NAVAL FACILITIES ENGINEERING COMMAND

PUBLIC WORKS DEPARTMENT MANAGEMENT GUIDE

NAVFAC P-1205
OCTOBER 2008

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
1322 PATTERSON AVENUE, SE SUITE 1000
WASHINGTON NAVY YARD DC 20374-5065

October 2008

Public Works Department Professionals,

The cornerstone of NAVFAC's support to the Navy is the Public Works Department. Over the past four years we have integrated all Navy facilities, engineering, and environmental product and service delivery within the Public Works Departments -- each under the Operational Control of the Installation Commanding Officer. This alignment ensures that the PWDs remain responsive to their Supported Commands while enabling NAVFAC to provide common business processes, professional development, and global reach-back support.

The PWD Management Guide contains practical information for all aspects of a Public Works Department -- from planning to demolition, conservation to remediation. It is intended to be a useful resource for everyone in a PWD, not just the Public Works Officer. For PWD leadership, it should reinforce the necessity to integrate all the tools at your disposal, including the Guide, to deliver your Supported Commands the facilities and services they require while also achieving long-term Navy goals for ashore infrastructure.

For a new Public Works Officer, the variety of challenges, Supported Commands, and expectations can be daunting. Keep five things in mind and you will do fine:

1) You lead a great team! The Navy's Public Works Departments are staffed by experienced professionals who are committed to their mission. Lead them with respect and passion and they will not let you down.

2) The entire NAVFAC organization exists to support you. If you need help, ask.

3) Learn about the mission of your Supported Commanders and how the services you provide enable their success.

4) Pay attention to the details and the big picture will remain in focus. While the major construction projects are glamorous, the hallmark of a well-regarded PWD is its service-call response, which can be anything from a clogged toilet to a vehicle request, a blown transformer, or a customer-requested contract modification to a hazardous waste pick-up. Ensure your PWD has the right processes in place, adequate resources, and a good attitude toward these many requests. Your reputation depends on it.

5) Base Appearance. Again, it's the little things. People tend to take better care of that which is neat and orderly: a quickly repaired broken window will prevent more broken windows. Not to mention that your boss, the Base CO, will demand a squared-away installation.

A Public Works tour is one of the most challenging, sometimes frustrating, and definitely most rewarding jobs the Navy has to offer. Long after it is over, you will enjoy the satisfaction of seeing your personal efforts translated into an improved work environment and quality of life for our Sailors and better performance, reliability, and appearance of your base.

Experts from across NAVFAC, including current Public Works Officers, developed this Guide. We will continuously update the on-line version. Don't hesitate to speak up if you have a good idea. Submit your recommendations to CECOS_N75@navy.mil.

Thank you all for your service to the Navy and the Nation. You are the frontlines of NAVFAC, and it is up to the rest of us to support you. Keep up the great work!

W.G. SHEAR, JR.
Rear Admiral, CEC, U.S. Navy
Commander

PUBLIC WORKS DEPARTMENT

MANAGEMENT GUIDE

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Abstract

Public Works Departments are vital to the Navy's shore operations, and the PWDs are the frontlines of the Naval Facilities Engineering Command. The Installation Commanding Officer relies on the Public Works Department to maintain existing buildings and roads, provide electricity, water, and sanitation services, oversee the construction of new infrastructure, plan for future requirements, prioritize work based on fiscal constraints, and ensure compliance with environmental laws and regulations. In addition, the PWDs are expected to identify and implement creative solutions to achieve long-term goals, such as reduced energy demand. The full-service PWD model that the Navy has adopted creates a tremendous opportunity to integrate product and service delivery in order to achieve these goals and deliver the Navy lifecycle management of its real property assets.

The purpose of the Public Works Department Management Guide is to provide guidance and references to the entire Department regarding structure and operations, as well as where a PWD can obtain reach-back support and resources from the rest of NAVFAC. It will also be utilized as the primary instruction guide for all Public Works classes taught by the Civil Engineer Corps Officer's School (CECOS). Additionally, this document may serve as a reference for Installation Commanding Officers who are interested in learning more about the operation of the Public Works Department at their base.

The products and services that a PWD delivers are diverse and dynamic. The following chapters provide detailed references to assist a PWD successfully accomplish these varied tasks. Each section contains a brief synopsis of the subject area that covers the basics of how a Public Works Department should function, the key staff members who enable its success, practical advice for PWD leaders, details on critical issues, and references for finding additional information. This Guide is intended to reinforce policies, procedures and organization across Naval Facilities Engineering Command while providing the Public Works Department with a standard that can be customized to best support their Installation and Supported Commanders.

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Public Works Department

Chapter 1

The Public Works Department is the installation's facilities lifecycle experts, responsible and accountable for the effectiveness and efficiency of the shore establishment. The PWD strives to maintain current readiness and achieve future capabilities of the installation through proactive, quality-focused, and cost efficient delivery of facilities engineering services.

SECTION 1-1. PUBLIC WORKS DEPARTMENT (PWD) OVERVIEW

The PWD is a forward deployed organizational element of one of Naval Facilities Engineering Command's (NAVFAC) Facilities Engineering Commands (FECs). It serves as the delivery point of products and services by providing comprehensive shore facilities management, operations maintenance, construction, base operating support services, and environmental management for Navy Installations.

In simple terms, the Public Works Department (PWD) is the one-stop shop for a Navy Installation to receive facilities engineering and acquisition support that result in a safe and fully functional, living and working environment for our many Supported Commanders. We provide diverse facilities maintenance, acquisition, transportation, utilities, housing, engineering, environmental and lifecycle management services.

The PWD is part of an Integrated Product Team (IPT) that provides a full range of NAVFAC facility and environmental products and services to Navy Installations. An effective PWD leverages the IPT and other parts of the NAVFAC organization to provide facilities engineering and acquisition support to an installation.

In most instances, the Installation Commanding Officer (ICO) will rely on the Public Works Department to deliver the services required to operate the base during normal conditions or in times of a disaster. It is paramount for the Public Works Officer (PWO) to understand the full breadth of responsibility and capabilities of the PWD and the reach back capability the PWD has at its disposal.

Public Works Departments will differ in personnel and organization depending upon an installation and Supported Commands that it services, but its principal functions remain the same. Regardless of whether an installation is small and isolated or in a large Fleet concentration area, whether it is CONUS or OCONUS, whether it provides a platform for

ships, aircraft, expeditionary forces, or Marines – a PWD provides the same basic functions either internally or through external support or contract services. It is incumbent upon the PWO, PWD leadership, and each member of the NAVFAC team to strive for consistency of practices across NAVFAC through the employment of this Management Guide, the NAVFAC *Concept of Operations*, command instructions, and the Business Management System (BMS).

The PWD leadership team must also serve as integrators of internal functions to maximize efficiency of products and services delivered. Many critical functions, including site approvals, utilities production, project planning and disaster response cross several PWD Divisions and their Branches. With proactive communication and collaboration of scarce resources, a PWD will succeed at any challenge that comes its way.

SECTION 1-2. PUBLIC WORKS DEPARTMENT (PWD) ORGANIZATION

A standard Public Works Department organization includes the Public Works Officer, the Deputy Public Works Officer, staff members, Assistant Public Works Officers, and the organization's four divisions. The four divisions are the Facilities Management Division, Facilities Engineering and Acquisition Division, Production Division, and Environmental Division. Figure 1-2-1 shows the PWD organizational template. The services performed by each of the divisions are aligned to a NAVFAC business or support line based on the functions performed by that branch. It is important to realize that each division may deliver services that cross more than one business or support line.

