportunities to the NAWCAD/WD workforce from academic institutions. To enhance individual and team skills, we will promote technical exchange programs and developmental assignments, attendance and presentations at technical symposia and conferences, and membership in technical societies. We will also promote a technical career path to senior grades for military and civilian personnel as a viable alternative to advancement through program and competency management. We will combine this advanced technical expertise within our workforce with a greater understanding of user needs and the operating environment through broader exposure and





assignments in the Fleet; at NAVAIR, Navy, and DOD Headquarters; and throughout the Unified Combatant Commands. We will place particular emphasis on the following:

### **Program Performance**

NAWCAD/WD will promote Program Performance excellence through early and stable participation of S&Es in program execution and collaboration with industry partners to identify and correct root causes of program performance shortfalls. We will leverage Competency initiatives to train in Earned Value Management and risk management techniques, to achieve improved cost, schedule, and technical performance outcomes. We will support the Program Management competency's effort to promote excellence in program/project management throughout the Program Management community, and NAWCAD/WD competencies through renewed emphasis on Defense Acquisition Workforce Improvement Act certifications and equivalent academic certifications. We will also encourage participation in relevant associations, such as the Project Management Institute, and in appropriate exchange programs and developmental assignments.

### **Systems Engineering**

As part of the Navy's Provider Enterprise and in support of the goals established by the Assistant Secretary of the Navy for Research, Development, and Acquisition, NAWCAD/WD will further develop and enhance its systems engineering expertise, including software development/acquisition and lifecycle management, to meet mission requirements. In developing these technical capabilities, we will emphasize effective systems engineering for system-of-systems and family-of-systems to ensure Naval Aviation interoperability in the joint battlespace. We will position our personnel for new challenges by providing education and training opportunities and the necessary infrastructure to take on prime systems integration roles in major acquisition and sustainment programs.



### **Research and Development**



We will increase our knowledge in those technologies considered by the competencies to be essential to future Naval Aviation capabilities, such as sensors, systems interfaces, power and propulsion, electronic warfare, materials, anti-tamper, miniaturization, intelligent automation, directed energy, and hypersonics. We will share information with programs outside Naval Aviation to save time and money and facilitate joint interoperability. Our culture and business mechanisms will encourage and reward innovation through a more robust patent program and other initiatives to emulate best practices from industry, government, and academia. We will encourage the utilization of post doctoral fellowships, research internships, and other vehicles that will allow us to engage additional expertise and apply it to specific Naval Aviation technologies.



## Test & Evaluation

T&E expertise and best practices are critical to effectively support all programs requiring Developmental Testing (DT) and Operational Testing (OT). The NAWCAD/WD T&E Competency will promote the use of the Integrated Test Team (ITT) as a standard practice. Through integrated test planning, execution, and data sharing, ITTs consisting of industry, DT, and OT personnel will eliminate duplicative testing and its associated costs, schedule, and test assets. Using the ITT model, we will encourage full participation and coordinate our T&E efforts with the Operational Test and Evaluation agencies by increasing awareness of the OT directors / coordinators concerning weapon system capabilities. NAWCAD/WD will also provide the workforce with the specialized test, evaluation, and experimentation certification, education, training, and resources needed for superlative performance. We will leverage the knowledge and expertise of AIR 5.0 Competency Assistant Program Executive Officers for T&E, Assistant Program Managers for T&E, and Lead Test and Experimentation Engineers in our training and educational programs. Additionally, we will promote membership and participation in relevant professional associations, such as the International T&E Association and the Society of Flight Test Engineers. We will obtain accreditation of the USNTPS long-course curriculum for a graduate degree in Flight Test Engineering. USNTPS will continue to develop short courses and incorporate lessons learned from past test programs into training curricula. NAWCAD/WD will develop leading edge T&E facilities and evolve innovative T&E methods as systems under test become more complex. We will collaborate with other service counterparts on T&E best practices and incorporate those that are beneficial to NAWCAD/WD T&E.



## R2 Enable Leadership Excellence

NAWCAD/WD will support Navy leadership and NAVAIR command-wide efforts to cultivate within its workforce the character, vision, knowledge, and management skills needed of 21<sup>st</sup> century leaders. Our



leaders will possess a broad understanding of the role of Naval Aviation in meeting national security objectives and of the role of NAVAIR in the NAE. They will inspire subordinates and hold themselves accountable for performance to customer and higher authority expectations. NAWCAD/WD will incentivize leadership excellence through evaluation and promotion policies that favor rotational assignments in customer organizations, cross-competency experience, proficiency in communication and collaboration, and proven ability to deliver programs on time and within budget. We will



also provide employees with formalized leadership training that stresses character values, customer focus, cross-organizational collaboration, mentoring of junior personnel and strategic communication. NAWCAD/WD leaders will, by their decisions and conduct, personify the Navy's core values of honor, courage, and commitment.

## **R3** Enable Business Excellence

NAWCAD/WD will be known for its business acumen and operational efficiency while consistently meeting or exceeding customer expectations. All personnel will be familiar with and regularly apply the basic principles and techniques of continuous process improvement implemented under NAVAIR *AIRSpeed*.

### **Business Acumen**

NAWCAD/WD Corporate Operations, Comptroller, Contracts, and Legal Counsel competencies are critical to the vitality and success of the organization. They support strategically-aligned and fact-based executive decisions and facilitate operational efficiencies. NAWCAD/WD will serve as a model



in the development and application of the associated business skills. We will work with the leaders of these competencies to continuously seek new ways to carry out these functions with greater speed and accuracy and at less cost, including the use of common standards, co-locations and other cross-organizational combinations and partnerships. We will adapt situational business models and industry best practices while aligning measures with desired outcomes. We will be adept at understanding and managing costs, rate structure effects, business forecasting, cash flow, and unexpended carryover. NAWCAD/WD will employ its Government/Industry Acquisition Improvement Team to develop improved processes for supporting the complex program acquisitions and contractor support arrangements demanded in this strategy. We will also proactively support larger corporate NAVAIR, Navy, and DOD business systems with their

promise of enhanced data integrity and infrastructure streamlining, such as National Security Personnel System (NSPS) and Navy Enterprise Resource Planning (ERP).

### **Process Improvement**

NAWCAD/WD strives to instill in the workforce a culture of continuous process improvement. We will institutionalize NAVAIR's *AIRSpeed* toolset and continue to proactively support the associated projects and training. Candidate *AIRSpeed* projects will include business processes that are growing in complexity and those that appear to act as recurring "bottlenecks" in meeting customer needs and expectations. Successes will be promoted through the NAE *AIRSpeed* Champion for positive reinforcement and to broaden awareness and realization of process improvement benefits. We will also support larger Naval Aviation, DoN, and DOD enterprise initiatives aimed at standardizing

processes and reaping the benefits of improved synchronization and alignment of effort at reduced time and costs. Beyond the official enterprise systems and process improvement initiatives, we will encourage individual and team innovations in enterprise processes and locally-developed tools. These efforts will be recognized for their potential in bringing about breakthrough gains in business efficiency.

## **R4** Attract and Retain the Nation's Best and Brightest Personnel

NAWCAD/WD will cultivate a working environment renowned for diversity, trust, transparency, and ethical behavior. This will in turn facilitate efforts to recruit, develop, and retain the best and brightest workforce possible. Encouraging an appropriate work-life balance will help us maintain high rates of retention. We will pursue a broad spectrum of partnerships with educational institutions and outreach to local schools. We will use Education Partnership Agreements to promote undergraduate and graduate degree programs in engineering and other disciplines. Using the Morgan State University partnership as a model, we will assist the competencies to proactively recruit minorities and people with targeted disabilities to promote workforce diversity and vitality. Our educational partnership office will help develop our future workforce through support of public school Science, Technology, Engineering, and Mathematics (STEM) academies and other outreach efforts targeting the youth from our local communities. NAWCAD/WD will also recruit and develop artisans with superior skills in rapid prototyping and other trades. We will infuse a Warfighter perspective into all of our RDAT&E activities by assisting in the recruitment of active duty military personnel and extending our recruiting outreach program to eligible veterans through the Department of Veterans Affairs.



## **IMPLEMENTATION**

All NAWCAD/WD personnel will be guided by the objectives and intent of this Strategic Plan in their daily planning activities and job performance. This Strategic Plan will serve as a planning tool throughout the Future Years Defense Plan and will become operational by translating strategic objectives into coordinated operating plans with measurable goals and quarterly leadership reviews. Through this collaborative execution process, the Strategic Plan will align priorities and resource investments toward optimal NAWCAD/WD effectiveness in achieving our shared vision.



# CONCLUSION

**W**e have numerous objectives and strategies, but ultimately our success depends on our people and our commitment to the success of Naval Aviation programs and our nation's Defense. Operating as an integrated and interdependent element of NAVAIR's CAO/IPT operating model, we will provide the workforce with the training, tools, and processes to arm our Sailors and Marines with confidence to succeed in every mission and return safely home. NAWCAD/WD will become more responsive to today's warfighting needs by integrating the ISSCs into a more agile infrastructure, by better connections with the Fleet, and by enhancing our rapid prototyping capabilities. We will secure the future capabilities needed by Naval Aviation through support of NAVAIR's renewed emphasis on systems engineering, program management, and transitioning new technologies to programs of record. This represents NAWCAD/WD's Strategic Plan for *winning today, securing the future, and revitalizing the workforce*. This is our vector to mission excellence.

For additional information on NAWCAD/WD's products, services and facilities please visit the following websites: (<http://www.nawcad.navy.mil/> and <http://www.nawcawd.navy.mil/>).





# Appendices

## Appendix A

### National Assets and Centers of Technical Excellence

Several areas of unique technical excellence have been formally recognized through the 2005 Defense Base Realignment and Closure (BRAC) process or were recognized for their Department of Defense (DoD) lead role under Project Reliance. Several of these centers are described below.

#### 2005 Defense BRAC Centers:

- Center for Rotary Wing Air Platform RDAT&E: The 2005 Defense BRAC process required rotary wing air platform development, acquisition, test and evaluation activities at Wright Patterson Air Force Base and the Naval Air Engineering Station, Lakehurst be realigned to Patuxent River, Maryland, making NAWCAD one of two Centers for Rotary Wing Air Platform Research, Development, Acquisition, Test and Evaluation (RDAT&E), along with Redstone Arsenal, Huntsville, Alabama. This was done to enhance synergy and increase the efficiency and effectiveness of rotary wing air platform design and development activities, while still “preserving healthy competition” between the two Joint Centers.
- Center for Fixed Wing Air Platform RDAT&E: The 2005 Defense BRAC process designated Patuxent River, MD one of two principal sites for Fixed Wing Air Platform Research, Development, Acquisition, Test and Evaluation (RDAT&E), with Wright-Patterson Air Force Base (AFB) being the other. All DoD fixed wing related live fire test and evaluation will be conducted at China Lake, CA. NAWCAD will assure technical excellence in the research, development, acquisition and test and evaluation of all fixed wing assets in all phases of their life cycle. Programs being supported or planned for support by this center include the F-35 Lightning II (JSF), the P-8A Poseidon (MMA) and the E-2D Advanced Hawkeye, Broad Area Maritime Surveillance Unmanned Aircraft System (BAMS UAS) and the Navy Unmanned Combat Air System (Navy UCAS). NAWCAD also has a leadership role in RDAT&E support of Unmanned Air Systems (UAS) on behalf of the NAE, recognized by NAEs listing of Patuxent River MILCON projects for UAS Integration and Support Facilities among its top priorities.
- Center for Aircraft Launch & Recovery Equipment (ALRE)/Support Equipment (SE): The 2005 BRAC report affirmed NAWCAD Lakehurst’s continued role as a dedicated RDAT&E facility for Navy Aircraft Launch and Recovery Equipment and Aviation Support Equipment. NAWCAD is DoD’s preeminent joint center for RDAT&E and in-service engineering and support of Aviation Support Equipment. Because of naval requirements to reliably operate these systems both at sea and ashore, NAWCAD has developed more advanced RDAT&E and life-cycle support capabilities needed to meet more stringent requirements. Our ALRE/SE engineering and support capabilities are recognized as world class.