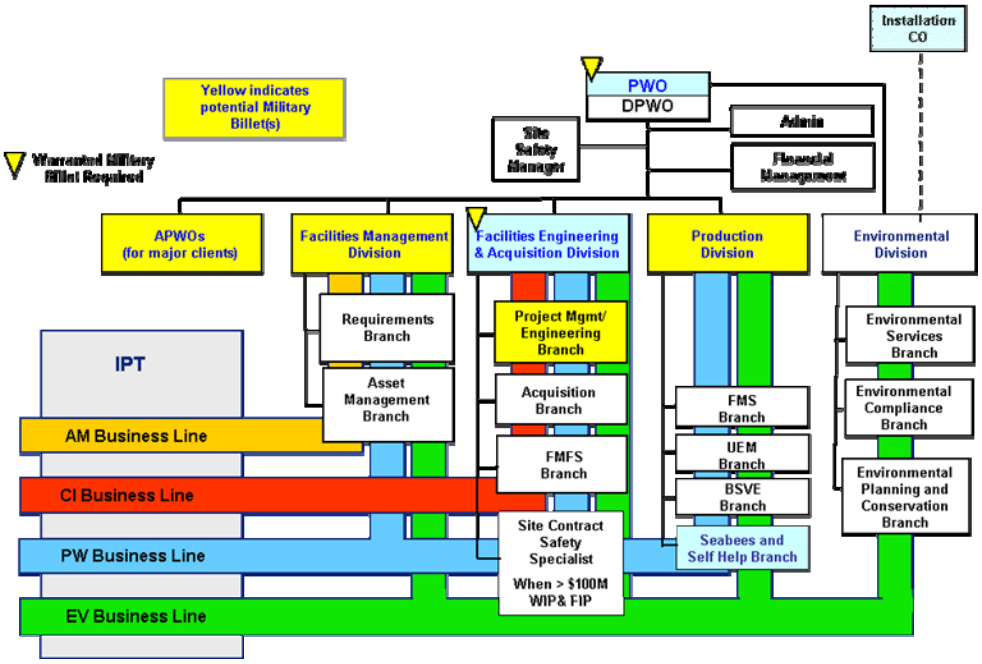

Figure 1-2-1. Public Works Organization Template

A detailed discussion of the structure of NAVFAC is provided in Appendix C. It shows the structural and functional alignment of the command. The relationship of the PWD within the IPT is described later in this chapter.

A typical Public Works Department organization includes the Public Works Officer, the Deputy Public Works Officer, staff members, Assistant Public Works Officers, and the organization's four divisions. The four divisions include the Facilities Management Division, Facilities Engineering and Acquisition Division, Production Division, and Environmental Division. Figure 1-2-1 shows the PWD organizational template. The services performed by each of the divisions are aligned to a NAVFAC business or support line based on the functions performed by the branch. It is important to realize that each division may deliver services that cross more than one business or support line.

The Facilities Management Division (FMD) serves as the point of work generation for the installation and provides the management of real property (land and buildings). This division is comprised of a Requirements Branch and Asset Management Branch. The FMD serves as client liaison to all major clients and ICOs and serves as PWD program funds manager, i.e., ST, FX, FP, and NWCF. Chapter 2 describes the organizational structure and functions performed by the Facilities Management Division.

The Facilities Engineering and Acquisition Division (FEAD) is responsible for acquisition planning and contract administration of construction and service contracts from design to delivery. This division is comprised of a Project Management and Engineering Branch, Acquisition Branch and a Facility Support Contracts (FSC) Management and Facility Services (FMFS) Branch. FEAD also includes work packaging and design of Category of Work (COW) I-III, construction management, and FMFS. If the Work-In-Place (WIP) and Facilities-In-Place (FIP) delivered by a FEAD are greater than $100 million annually, a site contract safety specialist should be assigned. Regardless of the scope of work, contract execution is a FEAD function. Chapter 3 describes the organizational structure and functions performed by the Facilities Engineering and Acquisition Division.

The Production Division is responsible for the in-house execution of facilities maintenance, operation of utilities, energy management, and management of base support vehicle equipment (these services may be outsourced). The Production Division is comprised of a Facility Management and Sustainment (FM&S) Branch, a Utilities and Energy Management (UEM) Branch, a Base Support Vehicles and Equipment (BSVE) Branch and, in some locations, Seabees and Self Help. Chapter 4 describes the organizational structure and functions performed by the Production Division.

The Environmental Division (EV) is responsible for environmental compliance, planning, conservation (natural and cultural resources), and the delivery of environmental services at an installation. This division is comprised of an Environmental Services Branch, an Environmental Compliance Branch, and an Environmental Planning and Conservation Branch. Chapter 5 describes the organizational structure and functions performed by the Environmental Division.

Roles and Responsibilities of Key Leadership

Public Works Officer (PWO)

The PWO is a warranted Civil Engineer Corps (CEC) officer responsible for PWD organization, operations, administration, and supervision. This includes planning, design, construction maintenance, repair of shore facilities, safety certifications, and environmental matters. The PWO is OPCON/ADDU to the ICO and ADCON/PRIDU to the Facilities Engineering Command (FEC) CO. The ICO writes a concurrent military Fitness Report (FITREP) for the PWO. A PWO is:

- Expected to meet regularly, face-to-face, with Supported Commands to proactively address issues, concerns, and expectations.
- Accountable for the timeliness and quality of all products and services NAVFAC delivers.
- Expected to be an advocate within NAVFAC for the Supported Commands, communicating their requirements.
- Expected to ensure Supported Commands are afforded the full opportunity to evaluate NAVFAC's performance, relative to their expectations, after delivery of each product or service.
- Responsible for the operations of public works and public utilities and normally serves as the Energy Efficiency and Renewable Energy Manager.
- Usually designated the certifying officer for all weight handling equipment (WHE) for which the installation has custody or maintenance responsibility.
- Accountable for lifecycle management of NAVFAC and CNIC Class I and Class II real property, product and service delivery, Supported Command interface, project execution, and performance assessments.
- Responsible for delivering public works and facilities engineering elements necessary to support the Emergency Management (EM) Program.

- Expected to work with the IPT Assistant Operation Officer (AOPS) to coordinate and prioritize work execution. The PWO has OPCON over all work and NAVFAC personnel at the installation.
- Expected to develop, prioritize, and execute installation requirements in coordination with the ICO and other Supported Commanders.
- Responsible for environmental compliance and stewardship for the installation and is accountable for achieving environmental compliance, maintaining permits, and monitoring performance through metrics (e.g. Environmental Management Systems (EMS) implementation).
- Responsible for communicating all environmental issues, such as potential Notice of Violations (NOVs), to the ICO, the FEC CO, Operations (OPS) and the Environmental Business Line Coordinators.

Deputy Public Works Officer (DPWO)

The DPWO is the senior civilian in the Public Works Department with the responsibility of operational execution of the Public Works mission and serves as the first line supervisor of the FMD, FEAD, and Production Division. The EV Division reports directly to the PWO. The DWPO has signature authority.

Assistant Public Works Officer (APWO)

APWOs are established as needed to focus on major clients, geographic area, or program directors. They are OPCON of NAVFAC personnel in APWO Area of Responsibility (AOR). Their responsibilities include:

- Manage client emergency and recurring work requests.
- Prepare and coordinate scopes of work or cost estimates.
- Plan execution of sustainment, restoration and modernization dollars for client.
- Develop maintenance action plan (MAP) and coordinate execution.
- Coordinate all client facilities requirements and execution.
- Cradle-to-grave NAVFAC project management.
- Coordinate energy management.
- Support management of regional budget.

It is the responsibility of the PWD leadership to insure horizontal and vertical integration of efforts. These include but or not limited to:

- Budgeting
- Work permits
- Site permits
- Outages
- Emergency management

SECTION 1-3. PUBLIC WORKS OFFICER'S STAFF

The Public Works Officer's staff includes the Site Safety Manager, administration, and financial management personnel.

Site Safety Manager

The Site Safety Manager (SSM) is the single safety point of contact at PWDs. A SSM may serve multiple PWDs.

Administration (ADM)

The Administration staff provides support functions to the Public Works Department in various forms. Support from the staff include general functions such as reception, human resources management and coordination, timekeeping, government purchase card administration, correspondence management, and information technology (IT) support.

Financial Management Staff

The Financial Management staff is responsible for financial and fiscal management at the PWD. A Public Works Department is generally staffed with financial analysts, a cost center or commodity manager, and a fund administrator to coordinate financial management information with the FEC financial management staff.

- A f*inancial analyst* is responsible for coordinating PWD budget issues to ensure timely and accurate distribution of information to justify, defend, and execute NAVFAC budgets.
- A c*ost center or commodity manager* is responsible for delivery of the product and service, preparing the cost center/commodity budgets, and controlling product and service costs.

- *A fund administrator* is responsible for accepting the client's funding documents, issuing and tracking job cost, and maintaining communication with clients as it relates to the status of funds and work progress.

NAVFAC operates under two financial management systems, the Navy Working Capital Fund (NWCF) and the General Fund (GF).

Under the NWCF financial system, all business costs are included in the rates charged for work executed, as NWCF has no direct appropriation of funds. Capital investment and depreciation are built into the rates. Each component command budgets an annual Net Operating Result (NOR), including projected costs and revenues for one fiscal year. This NOR is projected two years in advance and culminates in rate development, in coordination with NAVFAC Headquarters Public Works and Environmental Business Lines. The NWCF NOR is a key metric of each Command. The Accumulated Operating Result (AOR) reflects the cumulative summation of the NOR since inception of that Command. If a Command carries a negative AOR from prior years, future rates are increased. If a Command is carries a positive AOR, future rates are decreased. Work is initiated by a Supported Command by sending NAVFAC a work request. Once funds are received, NAVFAC provides the product or service.

The General Fund (GF) includes both reimbursable and mission funds. The NAVFAC GF financial system is managed through the NAVFAC Resource Allocation Plan (RAP) process. The RAP is based on each Installation's workload by product and service line. The RAP includes the work hours and funds required to execute this workload, as well as associated labor, travel, IT, and other support costs. The RAP begins with a projection of the workload deltas, by product and service line, between the current fiscal year and next fiscal year. Product and service line workload indicators are used to determine workload deltas. Generally, a PWD does not directly participate in the RAP but is required to provide information that is used by the FEC to build the command's annual budget requirements.

Funding

There are several ways NAVFAC receives funds. See Figure 1-3-1.

- NAVFAC receives funding directly from the Navy Financial Management Board (FMB) for mission-funded programs. Funds are allocated annually using the Resource Allocation Process (RAP).
- NAVFAC can receive funds from clients to provide reimbursable support for project development.
- NAVFAC also receives client funds for work output through established Navy Working Capital Fund (NWCF) rates.

NAVFAC also receives client funding for contract awards.

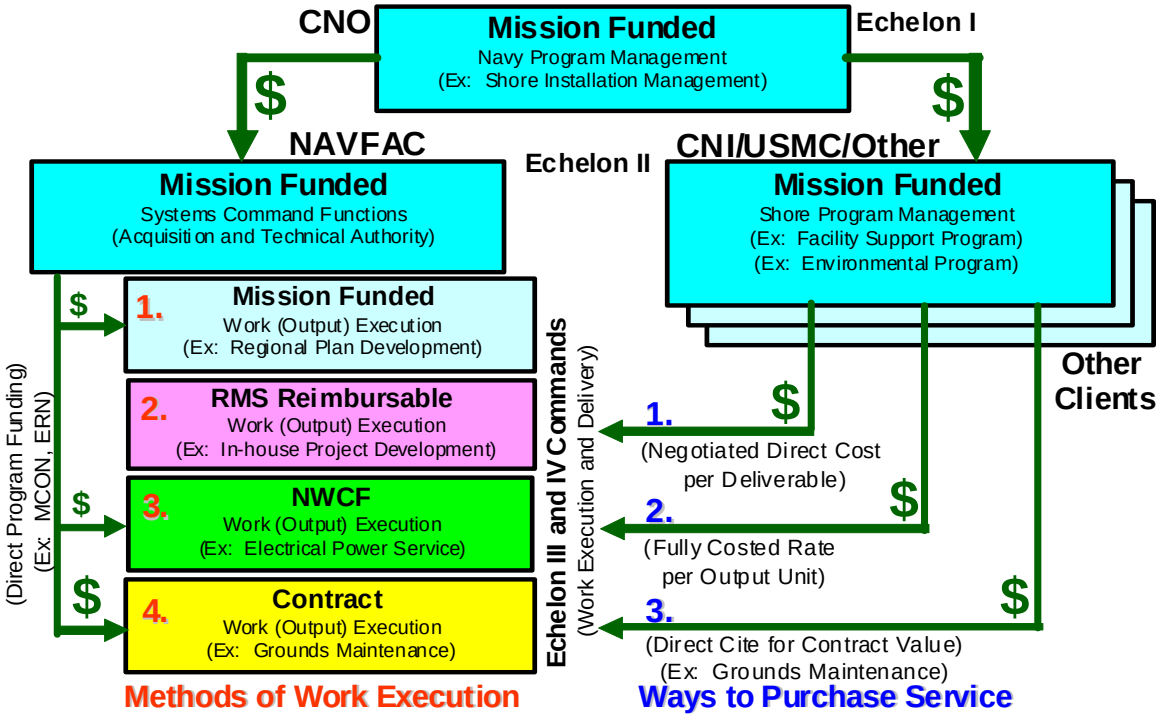

Figure 1-3-1. Integrated Financial Management System

Facilities projects are financed from one of three broad categories of funding sources:

Navy Working Capital Fund (NWCF)

The NWCFs are generated locally through the sale of products and services (generally industrial).

Appropriated Fund (APF)

APFs are funds provided by Congress through specific legislation. Examples include military construction (MILCON) and operations and maintenance (O&M) appropriations and appropriations for procurement such as Other Procurement, Navy (OPN), Weapons Procurement, Navy (WPN), or Research, Development, Test and Evaluation, Navy (RDTEN).

Nonappropriated Fund (NAF)

NAFs consist of cash, investment income or other assets received from sources other than that appropriated by Congress. Examples include revenues generated from retail sales, services, or private funds received from non-government entities, and public funds from governments other than the United States.

CNIC established the Installation Core Business Model (ICBM) as part of the Installation Management Accounting Project (IMAP). The ICBM provides a complete picture of all installation functional and sub-functional areas by appropriately grouping the business areas under specific headings. Functional areas documented in the IMAP are grouped into larger ICBM areas (Air Operations, Port Operations, Operations Support, Public Safety, Environmental, Facility Support, Fleet and Family Readiness and Command and Staff). The IMAP provides standardized terminology and necessary details for CNIC funded shore services and support business areas, functions, and sub-functions.

<u>Budgeting</u>

Facilities Engineering Commands will issue specific planning data and budgetary guidelines to their installations for submission of operating budgets. Commanding Officers will prepare operating budgets based upon this guidance. The degree of Public Works Department participation in budget development varies widely from installation-to-installation. It is considered important to have Public Works leadership heavily involved in the budgetary process.

Preparation of the budget is a continual action. Workload requirements and changes in the quantities of plant maintenance should be noted during the entire year. The management system provides the information and evaluation measures necessary for the budget process. A last minute rush to complete the budget will result in errors and forgotten justifications. Although budget instructions vary from year-to-year, the basic building blocks remain the same, and nothing is better than total familiarity with your local requirements.

In general terms, requirements can be broadly classified in three categories: variable, repetitive, and planned. Variable requirements include such things as breakdowns and emergency/service work. They are items that occur every year, but in different forms and can be predicted only by historical trends. Repetitive items can be identified with a reasonable degree of accuracy. This includes items such as grass cutting, janitorial services, PMIs, etc.. Planned items are requirements that should be accomplished but can be deferred if the funding situation is limited.

The most difficult part of the budget cycle is transforming available fiscal year funds into an effective operating plan. The maximum use of information available through the maintenance management system is necessary to develop a practical plan. A continuous inspection system is a valuable means of identifying hard core maintenance requirements.

To determine the most important requirements, it is necessary to identify the minimum number of work items by budget function that must be funded to keep the station operational and able to perform its basic mission. Realistic, fixed, requirements determination for installation survival is the budget preparation starting point. After this "hard-line" approval, the next step is to analyze the maintenance and repair work and determine which will bring the greatest long-range economic advantage.

Evaluate established frequencies of occurrence for selected types of repetitive work. All repetitive items should be evaluated periodically and justified in terms of their current relative importance. Another approach is to consider the consequences if a function is or is not performed, or if it is partially rather than fully accomplished. It is important that the plan include a balanced mixture of work. Often it is difficult for the Public Works Officer to determine priorities for this type work. It is suggested that each installation establish a Station Planning Board to determine priorities for larger items of non-maintenance work. Be sure to balance all categories and type of funds to assure the orderly expending of all funds available.