- Center for a Naval Integrated Weapons and Armament RDAT&E:

The 2005 Defense BRAC Report affirmed NAWCWD China Lake’s primary role in air-to-air, air-to-ground, and surface launched missile RDAT&E. The Integrated RDAT&E Center at China Lake provides a diverse set of open-air range and test environments (desert, mountain, forest) for Weapons & Armaments (W&A) RDAT&E functions. Synergy will be realized in air-to-air, air-to-ground, and surface launched mission areas. This decision recognizes NAWCWD’s extensive experience in developing, perfecting, and testing military components to solve weapons problems

for the nation's Warfighters. The W&A Center consolidates facilities working W&A RDAT&E into an efficient center enabling technical synergy and concentrated scientific, technical and acquisition expertise. Dahlgren was recognized as a receiver specialty site for Naval surface weapons systems integration; and Indian Head will serve as an energetics center.

- Center for Fixed Wing Air Platform Survivability Live Fire T&E: NAWCWD China Lake is the recognized leader in Fixed Wing Air Platform Survivability Live Fire T&E. The 2005 Defense BRAC decision consolidates all Fixed Wing Air Platform Survivability Live Fire T&E at China Lake. This decision was driven by the inefficiencies that currently exist between the two sites (Wright-Patterson AFB and China Lake), and the potential savings afforded by establishing a single live fire test range for fixed wing air platforms. China Lake has this capability and has been doing similar work related to weapons lethality for many years. This action will increase efficiency by reducing overall manpower requirements while also reducing redundancies that exist across the Live Fire Testing domain.

#### **DoD Centers of Excellence/U.S. National Assets:**

- DoD Center of Excellence for Precision Approach Landing Systems (PALS)/Combat Identification (CID)/Air Traffic Control (ATC)/Air-Ship Integration: NAWCAD currently is the development, acquisition, test and evaluation (DAT&E) and In-Service Engineering Agent for the US Navy and our NATO partners in these critical technology areas. The ability to identify friendly aircraft and recover these aircraft at sea and ashore is dependent on the ATC, CID and PALS systems development and support performed by NAWCAD at our St. Inigoes location. Similarly, our unique air-ship integration capabilities enable NAVAIR to transform envisioned UAV/UCAV CONOPS in joint manned and unmanned environments into tangible products that make UAV/UCAVs an integrated battlespace solution for the warfighter.
- DoD E3 Center of Excellence: NAWCAD is at the leading edge of Electromagnetic Environmental Effects (E3) Research, Development, Test and Evaluation (RDAT&E). NAWCAD is known throughout the nation as the E3 DoD Center of Excellence for aircraft and aircraft systems. These facilities are recognized national assets specializing in a variety of capabilities, ranging from box level to complete system level and integrated systems testing. The advanced facilities are designed to be flexible and adaptable, using state-of-the-art technology to support emerging and changing integrated system E3 testing requirements for all Services and Commercial platforms. Co-located facilities and integration with state-of-the art simulation laboratories, such as the Air Combat Environment Test and Evaluation Facility (ACETEF), allow full life-cycle E3 testing today and in the future. These advanced capabilities allow assessments of Electromagnetic Compatibility (EMC), Electro-magnetic Interference (EMI), Electro-magnetic Pulse (EMP), Electro-Magnetic Vulnerability (EMV), Electro-static Discharge (ESD), TEMPEST, Lightning, and Directed Energy effects.
- U.S. Naval Test Pilot School (USNTPS): NAWCAD is home to the largest flight test training and education organization in the world: the USNTPS. This world-renowned national asset will continue to train Test Pilots, Flight Officers, and Flight Test Engineers in Rotary Wing, Fixed Wing, and Airborne Systems Flight Testing through a combination of long and short courses.
- Subscale Subsonic Aerial Targets, Supersonic Missile Targets, Sea-Surface Vessel Targets, and EO/IR/RF Threat Simulation Payloads for Targets: The NAWCWD Threat Target Systems Department (TTSD) acts as the Navy's representative on the Targets Reliance Panel (TRP). In support of Reliance/TRP, the TTSD provides tri-service leadership for Subscale Subsonic Aerial Targets,

Supersonic Missile Targets, Sea-Surface Vessel Targets, Anti-radiation Missile Targets, and EO/IR/RF Threat Simulation Payloads (aka Target Augmentation Systems), Target Scoring. These systems are used in support of worldwide presentations for Test, Training and Experimentation (TT&E) in laboratories, at sea, on land, and in the air.

## **Appendix B**

### **NAWCAD/WD-Related Language from the 2005 Defense Base Realignment and Closure Commission Report**

*The BRAC 2005 decisions are implemented pursuant to the Defense Base Closure and Realignment Act of 1990, as amended through the FY 2005 Defense Authorization Act. By statute, the DoD had until September 15, 2007 to begin closing and realigning the installations as called for in the report. The process must be completed by September 15, 2011. Applicable sections of the BRAC Commission Report impacting or potentially impacting the NAWCs, which now carry the force of law, are provided below. The complete report may be found at: <http://www.brac.gov/finalreport.html>.*

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# NAVAL AIR STATION JOINT RESERVE BASE WILLOW GROVE, PA, AND CAMBRIA REGIONAL AIRPORT, JOHNSTOWN, PA

RECOMMENDATION #68 (DON 21)

## SECRETARY OF DEFENSE RECOMMENDATION

Close Naval Air Station Joint Reserve Base Willow Grove, PA. Relocate all Navy and Marine Corps squadrons, their aircraft and necessary personnel, equipment and support to McGuire Air Force Base, Cookstown, NJ. Relocate the minimum amount of manpower and equipment to support intermediate maintenance workload and capacity for Tire and Wheel, nondestruction inspections, and Aviation Life Support System equipment to McGuire Air Force Base. Relocate intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Fabrication & Manufacturing, and Support Equipment to Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC. Deactivate the 111th Fighter Wing (Air National Guard) and relocate assigned A-10 aircraft to the 124th Wing (Air National Guard), Boise Air Terminal Air Guard Station, Boise, ID (three primary aircraft authorized); 175th Wing (Air National Guard), Martin State Airport Air Guard Station, Baltimore, MD, (three primary aircraft authorized); 127th Wing (Air National Guard), Selfridge Air National Guard Base, Mount Clemens, MI (three primary aircraft authorized) and retired (six primary aircraft authorized). Relocate Armed Forces Reserve Center Expeditionary Combat Support manpower to Eglin Air Force Base, FL. Relocate Co A/228<sup>th</sup> Aviation to Fort Dix, Trenton, NJ. Relocate Reserve Intelligence Area 16 to Fort Dix. Establish an enclave for the Army Reserve units remaining on or relocating to Willow Grove and the Air National Guard 270th Engineering Installation Squadron. Realign Cambria Regional Airport, Johnstown, PA, by relocating Marine Light Attack Helicopter Squadron 775 Detachment A, to include all required personnel, equipment, and support, to McGuire Air Force Base.

## SECRETARY OF DEFENSE JUSTIFICATION

This recommendation will **reduce excess capacity while creating new joint opportunities in the McGuire Air Force Base/Fort Dix/Naval Aviation Engineering Station Lakehurst military concentration area.** This recommendation leverages maintenance and operational efficiencies within Marine Corps Reserve Aviation and maintains reserve forces in areas with favorable demographics. Inclusion of the realignment of Cambria Regional Airport in this recommendation allows the assets currently housed there to be collocated with their headquarters at McGuire Air Force Base. The major intermediate maintenance functions are consolidated into a Fleet Readiness Center, which reduces the number of maintenance levels and streamlines the way maintenance is accomplished with associated significant cost reductions.

This recommendation enables Air Force Future Total Force transformation by consolidating the A-10 fleet at installations of higher military value, and contributes to Army's establishment of the Northeast Army Reserve Regional Readiness Command.

The USAF KC-135E model aircraft (16 primary aircraft authorized) at McGuire Air Force Base, NJ, retire. The capacity created by the Air Force force structure retirement of KC-135Es (16 primary aircraft authorized) from McGuire Air Force Base enables the execution of this recommendation.

## COMMUNITY CONCERNS

The Willow Grove community argued the recommendation to close Willow Grove Naval Air Station Joint Reserve Base (NAS JRB), the associated deactivation of the 111th Fighter Wing (Pennsylvania Air National Guard), and the removal of the 913th Airlift Wing (AFRES) substantially deviated from the established final selection criteria and was based on flawed analyses. The substantial deviations cited by the community include: erroneous assumptions and lack of analysis in assessing jointness, substantial miscalculations in the assessment of the availability of land, facilities, and associated airspaces, lack of consideration of the base's strategic location with respect to homeland defense and homeland security, substantial deviations and inconsistencies in the evaluation process; improper deactivation of an Air National Guard Wing; inadequate consideration of demographics, manpower, and skill-set losses; and inadequate consideration of future mission capabilities. Numerous formatted letters and petitions have been received citing the installation as a model of joint use base facilities whose strengths include: working joint operations, including all services except the Coast Guard, critical strategic location near Northeast Corridor major metropolitan and port areas, vital part of homeland defense and security for the East Coast, huge economic impact to their local region, an 8,000 foot runway, modern Digital Radar Air Control System—one of only four in the US—available for emergency

preparedness and operations, and strong community support. Advocates repeatedly raised the question: “Why close a joint base in light of the stated DoD objective of moving to jointness?” The announced loss of jobs will have a negative economic impact on the area.

## COMMISSION FINDINGS

The Commission found that the majority of community concerns as they pertained to the 111<sup>th</sup> Fighter Wing (Air National Guard) had merit. Moreover, the Commission notes that the 913<sup>th</sup> Airlift Wing (AFRES) was not included in the recommendation by the Department. As best could be determined, the Navy had forwarded their proposal to Air Force for their review, and the Air Force recommended action addressed only the Air National Guard unit. The Commission also found, however, that the Navy recommendation to close NAS/JRB Willow Grove was analytically sound for the Navy and Marine Corps Reserve assets assigned there and at Cambria. The movement and consolidation at the new Joint Base located at McGuire/Fort Dix/Lakehurst makes efficient use of a larger joint military establishment while ameliorating many of the demographic effects of moving reserve units. The Commission therefore determined that the majority of NAS/JRB Willow Grove could be closed, while also retaining an enclave for the 111<sup>th</sup> Fighter Wing and the 913<sup>th</sup> Airlift Wing. The Commission encourages the Department of Defense to not retire service-capable A-10 aircraft. The Commission notes the quality and contributions of the 111<sup>th</sup> Fighter Wing and encourages the Department of Defense to consider identifying A-10 aircraft to form an A-10 wing or detachment using the 111<sup>th</sup> Fighter Wing of the Air National Guard located at Willow Grove, PA.

## COMMISSION RECOMMENDATIONS

The Commission found that the Secretary of Defense deviated substantially from final selection criteria 1, as well as from the Force Structure Plan. Therefore, the Commission recommends the following:

Close Naval Air Station Joint Reserve Base Willow Grove, PA. Relocate all Navy and Marine Corps squadrons, their aircraft and necessary personnel, equipment and support to McGuire Air Force Base, Cookstown, NJ. Relocate the minimum amount of manpower and equipment to support intermediate maintenance workload and capacity for Tire and Wheel, nondestruction inspections, and Aviation Life Support System equipment to McGuire Air Force Base. Relocate intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Fabrication & Manufacturing, and Support Equipment to Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC. Distribute the 15 A-10 aircraft assigned to the 111<sup>th</sup> Fighter Wing (ANG), the 15 A-10 aircraft assigned to the 124<sup>th</sup> Wing (ANG), Boise Air Terminal Air Guard Station, Boise, Idaho, the 15 A-10 aircraft assigned to the 175<sup>th</sup> Wing (ANG), Martin State Airport Air Guard Station, Baltimore, Maryland, and the 15 F-16 aircraft assigned to the 127<sup>th</sup> Wing (ANG), Selfridge Air National Guard Base, Mount Clemens, Michigan, to meet the Primary Aircraft Authorizations (PAA) requirements established by the Base Closure and Realignment recommendations of the Secretary of Defense, as amended by the Defense Base Closure and Realignment Commission.

Establish 18 PAA A-10 aircraft at the 124<sup>th</sup> Wing (ANG), Boise Air Terminal Air Guard Station, Boise, Idaho.

Establish 18 PAA A-10 aircraft at the 175<sup>th</sup> Wing (ANG), Martin State Airport Air Guard Station, Baltimore, Maryland.

Establish 24 PAA A-10 aircraft at the 127<sup>th</sup> Wing (ANG), Selfridge Air National Guard Base, Mount Clemens, Michigan.

If the Commonwealth of Pennsylvania decides to change the organization, composition and location of the 111<sup>th</sup> Fighter Wing (ANG) to integrate the unit into the Future Total Force, all personnel allotted to the 111<sup>th</sup> Fighter Wing (ANG), including the unit's Expeditionary Combat Support (ECS) elements, will remain in place and assume a mission relevant to the security interests of the Commonwealth of Pennsylvania and consistent with the integration of the unit into the Future Total Force, including but not limited to air mobility, C4ISR, Information Operations, engineering, flight training or unmanned aerial vehicles. Where appropriate, unit personnel will be retrained in skills relevant to the emerging mission.

This recommendation does not effect a change to the authorized end-strength of the Pennsylvania Air National Guard. The distribution of aircraft currently assigned to the 111<sup>th</sup> Fighter Wing (ANG) is based upon a resource-constrained determination by the Department of Defense that the aircraft concerned will better support national security

requirements in other locations and is not conditioned upon the agreement of the commonwealth. Relocate Co A/228th Aviation to Fort Dix, Trenton, NJ. Relocate Reserve Intelligence Area 16 to Fort Dix.

Establish a contiguous enclave for the 111th Fighter Wing (ANG) and the 270th Engineering Installation Squadron (ANG) sufficient to support operations of those units, including flight operations, and compatible with joint use of the former Naval Air Station as a civilian airport. The Army Reserve units not relocated from Willow Grove by this recommendation, as amended, and those relocated to Willow Grove by other recommendations, as amended, will be incorporated into the Armed Forces Reserve Center established by Army Recommendation 82. The property retained under Federal title to construct the AFRC shall be limited to the absolute minimum essential to construct that facility, shall be encompassed within the enclave established by the 111th Fighter Wing (ANG) and the 270th Engineering Installation Squadron (ANG), and shall be sited to minimize interference with the Air Guard enclave and joint civilian use of the former Naval Air Station as a civilian airport. The Commission defines the authority granted to the Army by the words "retain essential facilities to support activities of the Reserve Components" where they appear in Army Recommendation 82, to be limited to the property necessary to construct AFRC itself. Should the Secretary of the Army determine that access to more property would be beneficial, a joint use agreement should be executed to obtain a tenancy from the Commonwealth of Pennsylvania.

Realign Cambria Regional Airport, Johnstown, PA, by relocating Marine Light Attack Helicopter Squadron 775 Detachment A, to include all required personnel, equipment, and support, to McGuire Air Force Base. The Commission found that this change and the recommendation as amended are consistent with the final selection criteria and the Force Structure Plan. The full text of this and all Commission recommendations can be found in Appendix Q.

## DEFENSE FINANCE AND ACCOUNTING SERVICE

RECOMMENDATION #145/196 (H&SA 37/ADD)

### SECRETARY OF DEFENSE RECOMMENDATION

**Close the Defense Finance and Accounting Service (DFAS) sites** at Rock Island IL; Pensacola Saufley Field, FL; Norfolk Naval Station, VA; Lawton, OK; Pensacola Naval Air Station, FL; Omaha, NE; Dayton, OH; St. Louis, MO; San Antonio, TX; San Diego, CA; Pacific Ford Island, HI; **Patuxent River, MD**; Limestone, ME; Charleston, SC; Orlando, FL; Rome, NY; Lexington, KY; Kansas City, MO; Seaside, CA; San Bernardino, CA; and Oakland, CA. Relocate and consolidate business, corporate and administrative functions to the Defense Supply Center-Columbus, OH, the Buckley Air Force Base Annex, Denver, CO, or the MG Emmett J. Bean Federal Center, Indianapolis, IN.

Realign DFAS Arlington, VA, by relocating and consolidating business, corporate, and administrative functions to the Defense Supply Center-Columbus, OH, the Buckley Air Force Base Annex, Denver, CO, or the MG Emmett J. Bean Federal Center, Indianapolis, IN. Retain a minimum essential DFAS liaison staff to support the Under Secretary of Defense (Comptroller)/Chief Financial Officer, Military Service Chief Financial Officers, and Congressional requirements. Realign DFAS Cleveland, OH, by relocating and consolidating business, corporate, and administrative functions to the Defense Supply Center-Columbus, OH, the Buckley Air Force Base Annex, Denver, CO, or the MG Emmett J. Bean Federal Center, Indianapolis, IN. Retain an enclave for the Military Retired and Annuitant Pay Services contract function and government oversight.

Realign DFAS Columbus, OH, by relocating up to 55 percent of the Accounting Operation functions and associated corporate and administrative functions to DFAS Denver, CO, or DFAS Indianapolis, IN, and up to 30 percent of the Commercial Pay function and associated corporate and administrative functions to DFAS Indianapolis, IN, for strategic redundancy.

Realign DFAS Denver, CO, by relocating up to 25 percent of the Accounting Operation functions and associated corporate and administrative functions to DFAS Columbus, OH, or DFAS Indianapolis, IN, and up to 35 percent of the Military Pay function and associated corporate and administrative functions to DFAS Indianapolis, IN, for strategic redundancy.

Realign DFAS Indianapolis, IN, by relocating up to 10 percent of the Accounting Operation functions and associated corporate and administrative functions to DFAS Columbus, OH or DFAS Denver, CO, and up to 20 percent of the Commercial Pay function and associated corporate and administrative functions to DFAS Columbus, OH, for strategic redundancy.

### SECRETARY OF DEFENSE JUSTIFICATION

This action accomplishes a major facilities reduction and business line mission realignment, transforming the current DFAS organization into an optimum facilities configuration, which includes strategic redundancy to minimize risks associated with man-made or natural disasters/challenges. All three of the gaining sites meet DoD Antiterrorism/Force Protection (AT/FP) Standards. The current number of business line operating locations (26) inhibits the ability of DFAS to reduce unnecessary redundancy and leverage benefits from economies of scale and synergistic efficiencies. Overall excess facility capacity includes approximately 43 percent or 1,776,000 Gross Square Feet (GSF) in administrative space and 69 percent or 526,000 GSF in warehouse space with many locations lacking adequate threat protection as defined in DoD AT/FP Standards. Finally, the three locations have potential to evolve into separate Business Line Centers of Excellence and further enhance "unit cost" reductions beyond the BRAC facilities/personnel savings aspect.

The three gaining locations were identified through a process that used Capacity Analysis, Military Value, Optimization Modeling, and knowledge of the DFAS organization and business line mission functions. The Military Value analysis, of 26 business operating locations, ranked the Buckley AF Base Annex, CO, the Defense Supply Center-Columbus, OH, and the MG Emmett J. Bean Federal Center, Indianapolis, IN, as 3, 7, and 9 respectively. The Optimization analysis not only included the factors of available capacity and expansion capability, but also included business line process and business operational considerations in identifying the three-location combination as providing the optimal facilities approach to hosting DFAS business line missions/functions.

Subject matter knowledge of DFAS' three business line missions and its operational components, along with business process review considerations and scenario basing strategy, was used to focus reduction of the 26 locations and identification of the three gaining locations. The scenario basing strategy included reducing the number of locations to the maximum extent possible, while balancing the requirements for an environment meeting DoD Antiterrorist and Force Protection standards, strategic business line redundancy, area workforce availability, and to include an anchor entity for each business line and thus retain necessary organizational integrity to support DoD customer needs while the DFAS organization relocation is executed.

## COMMUNITY CONCERNS

The communities' concerns about DoD's proposed closure of numerous Defense Finance and Accounting Service sites focused on criticism of military value scores. Most stated that the Headquarters & Support Activities-Joint Cross Services

Group focused its analysis almost exclusively on physical facility issues and not on work quality or customer input. Some contended that DoD overweighed the value of locations on DoD installations within a controlled perimeter; a consideration they contended was irrelevant to DFAS' mission. Others pointed out facilities proposed for closure despite meeting DoD force protection standards.

In addition, many claimed that the three sites selected by DoD for retention had higher operating costs than many DFAS sites proposed for closure, despite the heavy weight assigned to operating costs in computing military value scores. They also noted that operating costs, and therefore military value scores, were heavily influenced by differing costs for General Service Administration space that are irrelevant to a DFAS site's effectiveness or efficiency and something a DFAS site cannot control. Some sites claimed they provide unique services not properly factored into military value scores. Some communities raised concerns about the choice of sites with high locality pay. Many claimed that only about 10 percent to 15 percent of personnel would move, creating workforce and experience losses that would negatively affect customer service.

Some DFAS facilities had been sited to mitigate the effect of previous BRAC rounds, and their closure would be a heavy blow to communities that may not have fully recovered from previous BRAC actions. Some argued that DFAS consolidation to the Denver site on Buckley Annex makes no sense as a BRAC recommendation, because another BRAC recommendation would realign the Air Reserve Personnel Center, the site's current major tenant, to another location.

Realigning DFAS personnel away from, rather than to, Denver would allow for a full closure of the property.