Additional information regarding planning for facility projects and maintenance can be found throughout Chapter 2.

SECTION 1-4. PRODUCTS AND SERVICES

NAVFAC Instruction 7040.5C identifies all NAVFAC deliverables by Product Line, outlines the corresponding mission and/or reimbursable funding rules for both General Fund (GF) and Navy Working Capital Fund (NWCF) and sets forth policy for standard business practices and charging for services.

The product and services are listed as NAVFAC mission funded (M) or client reimbursable (R), including NWCF. Funding rules are provided for instances in which a product or service can be either mission or reimbursable funded. When more than one NAVFAC component command is capable of providing a product or service, a prime (or lead) is specified. The supporting component command listed will provide a level of capability or capacity that the lead does not possess. The Product and Service Matrix maps these functions to the corresponding Business and Support Lines. See Table 1-4-1. Product and service delivery is forward-deployed to the maximum extent that resourcing permits.

Business Line	Product & Service Line
(AM) Asset Management	(V) Facility Planning
	(W) Project Development
	(D) Real Estate
(EV) Environmental	(L) Environmental Quality and Planning
	(M) Environmental Restoration
(CI) Capital Improvements	(E) Design
	(G) Construction
	(N) Specialized Technical and Engineering Services
	(O) Ocean Engineering
(PW) Public Works	(H) Facility Management and Sustainment
	(X) Base Support Vehicles and Equipment
	(Y) Facility Services
	(J) FSC Management
	(Z) Utilities and Energy Management
(CE) Contingency Engineering	(B) Contingency Engineering
(EX) Expeditionary	(C) Expeditionary

Definitions	
Commands	
CNIC	Commander, Navy Installations Command
Region	Commander, Navy Region
FEC	NAVFAC Facilities Engineering Command
ELC	NAVFAC Expeditionary Logistics Center
ESC	NAVFAC Engineering Service Center
HQ	NAVFAC Headquarters

Business Line	Product & Service Line
NCC	Navy Crane Center
LANT	NAVFAC Atlantic
PAC	NAVFAC Pacific
Funding Rules	
M	Mission funded
MR	Mission or reimbursable, based on type of project
R	Reimbursable
NWCF	Navy Working Capital Fund reimbursable

Table 1-4-1. Product and Service Line Descriptions

NAVFAC has six Business Lines: Contingency Engineering (CE), Expeditionary (EX), Asset Management (AM), Capital Improvements (CI), Public Works (PW), and Environmental (EV). A Business Line has at least one Product Line, consisting of a group of products and services. NAVFAC also has four Support Lines: Acquisition (ACQ), Financial Management (FM), Command Information Officer (CIO), and Counsel. A Support Line may have one of more Service Lines, consisting of services that are provided across NAVFAC.

SECTION 1-5. INTEGRATED PRODUCT TEAM (IPT)

The PWD is supported by the Integrated Product Team (IPT). The purpose of the IPT is to create a fully integrated delivery platform that leverages the capabilities and expertise of all our business areas to provide the full range of NAVFAC products and services. The IPT leverages resources at both the PWD and FEC level to accomplish requirements for the PWD.

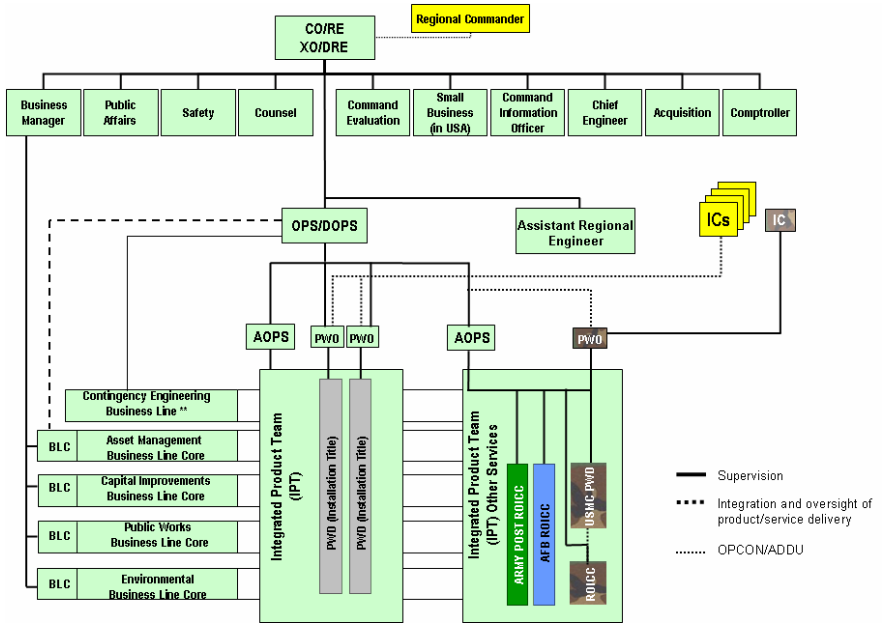

Figure 1-5-1. FEC Organization Chart and IPT

The IPT is staffed by Business and Support Line personnel based on projected workload. The IPT includes the IPT nucleus (located at the FEC) and the personnel in the PWDs and Resident Officer in Charge of Construction (ROICC) offices within the IPT area of responsibility. The IPT ensures Supported Command requirements and expectations are clearly understood and accountable for product and service cost, quality, and schedule. The IPT is supplemented by the Business/Support Line Core to accomplish work that is beyond its capacity or capability.

Establishment of the PWDs and/or ROICC as the forward deployed organizational element of the organization allows for the efficient and effective delivery of product and services through the following concepts:

- *Standardization* is achieved by having a common organizational framework that can be used at all installations.
- *Multiple product and service delivery methods* (In-house vs. BOS contract) can be accommodated within this framework by understanding that the execution organization may differ between storefronts, but the management structure is standardized.
- *Scalability* is achieved by understanding that not all functions may exist at a given storefront and the size of the function may vary from storefront to storefront.

- *Core-IPT-Storefront*, the degree to which a function is performed at the storefront vice at an IPT or in the core, is determined by available resources. The top priority for funding is the critical "must have" functions.

The full IPT includes the PWD and/or ROICC offices within the IPT AOR. The PWD and/or ROICC serves as the storefront for product and services which has reach back capabilities to the NAVFAC organization through the IPT. Included in the IPT nucleus are those functions that can be effectively performed within a cross functional IPT, while gaining economies of scale and efficiencies, such as:

- Functions that require significant knowledge of the Supported Command and/or installation.
- Functions that require significant, but not necessarily daily, interaction with the Supported Command and/or installation.

The IPT ROICC offices support non-Navy Supported Commands, such as the Marine Corps and Air Force. The ROICC is a warranted and licensed CEC officer and is OPCON/ADDU to the Installation CO and ADCON/PRIDU to the FEC CO. ROICC staff includes contracts, engineering, and safety support.

The IPT is led by the Assistant Operation Officer (AOPS). The AOPS is responsible for product and service delivery, project execution coordination across the IPT, and IPT performance assessment. The AOPS directs all work executed within the IPT, in coordination with PWDs and ROICCs. The AOPS, or his representative, is a member of selection board panels for IPT personnel, which is chaired by the BLC/SLC or their representative. The AOPS chairs the IPT Acquisition Planning Board. Recognizing that Public Works Officers (PWOs) have direct access to OPS/DOPS as needed, the AOPS leads and organizes all aspects of project execution, resourcing, and process issues in support of their PWOs.

Within the IPT, it is important to understand the governance of the team so that it functions effectively and efficiently. The following general guidance has been promulgated in the NAVFAC *Concept of Operations*.

- The PWO reports to OPS and responsible to AOPS for operations related taskings.
- The AOPS is responsible to PWOs for product and service delivery, project execution, coordination across IPTs (including other PWOs), and performance assessment.
- The AOPS directs all work executed within the IPT nucleus, and coordinates with PWOs for priorities involving Supported Commands and/or installations.