## COMMISSION FINDINGS

The Commission identified discrepancies in the DFAS sites' military value scores, but the scores were not DoD's primary site selection driver. Instead, DoD used an optimization model to develop a best-value solution to get to the minimum number of sites. The model's primary focus was potential receiver sites with a large capacity and, in turn, personnel. The Commission acknowledges that the work of DFAS does not have to be done on military installations. The Commission found that in the out-years, DFAS' workforce will continue to decrease due to technology and efficiency improvements, and retaining DoD owned property could be a liability to the organization. Therefore, as workload and personnel decrease, GSA property or similar types of properties will provide more flexibility for DFAS to reduce its facility footprint.

Further, the Commission found that closing the DFAS located in Denver, CO, at Buckley Annex, combined with other BRAC actions, would enable a full closure of property owned by the Air Force. The DFAS in Columbus and the DFAS in Indianapolis do not afford such an opportunity. Buckley Annex is approximately 38 acres, and DFAS occupies 78 percent of the building on the property. The Commission found that closing the Denver site would require keeping open another major DFAS site in order to retain desired anchor sites for business operations and strategic redundancy. According to DoD, the next major site in their selection process would be the DFAS in Cleveland, OH.

Last, the Commission found that DoD did not adequately consider economic impact in its decision process. The two sites that could have experienced severe impacts are Limestone, ME, and Rome, NY. Retaining these two sites will

provide DFAS with needed capacity for business operations and strategic redundancy while also mitigating economic impacts.

## COMMISSION RECOMMENDATIONS

The Commission found that the Secretary of Defense deviated substantially from final selection criteria 3, 4, and 6 and from the Force Structure Plan. Therefore, the Commission recommends the following:

**Close the Defense Finance and Accounting Service (DFAS) sites at** Denver, CO; Rock Island, IL; Pensacola Saufley Field, FL; Naval Station, Norfolk, VA; Lawton, OK; Naval Air Station, Pensacola, FL; Omaha, NE; Dayton, OH; St. Louis, MO; San Antonio, TX; San Diego, CA; Pacific Ford Island, HI; NAS **Patuxent River, MD**; Charleston, SC; Orlando, FL; Lexington, KY; Kansas City, MO; Seaside, CA; San Bernardino, CA; and Oakland, CA. Relocate the functions performed at these locations to the DFAS sites at Cleveland, OH; Columbus, OH; Indianapolis, IN; Limestone, ME; and Rome, NY; grow the DFAS site at Cleveland, OH, to not less than 1500 Full Time Equivalents (FTE); grow the DFAS site at Limestone, ME, to not less than 600 FTE, and grow the DFAS site at Rome, NY, to not less than 1000 FTE; maintain not less than the current FTEs at the DFAS sites at Columbus, OH, and Indianapolis, IN. Assign functions among the DFAS sites retained to provide for strategic redundancy in all critical tasks. Realign the Arlington, VA, site by relocating all functions to the remaining DFAS sites except the minimum essential DFAS liaison staff to support the Under Secretary of Defense (Comptroller)/Chief Financial Officer, Military Service Chief Financial Officers, and Congressional requirements, which will be retained in the National Capital Region.

The Commission found this change and the recommendation as amended are consistent with the final selection criteria and the Force Structure Plan. The full text of this and all Commission recommendations can be found in Appendix Q.

## RELOCATE MISCELLANEOUS DEPARTMENT OF NAVY LEASED LOCATIONS

RECOMMENDATION #149 (H&SA 49)

### SECRETARY OF DEFENSE RECOMMENDATION

Close Crystal Park 3 and Crystal Square 3, leased installations in Arlington, VA, and **21491 Great Mills Road** and **21535 Pacific Drive**, leased installations **in Lexington Park, MD**. Relocate all Department of the Navy organizations to DoD owned space in the National Capital Region. Realign Crystal Gateway 3, Crystal Gateway 4, Crystal Mall 2, Crystal Mall 3, Crystal Park 1, Crystal Park 5, Crystal Square 2, 1400-1450 S. Eads Street, and 2300 Clarendon Blvd., **all leased installations in Arlington, VA**, and any other Department of the Navy occupied leased space in the National Capital Region, by relocating all Department of the Navy organizations **to DoD owned space in the National Capital Region**. Realign Federal Office Building 2, Arlington, VA, by relocating all Department of the Navy organizations to DoD owned space in the National Capital Region.

### SECRETARY OF DEFENSE JUSTIFICATION

This recommendation meets two important Department of Defense (DoD) objectives with regard to future use of leased space and enhanced security for DoD activities. Implementation will reduce the Department's reliance on leased space which has historically higher overall costs than government-owned space and generally does not meet Anti-terrorism Force Protection standards as prescribed in UFC 04-010-01. This, plus the immediate benefit of enhanced Force Protection afforded by locations within a military installation fence-line, will provide the Department of the Navy (DON) activities with immediate compliance with Force Protection Standards. DON's current leased locations are non-compliant with current Force Protection Standards. Additionally, the recommendation results in a significant improvement in military value as a result of the movement from leased space to military installations. The average military value of DON activities based on current locations ranges from 192<sup>nd</sup> to 326<sup>th</sup> out of 334 entities evaluated by the MAH military value model. All military installations to which the DON activities would relocate have higher military values.

The payback calculation in this recommendation reflects the relocation of approximately 228,000 GSF of leased space in the NCR, along with 284,000 GSF of administrative space in FOB-2, which is scheduled for closure, to locations identified by DON as the most likely relocation sites: Arlington Service Center, Anacostia Annex, and the Washington Navy Yard. This recommendation also reflects **Naval Air Systems Command consolidating its headquarters operation at NAS Patuxent River by moving two locations from leased space to be contiguous with its main office**. However, the recommendation is written broadly enough to relocate Navy organizations currently in leased space to any other DoD leased space in the NCR.

Our analysis indicates that such alternative relocation sites will not have a significant or material impact on any of the BRAC selection criteria.

### COMMUNITY CONCERNS

Community leaders questioned DoD's security standards, stating they were unnecessarily more stringent than those developed by the Interagency Security Committee (tasked with developing and evaluating security standards for Federal facilities). Also, the communities questioned whether DoD had surveyed each facility to determine compliance and the level of compliance with the DoD security standards (or even those "less stringent" standards approved by OMB in September 2004). The communities felt BRAC was not the proper instrument to effect DoD employee relocation from leased facilities.

Advocates expressed concerns about the negative impact on operational readiness and manpower implications. They argued the current "scattered" arrangement of leased office space makes more strategic sense than does concentration, that relocation will disrupt synergies with other agencies of the Federal Government and the Pentagon, and, finally, that leased space is better able to accommodate contingency, mobilization, surge, and future total force requirements than its alternative, military construction. Similarly, communities claimed their quality of life could be reduced because of transportation problems such as increased traffic, lack of public transportation, and increased commuting times, with the attendant issues of air pollution and increased fuel consumption.

However, there were no formal expressions relating directly to Navy leased locations from the community.

## COMMISSION FINDINGS

The Commission found no reason to disagree with the recommendation of the Secretary of Defense. While the Department did not assess individual buildings for force protection compliance or review individual leases, enough empirical data support moving DoD personnel from leased locations to force-protected locations. While the Commission approved the Secretary's recommendation, it also included a technical change to conform to **DoD's stated intent to close 21491 Great Mills Road and 21535 Pacific Drive, leased installations in Lexington Park, MD, and relocate Naval Air Systems Command offices to Naval Air Station Patuxent River, MD.**

## COMMISSION RECOMMENDATIONS

The Commission found the Secretary's recommendation consistent with the final selection criteria and the Force Structure Plan. Therefore, the Commission approves the recommendation of the Secretary.

## FLEET READINESS CENTERS

RECOMMENDATION #165 (IND 19)

### SECRETARY OF DEFENSE RECOMMENDATION

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

**Realign Naval Air Station Patuxent River, MD**, by disestablishing the Aircraft Intermediate Maintenance Department at **Naval Air Warfare Center Aircraft Division**; establishing **Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD**; and transferring all intermediate maintenance workload and capacity to **Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD**.

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

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

Realign Marine Corps Air Station Cherry Point, NC, as follows: disestablish Naval Air Depot Cherry Point; establish Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 39K DLHs), Aircraft Hydraulic Components (approximately 69K DLHs), Aircraft Landing Gear Components (approximately 8K DLHs), Aircraft Other Components (approximately 23K DLHs), and Aircraft Structural Components (approximately 126K DLHs) to Fleet Readiness Center Mid-Atlantic, Naval Air Station Oceana, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11K DLHs), Aircraft Hydraulic Components (approximately 19K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Structural Components (approximately 35K DLHs), and Aircraft Other Components (approximately 6K DLHs) to Fleet Readiness Center Mid-Atlantic Site Norfolk, Naval Air Station Norfolk, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 10K DLHs), Aircraft Landing Gear Components (approximately 1K DLHs), Aircraft Other Components (approximately 3K DLHs), and Aircraft Structural Components (approximately 18K DLHs) to Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station **Patuxent River, MD**; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 2K DLHs), Aircraft Hydraulic Components (approximately 3K DLHs), Aircraft Landing Gear Components (approximately 0.4K DLHs), Aircraft Other Components (approximately 1K DLHs), and Aircraft Structural Components (approximately 6K DLHs) to FRC Mid-Atlantic Site New Orleans, Naval Air Station JRB New Orleans, LA.; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 9K DLHs), Aircraft Hydraulic Components (approximately 16K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Other Components (approximately 6K DLHs) and Aircraft Structural Components (approximately 30K DLHs) to the Fleet Readiness Center East Site Beaufort, hereby established at Marine Corps Air Station Beaufort, SC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11K DLHs), Aircraft Hydraulic Components (approximately 20K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Other Components (approximately 6K DLHs), Aircraft Structural Components (approximately 36K DLHs), Aircraft Rotary (approximately 1K DLHs), Aircraft VSTOL (approximately 2K DLHs), Aircraft Cargo/Tanker (approximately 0.02K DLHs), Aircraft Other (approximately 18K DLHs), Aircraft Structural Components (approximately 0.001K DLHs), Calibration (approximately 0.15K DLHs) and "Other" Commodity (approximately 0.3K DLHs) to Fleet Readiness Center East Site New River, hereby established at Marine Corps Air Station New

River, Camp Lejeune, NC; and transfer all remaining depot maintenance workload and capacity to Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC.

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

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

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

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

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

Realign **Naval Air Warfare Center Weapons Division China Lake, CA**, by disestablishing the Aircraft Intermediate Maintenance Department and relocating its maintenance workload and capacity for Aircraft (approximately 3K DLHs), Aircraft Components (approximately 45K DLHs), Fabrication & Manufacturing (approximately 6K DLHs) and Support Equipment (approximately 16K DLHs) to Fleet Readiness Center West, Naval Air Station Lemoore, CA.

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

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

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

Realign Naval Air Station North Island, Naval Base Coronado, CA, as follows: disestablish Naval Air Depot North Island, COMSEACONWINGPAC (AIMD), and NADEP North Island Detachment North Island; establish Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), Aircraft Other Components (approximately 13K DLHs), and Aircraft Structural Components (approximately 4K DLHs) from Naval

Air Depot North Island to **Fleet Readiness Center Southwest Site Point Mugu**, hereby established at **Naval Air Station Point Mugu, Naval Base Ventura, CA**; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 26K DLHs), Aircraft Hydraulic Component (approximately 8K DLHs), Aircraft Landing Gear Components (approximately 13K DLHs), Aircraft Other Components (approximately 55K DLHs), Aircraft Structural Components (approximately 16K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Miramar, hereby established at Marine Corps Air Station Miramar, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 8K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 4K DLHs), Aircraft Other Components (approximately 17K DLHs), and Aircraft Structural Components (approximately 5K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Pendleton, hereby established at Marine Corps Air Station Camp Pendleton, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), Aircraft Other Components (approximately 12K DLHs), Aircraft Structural Components (approximately 3K DLHs) from Naval Air Depot North Island to Fleet Readiness Southwest Site Yuma, hereby established at Marine Corps Air Station Yuma, AZ; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2 K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), Aircraft Other Components (approximately 12K DLHs), and Aircraft Structural Components (approximately 3K DLHs) from Naval Air Depot North Island to Fleet Readiness Center West Site Fort Worth, Fort Worth TX; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 25K DLHs), Aircraft Hydraulic Components (approximately 8K DLHs), Aircraft Landing Gear Components (approximately 13K DLHs), Aircraft Other Components (approximately 53K DLHs), and Aircraft Structural Components (approximately 15K DLHs), from Naval Air Depot North Island to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA; and transfer all remaining intermediate and depot maintenance workload and capacity to Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA.

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

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

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

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

## SECRETARY OF DEFENSE JUSTIFICATION

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

Fallon, NV. FRC Southwest will be located on Naval Station Coronado, CA, and will have affiliated sites at MCAS Miramar, CA, MCAS Pendleton, CA, MCAS Yuma, AZ, and **NAS Point Mugu, CA**. FRC Northwest will be located on NAS Whidbey, WA, with no affiliated FRC Sites. This recommendation supports both DoD and Navy transformation goals by reducing the number of maintenance levels and streamlining the way maintenance is accomplished with associated significant cost reductions. It supports the Naval Aviation Enterprise's (NAE's) goal of transforming to fewer maintenance levels, i.e., from 3 to 2 levels; and it supports the NAE's strategy of positioning maintenance activities closer to fleet concentrations when doing so will result in enhanced effectiveness and efficiency, greater agility, and allows Naval Aviation to achieve the right readiness at the least cost. This transformation to FRCs produces significant reductions in the total cost of maintenance, repair and overhaul plus the associated Supply system PHS&T (Packaging, Handling, Storage and Transportation) as well as repairables inventory stocking levels as a result of reduced total repair turn-around times, reduced transportation, lower spares inventories, less manpower, and more highly utilized infrastructure. It requires integration and collaboration between Depot-level Civil Service personnel and Military Intermediate-level Sailors and Marines. At those FRCs involving Marine Corps MALS (Marine Aviation Logistics Squadrons), because the MALS remain deployable commands, they will affiliate with their FRC organizations, but will remain operationally distinct and severable in all respects. The FRC D-level functions within the MALS fall under the Commanding Officer of each MALS. The FRC Commander is the provider of embedded depot personnel, as well as D-level technical and logistics support within the MALS. For all FRCs, there is a combined annual facility sustainment savings of \$1.1M; elimination of a total of 529,000 square feet of depot/intermediate maintenance production space and military construction cost avoidances of \$0.2M. This recommendation also includes a military construction cost of \$85.7M. In addition to the actions described in this recommendation, there are four additional actions involved in the comprehensive merger of depot and intermediate maintenance: Naval Air Station Joint Reserve Base Willow Grove, PA, Naval Air Station Corpus Christi, TX, Naval Air Station Brunswick, ME, and Naval Air Station Atlanta, GA. The actions at these installations are described in separate installation closure recommendations in the Department of the Navy section of the BRAC Report.

## COMMUNITY CONCERNS

The majority of the communities affected by this recommendation had no formal expressions of concern. A number of community leaders expressed general support for the bases within their community and their support for Navy and Marine Corps missions. Specific comments from community leaders representing **the Lakehurst Naval Air Engineering Station** suggested that the maintenance of unique Aircraft Launch and Recovery Equipment, and Aviation Support Equipment at **Lakehurst** should be considered and included with the proposed reorganization of the depot and intermediate maintenance activities into Fleet Readiness Centers. The community from Naval Support Activity, Crane, Indiana questioned the proposed movement of the ALQ-99 airborne Electronic Warfare Center (EWC) because it fractures a truly joint EWC that supports all services, and moves one system's depot operation from Crane's total depot capability and destroys the synergy of operations at Crane to a single platform within a single service at Whidbey Island. The community was also critical of the proposal because they claimed it was neither cost effective nor logical given that the system being moved will be out of the inventory in 10 – 12 years.

## COMMISSION FINDINGS

The Commission found no reason to disagree with the vast majority of this recommendation of the Secretary of Defense. The Commission found that pre-BRAC reorganizations considered the unique maintenance at **Lakehurst** and **planned to address reorganization of Lakehurst during the implementation** of this recommendation.

The Commission's assessment of the proposed realignment of Naval Support Activity Crane, IN, portion of this very complex DoD recommendation would require substantial construction at Whidbey Island for a system to support EA-6B aircraft to be phased out of the inventory in 10 to 15 years regardless of BRAC. Additionally, the proposed realignment is not cost effective, with implementation costs of \$143.6 million and a 20-year Net Present Value cost of \$163.9 million. As a result, the Commission amended the recommendation by deleting this portion.

The Commission found construction costs and savings projections were overstated. The Commission found that savings should not be attributed to elimination of unencumbered positions unlikely to be filled. Costs and savings for the final, amended recommendation approved by the Commission have been adjusted to reflect newly estimated military construction costs, the elimination of the Crane realignment to Whidbey Island, and savings that were incorrectly

attributed to the elimination of positions already empty as a result of previous efficiency measures. The Commission found that the approved recommendation still enhances military value and generates substantial cost savings.

## COMMISSION RECOMMENDATIONS

The Commission found that the Secretary of Defense deviated substantially from final selection criteria 1, 3, 4 and 5, as well as from the Force Structure Plan. Therefore, the Commission recommends the following:

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

**Realign Naval Air Station Patuxent River, MD, by disestablishing the Aircraft Intermediate Maintenance Department at Naval Air Warfare Center Aircraft Division; establishing Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD; and transferring all intermediate maintenance workload and capacity to Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD.**

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

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

Realign Marine Corps Air Station Cherry Point, NC, as follows: disestablish Naval Air Depot Cherry Point; establish Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 39K DLHs), Aircraft Hydraulic Components (approximately 69K DLHs), Aircraft Landing Gear Components (approximately 8K DLHs), Aircraft Other Components (approximately 23K DLHs), and Aircraft Structural Components (approximately 126K DLHs) to Fleet Readiness Center Mid-Atlantic, Naval Air Station Oceana, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11K DLHs), Aircraft Hydraulic Components (approximately 19K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Structural Components (approximately 35K DLHs), and Aircraft Other Components (approximately 6K DLHs) to Fleet Readiness Center Mid-Atlantic Site Norfolk, Naval Air Station Norfolk, VA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 10K DLHs), Aircraft Landing Gear Components (approximately 1K DLHs), Aircraft Other Components (approximately 3K DLHs), and Aircraft Structural Components (approximately 18K DLHs) **to Fleet Readiness Center Mid-Atlantic Site Patuxent River, Naval Air Station Patuxent River, MD**; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 2K DLHs), Aircraft Hydraulic Components (approximately 3K DLHs), Aircraft Landing Gear Components (approximately 0.4K DLHs), Aircraft Other Components (approximately 1K DLHs), and Aircraft Structural Components (approximately 6K DLHs) to FRC Mid-Atlantic Site New Orleans, Naval Air Station JRB New Orleans, LA.; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 9K DLHs), Aircraft Hydraulic Components (approximately 16K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Other Components (approximately 6K DLHs) and Aircraft Structural Components (approximately 30K DLHs) to the Fleet Readiness Center East Site Beaufort, hereby established at Marine Corps Air Station Beaufort, SC; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 11K DLHs), Aircraft Hydraulic Components (approximately 20K DLHs), Aircraft Landing Gear Components (approximately 2K DLHs), Aircraft Other Components (approximately 6K DLHs), Aircraft Structural Components (approximately 36K DLHs), Aircraft Rotary (approximately 1K DLHs), Aircraft VSTOL (approximately 2K DLHs), Aircraft Cargo/Tanker (approximately 0.02K DLHs), Aircraft Other (approximately 18K DLHs), Aircraft Structural

Components (approximately 0.001K DLHs), Calibration (approximately 0.15K DLHs) and "Other" Commodity (approximately 0.3K DLHs) to Fleet Readiness Center East Site New River, hereby established at Marine Corps Air Station New River, Camp Lejeune, NC; and transfer all remaining depot maintenance workload and capacity to Fleet Readiness Center East, Marine Corps Air Station Cherry Point, NC.

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

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

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

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

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

Realign **Naval Air Warfare Center Weapons Division China Lake, CA**, by disestablishing the Aircraft Intermediate Maintenance Department and relocating its maintenance workload and capacity for Aircraft (approximately 3K DLHs), Aircraft Components (approximately 45K DLHs), Fabrication & Manufacturing (approximately 6K DLHs) and Support Equipment (approximately 16K DLHs) to **Fleet Readiness Center West, Naval Air Station Lemoore, CA**.

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

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

Realign Naval Air Station North Island, Naval Base Coronado, CA, as follows: disestablish Naval Air Depot North Island, COMSEACONWINGPAC (AIMD), and NADEP North Island Detachment North Island; establish Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA; relocate depot maintenance workload and capacity for aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), aircraft Other Components (approximately 13K DLHs), and Aircraft Structural Components (approximately 4K DLHs) from Naval Air Depot North Island to **Fleet Readiness Center Southwest Site Point Mugu, hereby established at Naval**

**Air Station Point Mugu, Naval Base Ventura, CA;** relocate depot maintenance workload and capacity for Aircraft avionics/Electronics Components (approximately 26K DLHs), Aircraft Hydraulic Component (approximately 8K DLHs), Aircraft Landing Gear Components (approximately 13K DLHs), Aircraft Other Components (approximately 55K DLHs), Aircraft Structural Components (approximately 16K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Miramar, hereby established at Marine Corps Air Station Miramar, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 8K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 4K DLHs), Aircraft Other Components (approximately 17K DLHs), and Aircraft Structural Components (approximately 5K DLHs) from Naval Air Depot North Island to Fleet Readiness Center Southwest Site Pendleton, hereby established at Marine Corps Air Station Camp Pendleton, CA; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), Aircraft Other Components (approximately 12K DLHs), Aircraft Structural Components (approximately 3K DLHs) from Naval Air Depot North Island to Fleet Readiness Southwest Site Yuma, hereby established at Marine Corps Air Station Yuma, AZ; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 6K DLHs), Aircraft Hydraulic Components (approximately 2K DLHs), Aircraft Landing Gear Components (approximately 3K DLHs), Aircraft Other Components (approximately 12K DLHs), and Aircraft Structural Components (approximately 3K DLHs) from Naval Air Depot North Island to Fleet Readiness Center West Site Fort Worth, Fort Worth, TX; relocate depot maintenance workload and capacity for Aircraft Avionics/Electronics Components (approximately 25K DLHs), Aircraft Hydraulic Components (approximately 8K DLHs), Aircraft Landing Gear Components (approximately 13K DLHs), Aircraft Other Components (approximately 53K DLHs), and Aircraft Structural Components (approximately 15K DLHs), from Naval Air Depot North Island to Fleet Readiness Center Northwest, Naval Air Station Whidbey Island, WA; and transfer all remaining intermediate and depot maintenance workload and capacity to Fleet Readiness Center Southwest, Naval Air Station North Island, Naval Base Coronado, CA.