- The AOPS chairs the IPT Acquisition Planning Board.
- Recognizing that PWOs have direct access to OPS/DOPS as needed, the AOPS leads and organizes all aspects of project execution, resourcing, and process issues in support of their PWOs.
- The AOPS, or his representative, may serve as chair or member of selection board panels for IPT nucleus personnel.

To fully understand the reach back capability of the IPT, it is important to understand the Business and Support Line Core functions at the FEC. The Core contains regional or broad functions not requiring frequent, direct interaction with Supported Commands or installations to gain economies of scale and efficiencies. These functions include:

- Resource management, process management, and innovation
- Community management (part of NAVFAC Administration (ADM) community)
- Technical expertise not resourced to IPTs
- Establishing and monitoring metrics
- Reach back and surge capacity for IPTs/PWDs
- Reach back and coordination with other FECs

The general core governance guidance that has been provided includes the following:

- Business Line Coordinators (BLCs) and Support Line Coordinators (SLCs) are responsible to OPS for providing Core support to and technical oversight of the IPTs, including PWDs and Resident Officer in Charge of Construction (ROICC).
- BLCs/SLCs are responsible to the Business Manager (BM) for resource management, process improvement, community management, and program management.
- BLCs/SLCs chair selection board panels for Business Line/Support Line Team Leads on the IPTs.

SECTION 1-6. EMERGENCY MANAGEMENT

Navy Installations, personnel, and family members are constantly at risk from natural and man-made threats and hazards that can occur with or without warning. Threats and hazards can include hurricanes, wildfires, earthquakes, severe winter storms, severe flooding, hazardous material incidents, and terrorist attacks.

In accordance with OPNAVINST 3440.17 and CNICINST 3440.17, each installation is required to have an all-hazards Emergency Management Plan (EMP) that should be coordinated with the Region, tenant commands, and local, state and federal agencies.

The EM Plan facilitates response and short-term recovery (which set the stage for successful long-term recovery).

The Installation EM Plan must act first to address emergencies occurring within their assigned area of responsibility (AOR). Depending on the nature and size of the emergency, Regional and mutual aid assistance may be required in order to complete all response and recovery tasks. The Installation EM Plan focuses on the measures and actions that are vital for protecting assigned personnel, maintaining critical mission(s), and restoring mission essential functions. Critical tasks to be addressed at the Installation level include: mass warning and notification, public awareness training, evacuation/shelter/ shelter-in-place planning, and public affairs planning.

Response actions are time-sensitive, with little allowance for delay or "midcourse corrections," and some post-disaster recovery issues, such as rebuilding and placement of temporary housing, also must be addressed quickly. Advance planning ensures that this process is able to be properly managed and executed. The EM Plan must also be flexible enough for use in all emergencies, including unforeseen events, yet provide a Region or Installation with an emergency management "bottom line." From there, a Region or Installation may proceed confidently with long-term mitigation efforts directed at specific hazards.

Installation Commanding Officers shall identify and prioritize required Emergency Management (EM) capabilities based upon a risk-based strategy that considers threat, vulnerability, criticality, operational requirements, and potential consequences per both 3440.17 series instructions. EM capabilities should sense hazards, shape the situation, shield personnel, and sustain critical operations.

All Installation Commanding Officers shall designate an Installation Emergency Management Officer (EMO) in writing per reference as well as an appropriate number of personnel to serve as a collateral duty or full-time staff to support the Installation EM Program, including the administration and operations of the Emergency Operations Center (EOC). Installation EMOs shall be trained per CNI guidance.

The Public Works Department is primarily responsible for the execution of specific engineering tasks in support of disaster recovery operations at Navy shore Installations. These tasks may be completed by NAVFAC utilizing in-house or contracted resources, or they may be accomplished using operational civil engineering forces. NAVFAC coordinates with and provides direct support to Naval civil engineering operations.

It is incumbent upon the PWD to review and exercise the installation EMP on a regular basis to ensure that PWD personnel are familiar with the plan, resources are available, and desired capabilities are met. Periodicity of this review should be at least annually, but is also prudent at critical times when potential disasters exist such as at the beginning of hurricane season and in the Fall before extreme winter weather events.

In addition to the in-house capabilities of the PWD, the following resources are available and depending upon the expected consequences, these services can be pre-positioned:

- Contingency Engineering Response Teams (CERT): All NAVFAC Facilities Engineering Commands have designated personnel that provide a reimbursable capacity for contingency response to include damage assessment, cost estimating, contingency contract administration and other technical requirements (planning, environmental, utilities). The CERT is designed to be flexible and scalable to support an installation's recovery from a full range of natural and man-made disasters. CERTs will deploy to permissive environments and are not first responders.
- Global Contingency Construction Contract (GCCC): a Cost-Plus Award Fee, indefinite delivery, indefinite quantity multiple award contract which provides worldwide rapid civilian construction and engineering services for contingencies such as disaster recovery.
- Global Contingency Service Contract (GCSC): a Cost-Plus Award Fee indefinite delivery, indefinite quantity contract which provides short-term facilities support services with incidental construction at various locations in support of worldwide disaster recovery. Depending on the expected consequences, these services can be pre-positioned.
- Mobile Utilities Support Equipment (MUSE): supported out of Naval Facilities Engineering Logistics Command (NFELC), MUSE provides technical expertise for utilities issues as well as having the capability to meet short-term utility shortcomings including portable diesel engine driven generators, substations and switchgear and boilers. NFELC will provide both the equipment and expert operators.
- Reserve Augmentation: The NAVFAC Contingency OICC is the Reserve component of NAVFAC HQ and can provide contingency, expeditionary and theater contracting management and support in various customizable.
- Resources can be coordinated through your local FEC Operations Officer.

SECTION 1-7. RECOMMENDED TRAINING

Due to the nature of the PWO to have diverse responsibilities, specialized training in environmental management, safety, emergency management, and acquisition is required.

Public Works

- Introduction to Facilities Engineering and Acquisition (A-4A-0101)
- Introduction to Asset Management and Environmental (A-4A-0102)
- Public Works Department Operations (A-4A-0103)
- Advance Public Works Department and Facilities Engineering Command Operation (A-4A-0065)

Environmental

The required environmental training for Civil Engineering Corps (CEC) officers assigned as Public Works Officers is delineated in OPNAVINST 5090.1C, Environmental and Natural Resources Manual and includes the following course offered by the Civil Engineer Corps Officer School (CECOS):

- Environmental Protection (A-4A-0036)
- Basic Environmental Law (A-4A-0058)
- NEPA Application (A-4A-0077)
- Introduction to Cultural Resource Management Laws and Regulations (A-4A-0070)
- Spill Management Team (SMT) Basic (A-493-2100)
- Cultural Resources Training for ROICCs and PWOs (CECOS web based)
- Environmental Training for ROICCs and PWOs (CECOS web based)

Safety

- Introduction to Navy Occupational Safety and Health (Ashore) - offered by the Naval Safety and Environmental Training Center
- ESAMS Training for Safety Professionals - offered by HGW, ESAMS contractor. (3 days - regionally offered as well as at HGW HQ in Knoxville, TN)
- General Crane Safety (NCC-GCS-01) Available at e-learning at NKO
- Rigging Gear Inspection (NCC-RGI-01) Available at e-learning at NKO

- NAVFAC Construction Safety and Health Correspondence Course Part 1 & 2 (20 hours - self-paced read through EM-385-1-1 and open book (part 1) and closed book (part 2) test
- NAVFAC Construction Hazard Awareness Training Course - 5 days (offered by FEC safety managers or contractor - on-site or at another FEC PWD/ROICC/OICC)

Emergency Management

The required emergency management training required for Public Works Officers is delineated in CNIC 3440.17 Navy Installation Emergency Management Program Manual which requires Incident Command System training. The PWO should be trained to at least ICS-basic level which includes the following four courses:

- IS-100.a Introduction to Incident Command System, I-100
- IS-200.a ICS for Single Resources and Initial Action Incidents
- IS-700 National Incident Management System (NIMS), An Introduction
- IS-800.B National Response Framework, An Introduction

Acquisition

The acquisition training required for a PWO is billet specific. At a minimum, a PWO should be Defense Acquisition Workforce Improvement Act (DAWIA) Level II Contracting certified and in many cases the position requires DAWIA Level III Contracting certification.