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

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

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

Realign Marine Corps Air Station Yuma, AZ, by transferring depot maintenance workload and capacity for Aircraft Fighter/Attack, Aircraft Other and Aircraft Rotary and intermediate maintenance workload and capacity for Aircraft Components, Aircraft Engines, Communication/Electronics Equipment, Ordnance Weapons & Missiles, Software and Support Equipment from MALS-13 to Fleet Readiness Center Southwest Site Yuma, Marine Corps Air Station Yuma, AZ. The Commission found that this change and the recommendation as amended are consistent with the final selection criteria and the Force Structure Plan. The full text of this and all Commission recommendations can be found in Appendix Q.

# CONSOLIDATE MARITIME C4ISR RESEARCH, DEVELOPMENT & ACQUISITION, TEST & EVALUATION

RECOMMENDATION #181 (TECH 9)

## SECRETARY OF DEFENSE RECOMMENDATION

Realign Washington Navy Yard, DC, by disestablishing the Space Warfare Systems Center Charleston, SC, detachment Washington Navy Yard and assign functions to the new Space Warfare Systems Command Atlantic Naval Amphibious Base, Little Creek, VA.

Realign Naval Station, Norfolk, VA, by disestablishing the Space Warfare Systems Center Norfolk, VA, and the Space Warfare Systems Center Charleston, SC, detachment Norfolk, VA, and assign functions to the new Space Warfare Systems Command Atlantic Naval Amphibious Base, Little Creek, VA.

Realign Naval Weapons Station Charleston, SC, as follows: relocate Surface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Surface Warfare Center Division, Dahlgren, VA; relocate Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Station Newport, RI; and relocate the Command Structure of the Space Warfare Center to Naval Amphibious Base, Little Creek, VA, and consolidate it with billets from Space Warfare Systems Command San Diego to create the Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA. The remaining Maritime Information Systems Research, Development & Acquisition, and Test & Evaluation functions at Naval Weapons Station Charleston, SC, are assigned to Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA.

Realign Naval Base Ventura County, CA, Naval Surface Warfare Center Division, Dahlgren, VA, and Naval Station Newport, RI, by relocating Maritime Information Systems Research, Development & Acquisition, and Test & Evaluation to Naval Submarine Base Point Loma, San Diego, CA, and consolidating with the Space Warfare Center to create the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA.

Realign Naval Submarine Base Point Loma, San Diego, CA, as follows: relocate Surface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Surface Warfare Center Division, Dahlgren, VA; relocate Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Station Newport, RI; disestablish Space Warfare Systems Center Norfolk, VA, detachment San Diego, CA, and assign functions to the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA; disestablish Naval Center for Tactical Systems Interoperability, San Diego, CA, and assign functions to the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA; and disestablish Space Warfare Systems Command San Diego, CA, detachment Norfolk, VA, and assign functions to the new Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA.

Realign Naval Air Station **Patuxent River, MD**, by **relocating Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Naval Air Warfare Center, Aircraft Division** to Naval Station Newport, RI.

Realign Naval Air Station Jacksonville, FL, by disestablishing the Space Warfare Systems Center Charleston, SC, detachment Jacksonville, FL.

Realign Naval Air Station Pensacola, FL, by relocating the Space Warfare Systems Center Charleston, SC, detachment Pensacola, FL, to Naval Weapons Station Charleston, SC.

Realign Naval Weapons Station Yorktown, VA, by relocating the Space Warfare Systems Center Charleston, SC, detachment Yorktown, VA, to Naval Station Norfolk, VA, and consolidating it into the new Space Warfare Systems Command Atlantic detachment, Naval Station Norfolk, VA.

## SECRETARY OF DEFENSE JUSTIFICATION

These recommended realignments and consolidations provide for multifunctional and multidisciplinary Centers of Excellence in Maritime C4ISR. This recommendation will also reduce the number of technical facilities engaged in Maritime Sensors, Electronic Warfare, & Electronics and Information Systems RDAT&E from twelve to five. This, in turn, will reduce overlapping infrastructure increase the efficiency of operations and support an integrated approach to RDAT&E for maritime C4ISR. Another result would also be reduced cycle time for fielding systems to the warfighter.

## COMMUNITY CONCERNS

Except for the Naval Undersea Warfare Center (NUWC) Newport's observation that they would gain more people than expected, none of the gaining communities commented on recommendations to consolidate Maritime C4ISR Research, Development, Acquisition, Test & Evaluation. However, the Commission heard numerous comments from communities that could experience job losses under DoD's recommendation. The Charleston, SC, community argued it should remain the East Coast center for maritime Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) research. They argued that the Space Warfare System Center has the highest military value on the East Coast of all Navy Information Systems Technology (IST) Development and Acquisition activities. It ranked higher than San Diego, CA for IST Test and Evaluation (T&E). Charleston, SC has the most efficient Navy C4ISR organization, lower labor rates, lower costs of living, and significantly fewer electronic emission issues than San Diego. They argued there are currently twice as many Space Warfare Command (SPAWAR) personnel in Charleston as Norfolk, VA and questioned the wisdom of separating Space Warfare Systems Command Atlantic headquarters from the location where most of the work is performed. SPAWAR Charleston embodies a joint command, with nearly one-half of its work being non-Navy. According to the community, this recommendation would override the decision of BRAC 1993 to make Charleston the East Coast center of C4ISR with a new world class facility, far removed from the electronic encroachment problems which have plagued Norfolk. The Dahlgren, VA, community said the Navy would give up, under DoD's plan, inextricably linked mission capabilities because ship-borne warfare systems are specifically designed to be fully embedded within a ship's hull design, interoperable with the ship's own systems, as well as those of other ships in the battle group. Systems are functionally integrated and not separable as independent components. Furthermore, based on BRAC 1995 experiences, only 20 percent to 25 percent of Dahlgren area personnel are likely to move to high-priced San Diego, CA, creating program disruption risks. The Naval Undersea Warfare Center, Newport, RI community believed realignment of submarine communications work from Newport, RI to San Diego, CA would generate no net savings, add significant costs, and damage existing critical Navy capability resident only in Newport. They believe a historical transfer rate of about 15 percent will result in the loss of thousands of years of unique submarine communications experience. The proposed move would severely degrade end-to-end testing of submarine combat system infrastructure. Security and data latency issues would severely degrade the capability of the "virtual submarine" located in Newport if the land-based submarine radio rooms were extracted from the remaining submarine combat subsystems. The Naval Base Ventura County (NBVC) community claimed the realignment would result in significant losses of intellectual capital, would adversely affect war fighting capabilities, and would waste hundreds of millions of dollars of taxpayer money. Citing a preliminary survey showing that 18 percent will relocate, they estimated that only 20—25 percent of current staff will move if the C4ISR work is moved from NBVC to **China Lake, CA**. They also questioned the business case for the realignment asserting the TJCSG did an extremely poor job analyzing and managing data, judging military value and considering jointness.

## COMMISSION FINDINGS

The Commission determined that the proposed movement of these components would seriously fracture the "system of systems work" performed at the affected installations. In particular, there was a high likelihood that the synchronization of the "virtual radio room," which was proposed to be moved to San Diego, would not be successfully coordinated with the remainder of the "virtual submarine" that would be left in Newport. The Commission found similar concerns for the weapon systems integration work conducted at Dahlgren. In addition, but subordinate to the technological issues, were concerns about the likely loss of intellectual capital with these moves for which the COBRA data reflects a need to move all personnel associated with their projects. While the Commission notes that intellectual capital losses can and have been successfully managed in the past, the amended recommendation has a higher ratio of savings-to-investment than the original DoD recommendation, and eliminates a strong likelihood that several key projects would prove extremely expensive to replicate, if not technologically impossible to implement as originally proposed.

## COMMISSION RECOMMENDATIONS

The Commission found that the Secretary of Defense deviated substantially from final selection criteria 1 and 4, as well as from the Force Structure Plan. Therefore, the Commission recommends the following:

Realign Washington Navy Yard, DC, by disestablishing the Space Warfare Systems Center Charleston, SC, detachment Washington Navy Yard and assign functions to the new Space Warfare Systems Command Atlantic Naval Amphibious Base, Little Creek, VA.

Realign Naval Station, Norfolk, VA, by disestablishing the Space Warfare Systems Center Norfolk, VA, and the Space Warfare Systems Center Charleston, SC, detachment Norfolk, VA, and assign functions to the new Space Warfare Systems Command Atlantic Naval Amphibious Base, Little Creek, VA.

Realign Naval Weapons Station Charleston, SC, as follows: relocate Surface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Surface Warfare Center Division, Dahlgren, VA; relocate Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Station Newport, RI; and relocate the Command Structure of the Space Warfare Center to Naval Amphibious Base, Little Creek, VA, and consolidate it with billets from Space Warfare Systems Command San Diego to create the Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA. The remaining Maritime Information Systems Research, Development & Acquisition, and Test & Evaluation functions at Naval Weapons Station Charleston, SC, are assigned to Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA.

Realign Naval Submarine Base Point Loma, San Diego, CA, as follows: relocate Surface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Surface Warfare Center Division, Dahlgren, VA; relocate Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Space Warfare Center to Naval Station Newport, RI; disestablish Space Warfare Systems Center Norfolk, VA, detachment San Diego, CA, and assign functions to the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA; disestablish Naval Center for Tactical Systems Interoperability, San Diego, CA, and assign functions to the new Space Warfare Systems Command Pacific, Naval Submarine Base Point Loma, San Diego, CA; and disestablish Space Warfare Systems Command San Diego, CA, detachment Norfolk, VA, and assign functions to the new Space Warfare Systems Command Atlantic, Naval Amphibious Base, Little Creek, VA.

Realign Naval Air Station **Patuxent River, MD**, by **relocating Subsurface Maritime Sensors, Electronic Warfare, and Electronics Research, Development & Acquisition, and Test & Evaluation of the Naval Air Warfare Center, Aircraft Division** to Naval Station Newport, RI.

Realign Naval Air Station Jacksonville, FL, by disestablishing the Space Warfare Systems Center Charleston, SC, detachment Jacksonville, FL.

Realign Naval Air Station Pensacola, FL, by relocating the Space Warfare Systems Center Charleston, SC, detachment Pensacola, FL, to Naval Weapons Station Charleston, SC.

Realign Naval Weapons Station Yorktown, VA, by relocating the Space Warfare Systems Center Charleston, SC, detachment Yorktown, VA, to Naval Station Norfolk, VA, and consolidating it into the new Space Warfare Systems Command Atlantic detachment, Naval Station Norfolk, VA.

The Commission found that this change and the recommendation as amended are consistent with the final selection criteria and the Force Structure Plan. The full text of this and all Commission recommendations can be found in Appendix Q.