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Facilities Management Division (FMD)

Chapter 2

The primary mission of the Facility Management Division (FMD) is to identify and prioritize requirements, plan and coordinate the execution of those requirements, and manage the real property assets on the installation to include space management and real estate coordination.

SECTION 2-1. FACILITIES MANAGEMENT DIVISION (FMD)

The FMD develops requirements for maintenance, repair, and recapitalization;

- Receives work from Supported Commands.
- Sets the priorities of work, manages Class I and Class II property.
- Manages current year Sustainment, Restoration and Modernization (SRM) funds, provides input for budgets.
- Develops and manages short and long range base planning.

The FMD has two branches: Requirements Branch and Asset Management Branch. Their functions are as follows:

Requirements Branch

The Requirements Branch determines and manages the construction, repair and maintenance requirements of the installation through management of the Facilities Condition Assessment Program (FCAP), by receiving and prioritizing work from Supported Commands, managing assignment and execution of work, managing current year SRM funds and providing input for budgets for future year work, developing and providing prioritized project lists for the various SRM programs, and managing the backlog of maintenance and repair.

The Requirements Branch is the primary interface between the Public Works Department (PWD) and the Supported Commands. The main functions of the Requirements Branch are:

- Work input and control and support to Work Induction Board (WIB) - Receives incoming work requests, determines the best execution method within the PWD, validates and/or sets the priority of work, manages resourcing of staff, and oversees the execution of the current year program. Develops work control processes and trains Public Works Staff in their use.
- Service desk - Receives incoming work requests and inputs them into Single Platform MAXIMO and/or dispatches crews if the work requires immediate attention.
- Supported Command interface, including Facility Managers - Works with the Supported Commands to understand their infrastructure requirements, assists them in getting work accomplished, and keeps them informed of the status of their work.
- Prioritize work - Sets priorities of work for current year execution (expressed in the Maintenance Execution Plan) and develops prioritized project lists for competing for the multiple SRM programs and sources of funding.
- Support Regional Engineer budget inputs.
- Facility Condition Assessment Program (FCAP) - Coordinates and manages ongoing FCAP inspections and manages the FCAP program, through which the maintenance and repair portions of the Maintenance Execution Plan (MEP), Maintenance Action Plan (MAP), and Long Range Maintenance Plan (LRMP) are developed.
- MEP, MAP, LRMP - Develops and maintains the MEP, MAP, and LRMP.
- Scoping Estimates - Provides scoping estimates to determine the funding required accomplish submitted projects.
- Funds Management - Manages the execution of current year SRM funding.

Asset Management Branch

The Asset Management Branch manages all Class I and Class II property, develops short to long range plans for the installation, develops DD Form 1391 project documentation, and develops integrated priority lists for many programs (military construction, special projects, demolition, installation appearance, etc.) based on enterprise input and condition, capacity, and configuration analyses of assets. The main functions of the Asset Management Branch are:

- Space management – Manages physical space on the installation and works with Supported Commands when their space requirements change.

- Acts as community and host nation liaison.
- Site approvals – Ensures planned work meets regulations and instructions, master planning and safety requirements.
- Real estate coordination – Analyzes and recommends approval or rejection of requests for use of government property. Works with private parties and community agencies to prepare draft agreements for disposing, licensing, leasing, and enhanced use leasing of Class I and Class II property.
- Regional Shore Infrastructure Plans (RSIP)/Geographic Information System (GIS) coordination and data maintenance; internet Navy Facilities Assets Data Store (iNFADS) – Ensures accuracy and completeness of the required data including assets physical attributes, cost data, use tenant, asset evaluation, and asset condition.
- Initiate DD Form 1391s and project documentation – Develops DD Form 1391 project documentation for Supported Commands and internally generated requirements and submits completed documentation to meet annual planning cycle dates.
- Prepare Installation Integrated Priority List (IPL) – Prepares IPLs for Commanding Officer review for military construction, special projects, demolition programs, and other programs as necessary, such as Installation Appearance Guide, Anti-terrorism Force Protection (ATFP), Global War on Terror (GWOT), etc. Ensures approved IPLs are submitted to meet annual planning cycle dates.
- Basic Facilities Requirements (BFR) support and coordination – Develops and maintains BFRs. Uses data to justify new construction, consolidation, and demolition.

SECTION 2-2. ROLES AND RESPONSIBILITIES OF KEY PERSONNEL

The Facilities Management Division Director is responsible for both the Requirements and Asset Management Branches. In addition, the FMD Director acts as the Deputy Public Works Officer (DPWO) and Public Works Officer (PWO) in their absence.

Requirements Branch Head is responsible for all the functions in the Requirements Branch described in the above section. In addition the Requirements Branch Head may be acting for the FMD Director. For some PWDs the FMD does not have a designated Requirements Branch Head.

The Work Control and Induction Lead is responsible for receiving work and ensuring the work is properly prioritized and assigned for execution.

The Asset Management Branch Head is responsible for all the functions in the requirements branch described in the above section. In addition the Requirements Branch Head may be acting for the FMD Director. For some PWDs, the FMD does not have a designated Asset Management Branch Head.

Real Property Accounting Officer (RPAO) is responsible for maintaining an accurate accounting of all Class I and Class II real property Duties include maintaining iNFADS, BFR reporting etc.

SECTION 2-3. FACILITY PLANNING

Facility planning identifies current infrastructure requirements, predicts future requirements, and provides a roadmap for how to implement requirements. Facility planning ranges from very broad global plans to very specific guides that identify specific requirements when developing a project for an installation. Many of the plans that the PWD will provide input into or develop are listed in this section. Figure 2-3-1 shows how facility planning influences investment decisions.

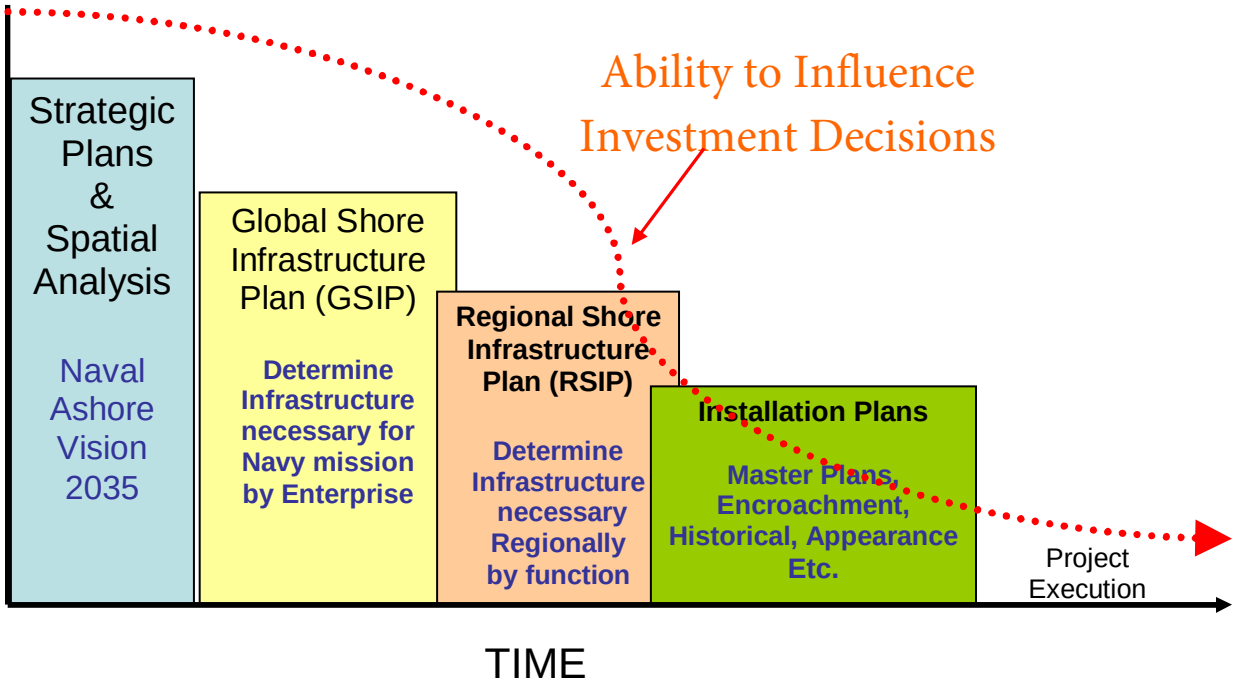

Figure 2-3-1. Facility Planning

Planning, Programming, and Budgeting Execution Systems (PPBES)

The primary resource management process used by the Department of Defense (DoD) is the Planning, Programming, and Budgeting Execution Systems (PPBES). The PPBES is a cyclic process containing three distinct phases: planning, programming, and budgeting. The Public Works Department Facilities Management Division's role in the PPBES is to adhere to the policies and procedures set forth by NAVFAC Strategic Plan while ensuring proper planning, programming and budgeting projects for the Navy, Marine Corps, federal agencies, and other DoD clients. The PWDs input into the PPBES is primarily through several annual data calls (example is the annual MILCON submissions) and by keeping key systems and information up to date that are used to get Facilities data for PPBES decisions such as Internet Navy Facility Assets Data Store (iNFADS).

Global Shore Infrastructure Planning (GSIP)

Global Shore Infrastructure plans are typically Naval Enterprise centric plans that review and analyze infrastructure requirements from a global perspective and then develop comprehensive, long-range, and strategic infrastructure requirements from that global perspective.

Regional Shore Infrastructure Planning (RSIP)

Regional planning is the process that develops comprehensive, long-range, and strategic plans for specific geographic areas. In short, the comprehensive RSIP process addresses land, facilities, transportation and circulation, utilities, the environment, and natural and cultural resource planning elements. Regional planning aims to:

1. Regionalize shore infrastructure for the best value
2. Maintain an optimal infrastructure footprint
3. Reduce the cost of infrastructure
4. Incorporate strategic Warfare Enterprise and regional command visions along with operational efficiencies
5. Reduce redundant facilities within regions and Navy Concentration Areas (NCAs), and between standalone activities
6. Identify alternatives for optimizing the use of shore infrastructure

Installation Plans

Navy Facilities Excellence Plan serves as a set of overarching standards and principles that express the CNI vision for improving and maintaining Navy installations and facilities. There are a variety of plans that are specific to each installation. For examples:

- Activity Overview Plan (AOP) or Base Master Plan describes the overall base facilities and a roadmap for future infrastructure development that includes land "zoning".
- Installation Appearance Plans (IAP) is typically developed for a single installation (could be developed for a region) and provides architectural guidelines for physical improvements and standards for color, landscaping, and signage. The guidelines encourage a unified, locally-influenced, consistent look for physical improvements. With the Base Exterior Architecture Plan (BEAP) as a guide, strategic appearance projects have been implemented at many installations.
- Encroachment Action Plan describes areas of potential encroachment and identifies strategies to avoid or mitigate the encroachment.
- Air Installation Compatibility Use Zones (AICUZ) Program identifies areas that are not compatible for development or development is limited because of aircraft operations. The AICUZ Program identifies land areas in the vicinity of air installations on which DoD recommends restrictions on land uses that may obstruct airspace, be incompatible with current or projected air operations or are otherwise hazardous to aircraft operations.
- Range Air Installation Compatible Use Zones (RAICUZ) Program purpose is to achieve compatibility between the Navy's air-to-ground training ranges and existing and proposed land use and airspace in the vicinity of the range installation.
- Historic Asset Management Plan (HAMP) is a tool used to mange Navy historic facility assets in a comprehensive and consistent manner. HAMP provides a basis for prioritizing historic properties for possible preservation, re-use, or removal with a focus on key historic assets that support Navy mission requirements.
- Integrated Cultural Resources Management Plan (ICRMP) identifies historic properties on the Installation and defines management processes, including the Section 106 compliance process.

SECTION 2-4. FACILITY INVESTMENT PROGRAMMING

Common Output Level Standards (COLS) assist CNI and OPNAV in making decisions to program, budget and execute in a consistent/logical manner by providing a four-level system for describing Navy's delivery of shore services and support services. COLS offer options for decision making in funding process, provide customers with realistic expectations of service delivery, and provide objective performance metrics to manage the program during execution.

It is imperative that COLS are distinct options that are priceable, measurable, output-oriented and viable. Each level of capability will clearly define the frequency and/or quality in delivery of service. COLS are program centric and "standard" across all regions. It is CNI's intent that COLS are utilized for performance/cost modeling. A few business areas may continue to be Level of Effort (LOE) where modeling is not practical.

Capability Performance Level (CPL) standards are under development to improve to the measurement method for funding from service-based to performance and risk-based outcomes. As a result, the CPL standards will improve the measurement of capability performance levels delivered and provide improved facilities condition reporting. See Figure 2-4-1.

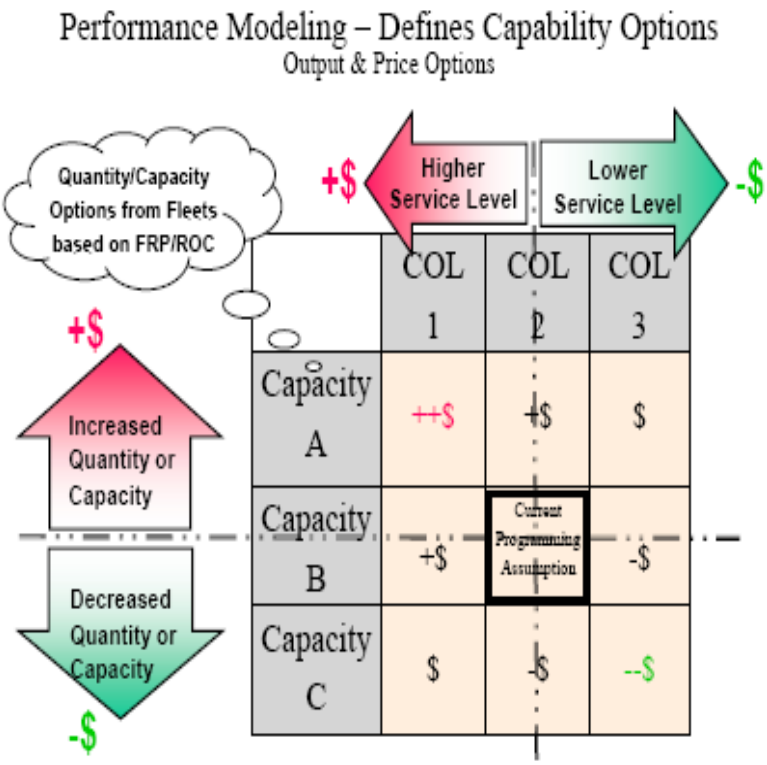

Figure 2-4-1. Capability Planning

Sustainment, Restoration, Modernization (SRM) and Recapitalization

The facilities Sustainment, Restoration and Modernization (SRM) program provides funds to keep the DoD facilities inventory in good working order, restore facilities and/or alter facilities to implement new higher standards to accommodate new functions or missions.

Sustainment

Facility sustainment means the maintenance and repair activities necessary to keep the inventory of facilities in good working order. It includes regularly-scheduled adjustments and inspections, preventive maintenance tasks, and emergency response and service calls for minor repairs. It also includes major repairs or replacement of facility components (usually accomplished by contract) that are expected to occur periodically throughout the lifecycle of facilities. This work includes regular roof replacement, wall surface refinishing, heating and cooling systems repair and replacement, tile and carpet replacement, and similar types of work.

Sustainment is funded to Navy-wide COLS, which do not necessarily include all expected sustainment projects. It does not include environmental compliance costs, facility leases, or other tasks associated with facilities operations such as custodial services, grounds services, waste disposal, and the provision of central utilities. It should be noted that historic buildings earn a higher sustainment rate.

The DoD Facilities Sustainment Model (FSM) is used as the model for forecasting facilities sustainment resource requirements.