## CREATE A NAVAL INTEGRATED WEAPONS & ARMAMENTS RESEARCH, DEVELOPMENT & ACQUISITION, TEST & EVALUATION CENTER

RECOMMENDATION #184 (TECH 15)

### SECRETARY OF DEFENSE RECOMMENDATION

Realign Naval Surface Warfare Center Crane, IN, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except gun/ammo, combat system security, and energetic materials **to Naval Air Weapons Station China Lake, CA.**

Realign Naval Surface Warfare Center Indian Head, MD, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except gun/ammo, underwater weapons, and energetic materials, **to Naval Air Weapons Station China Lake, CA.**

Realign Naval Air Station **Patuxent River, MD**, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except the Program Executive Office and Program Management Offices in Naval Air Systems Command, **to Naval Air Weapons Station China Lake, CA.**

Realign **Naval Base Ventura County, Point Mugu, CA**, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation **to Naval Air Weapons Station China Lake, CA.**

Realign Naval Weapons Station Seal Beach, CA, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except underwater weapons and energetic materials, **to Naval Air Weapons Station China Lake, CA.**

Realign Naval Surface Warfare Center, Yorktown, VA, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation **to Naval Surface Warfare Center Indian Head, MD.**

Realign Naval Base Ventura County, Port Hueneme, CA, by relocating all Weapons and Armaments Research, Development & Acquisition, and Test & Evaluation, except weapon system integration, **to Naval Air Weapons Station China Lake, CA.**

Realign Fleet Combat Training Center, CA (Port Hueneme Detachment, San Diego, CA), by relocating all Weapons and Armaments weapon system integration Research, Development & Acquisition, and Test & Evaluation **to Naval Surface Warfare Center Dahlgren, VA.**

Realign Naval Surface Warfare Center Dahlgren, VA, by relocating all Weapons & Armaments Research, Development & Acquisition, and Test & Evaluation, except guns/ammo and weapon systems integration **to Naval Air Weapons Station China Lake, CA.**

### SECRETARY OF DEFENSE JUSTIFICATION

This recommendation realigns and consolidates those facilities working in Weapons & Armaments (W&A) Research, Development & Acquisition, and Test and Evaluation (RDAT&E) into a Naval Integrated RDAT&E center at the **Naval Air Warfare Center, China Lake, CA.** Additional synergistic realignments for W&A was achieved at two receiver sites for specific focus. The Naval Surface Warfare Center, Dahlgren, VA, is a receiver specialty site for Naval surface weapons systems integration and receives a west coast site for consolidation. This construct creates an integrated W&A RDAT&E center in **China Lake, CA**, energetics center at Indian Head, MD, and consolidates Navy surface weapons system integration at Dahlgren, VA.

All actions relocate technical facilities with lower overall quantitative Military Value (across Research, Development & Acquisition and Test & Evaluation) into the Integrated RDAT&E center and other receiver sites with greater quantitative Military Value.

Consolidating the Navy's air-to-air, air-to-ground, and surface launched missile RD&A, and T&E activities at **China Lake, CA**, would create an efficient integrated RDAT&E center. **China Lake** is able to accommodate with minor

modification/addition both mission and lifecycle/sustainment functions to create synergies between these traditionally independent communities.

During the other large scale movements of W&A capabilities noted above, Weapon System Integration was specifically addressed to preserve the synergies between large highly integrated control system developments (Weapon Systems Integration) and the weapon system developments themselves. A specialty site for Naval Surface Warfare was identified at Dahlgren, VA, that was unique to the services and a centroid for Navy surface ship developments. A satellite unit from the Naval Surface Warfare Center, Port Hueneme, San Diego Detachment will be relocated to Dahlgren.

The Integrated RDAT&E Center at **China Lake** provides a diverse set of open-air range and test environments (desert, mountain, forest) for W&A RDAT&E functions. Synergy will be realized in air-to-air, air-to-ground, and surface launched mission areas.

This recommendation enables technical synergy, and positions the Department of Defense to exploit center-of-mass scientific, technical and acquisition expertise with weapons and armament Research, Development & Acquisition that currently resides at 10 locations into the one Integrated RDAT&E site, one specialty site, and an energetics site.

## COMMUNITY CONCERNS

The Naval Surface Warfare Center Crane, IN, community believed initial placement on DoD's closure list precluded its consideration as a gainer. Their joint customer base and Army Ammunition plant tenant were not recognized as a joint transformation asset, and that separate evaluation as a technical and industrial facility unfairly disadvantaged them in comparison to large Research Development & Acquisition (RD&A) facilities. They argued their highly experienced work force helped them grow 20 percent per year since 2001, on one of the largest bases in the US with no encroachment problems. The combined recommendations for NSWC Crane would cost Martin County more than one-ninth of its jobs.

The Indian Head, MD community claimed initial placement on DoD's closure list precluded consideration as a "gainer," and that the recommendation would be reasonable if energetics work from other commands, including **China Lake** and Picatinny, were brought to Indian Head. The Indian Head community concurred with DoD's recommendations sending work to them, and strongly opposed proposed losses of workload.

The Ventura County, Point Mugu, CA community claimed DoD's data analysis and judgment of military value were poor and the recommendations would not enhance transformation and jointness. Most of the affected positions are not synergistic with the armaments and weapons work already at China Lake.

They pointed out their range is a unique national asset, used by Air Force, Navy, Missile Defense Agency, other DoD, Foreign Military Sales, commercial activities and NASA, and that no synergy would be gained by realigning the Sea Range to China Lake. Basing range support aircraft at China Lake would require construction and increase operating costs. Some test facilities would take many millions of dollars to move and/or rebuild. NBVC's intellectual capital took decades to develop. Few employees would move to China Lake, and therefore DoD's proposal would risk major disruptions to mission effectiveness. They also disputed DoD's cost estimates, questioning assumptions on the number of staff likely to relocate, the cost of sea range air support, and savings estimated for civil service personnel. They believe a 12-year payback period is more realistic than six years and that recurring savings will likely be less than half those estimated by DoD.

The community speculated that the Coast Guard and Department of Homeland Security might expand their presence on Point Mugu, CA.

The Naval Weapons Station Seal Beach, CA, community noted that test and calibration equipment need not be purchased for China Lake if Seal Beach employees assist NSA Corona with calibration and other related work using Corona-based equipment.

Some members of the Naval Surface Warfare Center, Yorktown, VA, community said energetics work should be sent to Indian Head, and that a large percentage of Virginia employees would likely make this move. They noted that Indian Head, MD, would have been among the top three in most military value categories if the number of military personnel had been included in the evaluation.

However, others in the Yorktown, VA, community said DoD's recommendation is seriously flawed and should be rejected. They claimed locally generated cost, savings, and other data were changed or distorted at DoD to achieve the results needed to support DoD recommendations. Reported savings depended on staffing reductions unlikely to materialize as well as omitted or reduced implementation costs in COBRA. Correction of obvious errors would result in a net cost of over a million dollars, rather than a savings; and payback would stretch to over 20 years. They also argued DoD's recommendation would cause the Navy to lose capabilities and crucial magazine space, therefore hindering future operations.

The Port Hueneme, CA, community contended DoD overstated savings, and understated costs and the repayment period, including the additional costs incurred from training replacement staff and moving the aviation support unit. They said that savings are exaggerated by assuming 15 percent rather than GAO-recommended 5.7 percent for personnel savings. Most of the recommendations are Service-centric, contrary to DoD requirements for jointness and transformation, and would compromise existing synergies of the base, laboratories, and proximity to the Sea Range. They insisted operation of the Sea Range from China Lake would be less safe and more expensive. The realignment would result in significant losses of intellectual capital, adversely affect war fighting capabilities, and waste hundreds of millions of dollars of taxpayer money. They stated the Navy ignored requests for clarification of issues involving personnel relocations and COBRA computed savings.

The Naval Surface Warfare Center Dahlgren, VA, community said this particular recommendation conflicts with DoD's other recommendation to establish Dahlgren as a specialty site for Naval Surface Warfare, and would reduce military value and impair Navy warfighting capability. Consolidation of "big gun" RD&A and T&E at Picatinny Arsenal, NJ, would reduce the ability to engineer and integrate shipboard combat systems. Single siting violates a TJCSG guiding principal and, since Picatinny has neither big guns nor a test range, its transplanted employees would have to make frequent trips back to Dahlgren. Less than 20 percent of the educated, trained, and experienced engineering and technical workforce can be expected to move from the region, resulting in a brain drain.

According to the China Lake, CA, community, it was ranked highest in military value for research, acquisition, and T&E and was ranked first in two of three categories for Sensors/EW and Electronics. They argued that China Lake is the best site for synergism and efficiency and it has a record of identifying key problems and creating effective, affordable solutions. Relocation of Point Mugu's electronic warfare capability to China Lake would improve integration of the next generation combat aircraft. They fully support DoD's recommendation to establish a full-spectrum, integrated RDAT&E center at China Lake. The community can and would provide needed utilities, good schools and affordable housing, and they stated the proposal would generate a relatively small increase from Ridgecrest's 1990s-level population. China Lake has a high retention rate and over 80 percent of the NAWC China Lake retirees stay in the community. They agreed that the Sea Range is a critical joint service asset, with the only question being the number of Point Mugu staff needed to efficiently and effectively operate the sea range.

## COMMISSION FINDINGS

The Commission found that the issues and concerns raised about the recommendation did not rise to the level of a substantial deviation from the Selection Criteria or Force Structure Plan. For instance, the Commission determined that the potential loss of intellectual capital was not likely to be as serious as feared by the affected communities. Moreover, Commissioners found unconvincing the arguments by the Point Mugu community that after 13 years under the same Commanding Officer as **China Lake**, all possible duplication had been wrung out, therefore rendering a significant percentage of the anticipated savings unachievable. The Commission found instead that military value would be enhanced over the long run by bringing the teams working on these major armament projects into a single "center of excellence." However, the Commission was not able to reconcile the large differences between the number of affected personnel as proposed by DoD with the number of personnel identified by the community, primarily the number of people needed to support the Sea Range. The Commission urges the Secretary of the Navy, during the implementation process, to realign the Naval Integrated Weapons and Armaments RDAT&E functions for optimum effectiveness, rather than for narrow compliance with COBRA personnel numbers.

## COMMISSION RECOMMENDATIONS

The Commission found the Secretary's recommendation consistent with the final selection criteria and the Force Structure Plan. Therefore, the Commission approves the recommendation of the Secretary.

## ESTABLISH CENTERS FOR FIXED WING AIR PLATFORM RESEARCH, DEVELOPMENT & ACQUISITION, TEST & EVALUATION

RECOMMENDATION #188 (TECH 24)

### SECRETARY OF DEFENSE RECOMMENDATION

Realign Tinker Air Force Base, OK, Robins Air Force Base, GA, and Hill Air Force Base, UT, by relocating fixed wing related Air Platform Development and Acquisition to Wright-Patterson Air Force Base, OH.

Realign Wright-Patterson Air Force Base, OH, by relocating fixed wing related Live Fire Test and Evaluation to Naval Air Weapons Station China Lake, CA.

### SECRETARY OF DEFENSE JUSTIFICATION

This recommendation completes the consolidation of all Fixed Wing Air Platform RDAT&E, begun during the previous BRAC rounds, at two principal sites: **Naval Air Station (NAS) Patuxent River, MD**, and Wright-Patterson Air Force Base (AFB), OH, while retaining several specialty sites. Research and Development & Acquisition will be performed at **NAS Patuxent River** and Wright-Patterson AFB. Lakehurst will be retained as a dedicated RDAT&E facility for Navy Aircraft Launch and Recovery Equipment and Aviation Support Equipment.

This recommendation includes Research, Development & Acquisition and Test & Evaluation activities in Fixed Wing Air Platforms across the Navy and Air Force. The planned component moves will enhance synergy by consolidating to major sites, preserve healthy competition, leverage existing infrastructure, minimize environmental impact, and effect reasonable homeland security risk dispersal. The relocation of Fixed Wing Air Platform Research was previously accomplished in response to the S&T Reliance Agreements resulting in the consolidation at Wright-Patterson AFB with the maritime related Fixed Wing Air Platform Research consolidated at **NAS Patuxent River**.

This recommendation consolidates Air Force Development & Acquisition functions currently resident at Logistic Centers (Hill AFB, Tinker AFB, and Robins AFB) at Wright-Patterson AFB. These moves will increase efficiency by creating RD&A centers with all attendant support activity and a robust acquisition organization available to all Air Force Fixed Wing Air Platform D&A functions.

The consolidation of all Fixed Wing Air Platform Survivability Live Fire T&E at **China Lake** is driven by the inefficiencies that currently exist between the two sites (Wright-Patterson AFB and **China Lake**), and the potential savings afforded by establishing a single live fire test range for fixed wing air platforms. **China Lake** has this capability and has been doing similar work related to weapons lethality for many years. This action will increase efficiency by reducing overall manpower requirements while also reducing redundancies that exist across the Live Fire Testing domain.

### COMMUNITY CONCERNS

The Robins and Hill Air Force Base communities expressed concern over the number of people potentially affected by DoD's recommendation to establish a research, development, acquisition, and test and evaluation center at Wright-Patterson Air Force Base. Robins' community representatives stated the people potentially impacted by this recommendation provide support for the fixed wing aircraft development and acquisition process as well as supporting operational aircraft. They argued the sustainment mission and applicable personnel should be retained at Robins, and that only development and acquisition personnel should be relocated to Wright-Patterson Air Force Base. Hill community representatives stated that the 18 positions potentially impacted by this recommendation include 9 engineering positions that have already been transferred from Hill to Wright-Patterson Air Force Base.

As a gaining activity, the Dayton community supported the location of additional fixed wing aircraft acquisition personnel at Wright-Patterson. Community representatives believed co-locating additional acquisition resources with the Program Executive Officer for Aeronautical Systems would create synergies. They stated this recommendation could be implemented with minimal disruption to ongoing programs. However, Ohio community officials opposed DoD's recommendation to realign the Air Force's live fire test and evaluation work to Naval Air Weapons Station, China Lake, California. Ohio-based advocates contended this would negatively impact live-fire testing of Air Force-unique weapon systems. As an alternative to DoD's recommendation, they suggested the Commission consider

retaining both the Air Force facility at Wright-Patterson and the Navy facility at China Lake to be managed as a composite operation under a memorandum of agreement between the two services.

The Lakehurst Naval Air Engineering Station community argued the DoD recommendation left out the creation of a Center of Excellence for the specialty area of Aircraft Launch and Recovery Equipment, as well as Aviation Support Equipment, and urged the Commission to synchronize the DoD justification explanation with the Final Commission recommendation.

## COMMISSION FINDINGS

The Commission found merit in DoD's recommendation to establish two primary centers for fixed wing research, development and acquisition, test and evaluation—one center located at **Naval Air Station Patuxent River, MD** and established under previous BRAC rounds, and a new second site to be established at Wright-Patterson Air Force Base, OH.

In addition, the Commission acknowledges and supports DoD's underlying plan to retain specialty sites, including the specialty site currently established at the **Lakehurst Naval Air Engineering Station, NJ** to support aircraft launch and recovery systems and aviation support equipment.

With regard to DoD's recommendation to relocate fixed wing live fire testing capability from Wright-Patterson Air Force Base, OH to **China Lake, CA**, the Commission carefully weighed the benefits of consolidating to a single live fire test facility at **China Lake** versus retention of two facilities—one for Air Force-unique weapon systems and the other for Navy-unique weapon systems. The Commission found no reason to disagree with the Secretary's proposal to establish a single facility and noted that **China Lake's** military value score for fixed wing test and evaluation is substantially higher than Wright-Patterson AFB.

## COMMISSION RECOMMENDATIONS

The Commission found the Secretary's recommendation consistent with the final selection criteria and the Force Structure Plan. Therefore, the Commission approves the recommendation of the Secretary.

## ESTABLISH CENTERS FOR ROTARY WING AIR PLATFORM DEVELOPMENT & ACQUISITION, TEST & EVALUATION

RECOMMENDATION #189 (TECH 26)

### SECRETARY OF DEFENSE RECOMMENDATION

Realign Wright-Patterson Air Force Base, OH, by relocating Air Force Materiel Command V-22 activities in rotary wing air platform development and acquisition to **Patuxent River, MD**. Realign the **Naval Air Engineering Station Lakehurst, NJ**, by relocating activities in rotary wing air platform development, acquisition, test and evaluation to **Patuxent River, MD**. Realign Ft. Rucker, AL, by relocating the Aviation Technical Test Center to Redstone Arsenal, AL, and consolidating it with the Technical Test Center at Redstone Arsenal, AL. Realign Robins Air Force Base, GA, by relocating activities in rotary wing air platform development and acquisition to Redstone Arsenal, AL.

### SECRETARY OF DEFENSE JUSTIFICATION

This Air Land Sea & Space (ALSS) recommendation realigns and consolidates those activities that are primarily focused on Rotary Wing Air Platform activities in Development, Acquisition, Test and Evaluation (DAT&E). This action creates the Joint Center for Rotary Wing Air Platform DAT&E at the Redstone Arsenal, Huntsville, AL, and enhances the **Joint Center at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD**. The end state of this recommendation builds upon existing rotary wing air platform technical expertise and facilities in place at the two principal sites and provides focused support for future aviation technological advances in rotorcraft development.

The planned component moves enhance synergy by consolidating rotary wing work to major sites, preserving healthy competition, and leveraging climatic/geographic conditions and existing infrastructure, minimize environmental impact. These consolidations co-locate aircraft and aircraft support systems with development and acquisition personnel to enhance efficiency and effectiveness of rotary wing air platform design and development activities.

### COMMUNITY CONCERNS

The Robins community stated the 50 personnel potentially impacted by this recommendation provide support for the rotary wing development and acquisition process as well as sustaining operational aircraft. They believed the sustainment mission and applicable personnel authorizations should be retained at Robins and that only development and acquisition personnel should be relocated to Redstone Arsenal. The Fort Rucker and Redstone communities expressed support for the recommendation.

There were no formal expressions from the Wright-Patterson, **Lakehurst** and **Patuxent River** communities regarding the recommendation to establish a rotary wing aircraft research, development and acquisition, test and evaluation center at **Naval Air Station Patuxent River**.

### COMMISSION FINDINGS

The Commission found that the number of positions to be transferred from the realigning organizations to create or enhance joint centers of excellence for development, acquisition and test and evaluation (DAT&E) of rotary wing aircraft at **Naval Air Station Patuxent River, MD**, and Redstone Arsenal, AL, are not necessarily tied to the number of positions identified in the Department's COBRA analysis. In some cases, the Commission determined that the COBRA numbers were not based on full-time equivalent position counts, but instead on a tally of personnel whose duties at one time or another address DAT&E functions. The Commission believes DoD should use its discretion in determining what specific skill sets and personnel authorizations are needed to properly staff the new joint centers. The Commission notes that the 26-year payback is driven in large part due to requirements for new aircraft test and evaluation facilities at Redstone. These issues were found by the Commission to be implementation matters that can be resolved successfully during the six-year implementation period, and did not rise to the level of a substantial deviation.

### COMMISSION RECOMMENDATIONS

The Commission found the Secretary's recommendation consistent with the final selection criteria and the Force Structure Plan. Therefore, the Commission approves the recommendation of the Secretary.

## Appendix C

### Acronym Listing

|           |                                                                                            |
|-----------|--------------------------------------------------------------------------------------------|
| ALRE      | Aircraft Launch and Recovery Equipment                                                     |
| ATC       | Air Traffic Control                                                                        |
| BRAC      | Base Realignment and Closure                                                               |
| C4ISR     | Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance |
| CAO/IPT   | Competency Aligned Organization/Integrated Product Team                                    |
| CID       | Combat Identification                                                                      |
| CTO       | Chief Technology Officer                                                                   |
| DARPA     | Defense Advanced Research Project Agency                                                   |
| DHS       | Department of Homeland Security                                                            |
| DOD       | Department of Defense                                                                      |
| DT        | Developmental Testing                                                                      |
| DTRA      | Defense Threat Reduction Agency                                                            |
| E3        | Electromagnetic Environmental Effects                                                      |
| EDT       | Externally Directed Team                                                                   |
| FOC       | Full Operational Capability                                                                |
| FRC       | Fleet Readiness Center                                                                     |
| GIG       | Global Information Grid                                                                    |
| IPT       | Integrated Product Team                                                                    |
| ISSC      | In-Service Support Center                                                                  |
| ITT       | Integrated Test Team                                                                       |
| MILCON    | Military Construction                                                                      |
| MRTFB     | Major Range and Test Facility Base                                                         |
| MS&A      | Modeling, Simulation and Analysis                                                          |
| N6        | Deputy CNO for Communication Networks                                                      |
| NAE       | Naval Aviation Enterprise                                                                  |
| NAVAIR    | Naval Air Systems Command                                                                  |
| NAWCAD/WD | Naval Air Warfare Center Aircraft Division and Weapons Division                            |
| NCW       | Network Centric Warfare                                                                    |
| NERP      | Navy Enterprise Resource Planning                                                          |
| NETWARCOM | Naval Network Warfare Command                                                              |
| NSPS      | National Security Personnel System                                                         |
| O&S       | Operations and Support                                                                     |
| ONR       | Office of Naval Research                                                                   |
| OSD       | Office of the Secretary of Defense                                                         |
| OT        | Operational Testing                                                                        |
| PEO       | Program Executive Officer                                                                  |
| RDAT&E    | Research, Development, Acquisition, Test and Evaluation                                    |

|             |                                                                                                                     |
|-------------|---------------------------------------------------------------------------------------------------------------------|
| S&E         | Scientists and Engineers                                                                                            |
| S&T         | Science and Technology                                                                                              |
| SE          | Support Equipment                                                                                                   |
| SERDP/ESTCP | Strategic Environmental Research and Development Program/Environmental Security<br>Technology Certification Program |
| SPAWAR      | Space and Naval Warfare Systems Command                                                                             |
| STEM        | Science, Technology, Engineering, and Mathematics                                                                   |
| T&E         | Test and Evaluation                                                                                                 |
| UAS         | Unmanned Air System                                                                                                 |
| USNTPS      | U.S. Naval Test Pilot School                                                                                        |