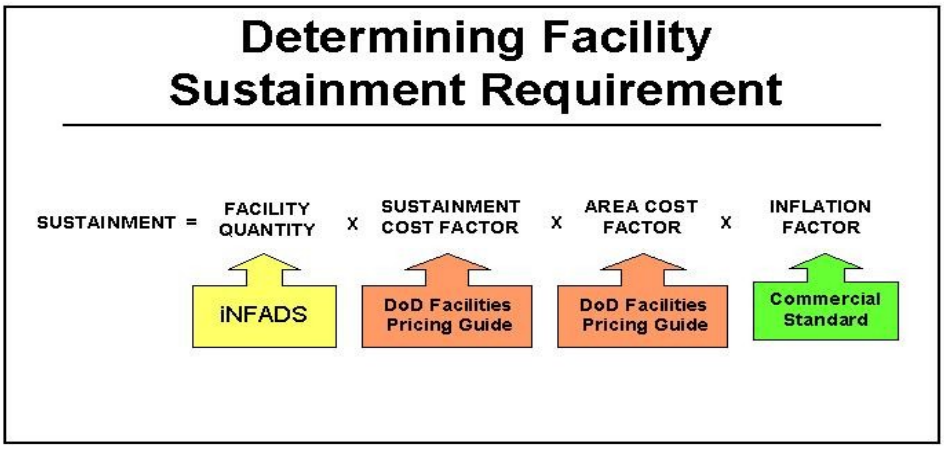

Figure 2-4-2. Determining Facility Sustainment Requirements

- *Facility quantity* is the facility size expressed in the Facility Analysis Category (FAC) unit of measure
- *Sustainment cost factor* is the average annual unit cost (in current year dollars) for sustaining the average size facility in the given FAC.
- *Area cost factor* is the location adjustment based upon the local costs for labor, equipment, materials, and currency exchange rates (overseas) compared with an overall base-city average.
- *Inflation factor* is the factor to adjust current year prices to the target future year.

The DoD uses a sustainment metric which is the comparison of sustainment funding to the requirement for a given year, expressed as a rate.

Sustainment Rate *(%)* = Sustainment Funding ÷ Facility Sustainment Requirement

Restoration

Restoration means the refurbishment of real property to such a condition that it may be used for its designated purpose. Restoration includes repair or replacement work to restore facilities damaged by inadequate sustainment, excessive age, natural disaster, fire, accident, or other causes.

Modernization

Modernization means the alteration or replacement of facilities solely to implement new or higher standards, to accommodate new functions, or to replace building components that typically last more than 50 years (such as the framework or foundation).

Recapitalization

Recapitalization means the major renovation or reconstruction activities (including facility replacements) needed to keep existing facilities modern and relevant in an environment of changing standards and missions. Recapitalization extends the service life of facilities or restores lost service life. It includes restoration and modernization of existing facilities. **Recapitalization encompasses both renovation and replacement** of existing facilities. Recapitalization requirements are generated using the formula for plant replacement value (PRV); cost of replacing an existing facility with a new facility that meets code and design requirements. PRV is used when planning a facility budget and when incorporating category code changes.

Plant Replacement Value = **Facility Quantity** x **Construction Cost Factor** x **Location Factor** x **Planning and Design (P&D) Factor** x **Historical Factor** x **Contingency Factor** x **SIOH** x **Inflation**

- *Facility quantity* is the facility size expressed in the FAC unit of measure (such as square feet).
- *Construction cost factor* is the average annual unit cost (in current year dollars) for constructing the average size facility to current standards in the given FAC.
- *Location factor* is the location adjustment based upon the local costs for labor, equipment, materials, and currency exchange rates (overseas) compared with an overall base-city average.
- *Planning and design factor* is an adjustment to account for typical project planning and design costs.
- *Historical factor* is an adjustment for historical architecture and materials (when applicable).
- *Contingency factor* is an adjustment for typical contingency costs during construction.
- *Supervision, inspection, and overhead (SIOH)* is an adjustment for supervision, inspection, and overhead costs associated with construction management.
- *Inflation* is the factor to adjust current year prices to the target future year.

The DoD uses a recapitalization metric which is the comparison of recapitalization funding to the recapitalizable PRV expressed as a rate.

Recapitalization Rate (years) = Recapitalizable PRV ÷ Annual Recapitalizable Funding

SECTION 2-5. FACILITY MAINTENANCE PLANNING

The goal of a facility maintenance plan is to develop an objective, consistent, executable, and mission focused list of projects to be accomplished in order to maintain installation facilities in an acceptable condition. That maintenance plan will lay out what needs to be done, who will do the work, when will it be accomplished, what it will cost, and how will it be paid for.

The objective is to optimize installation readiness (improve Defense Readiness Reporting System-Navy (DRRS-N) scores) at the lowest possible cost by focusing on facilities of the greatest military utility (high Mission Dependency Index (MDI) score) that are below acceptable condition (low Facility Condition Index (FCI) score). This process will take knowledge of the condition of base facilities then prioritizing work, followed by packaging work for efficient execution by funding source and method of accomplishment. Maintenance plans are often divided into three tiers that will assist in more effectively planning and executing future work.

- Maintenance Execution Plan (MEP) is everything that is within the budget control for the year and has been approved for completion.
- Maintenance Action Plan (MAP) is a compilation of all maintenance and repair work to be accomplished during the upcoming three year period, including an estimate of unforeseen work. See Figure 2-5-1.
- Long Range Maintenance Plan (LRMP) is the plan of maintenance work anticipated for the remaining design life of the assets beginning with the current year. It comprises the unconstrained maintenance required to support the installation mission needs and to correct the deficiencies identified by the current and future modeled assessment of facilities. Work also accounts for restoration, modernization, and recapitalization projections.

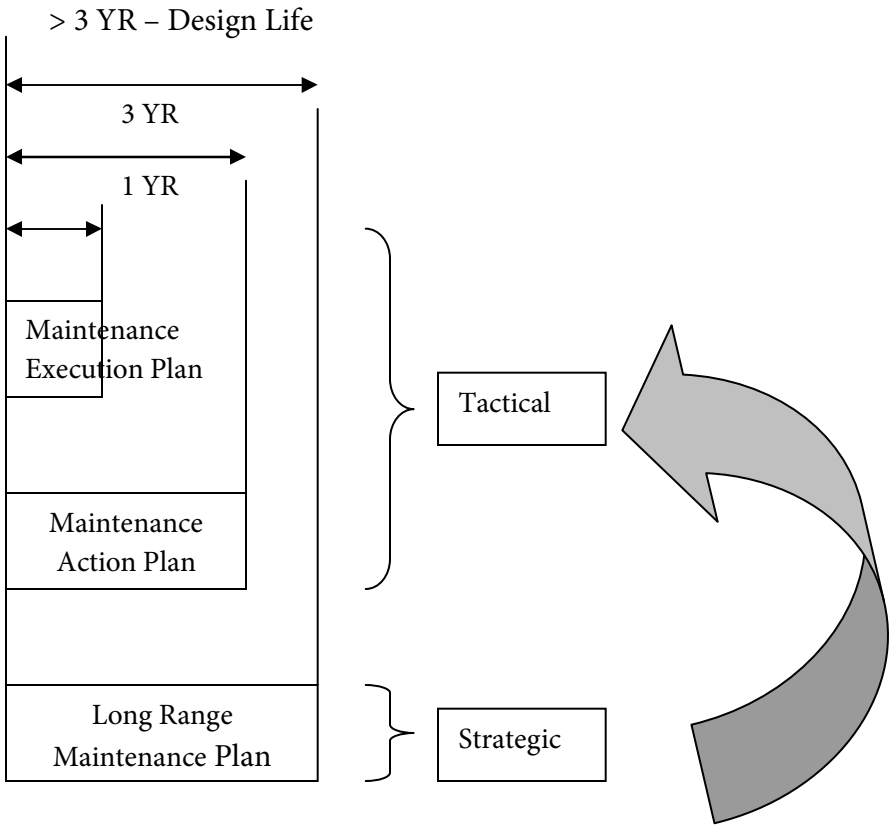

Figure 2-5-1. Facility Maintenance Planning

The Facilities Condition Assessment Program (FCAP) is a comprehensive effort for planning, managing, and executing scheduled facility inspections through inspection service providers such as Architect-Engineers (A-E), Naval Facilities Engineering Service Center, and the Public Works Department (PWD). Products include deficiency data, cost estimates, priority lists, iNFADS recommended changes, and other metrics. Figure 2-5-2 depicts the FCAP process.

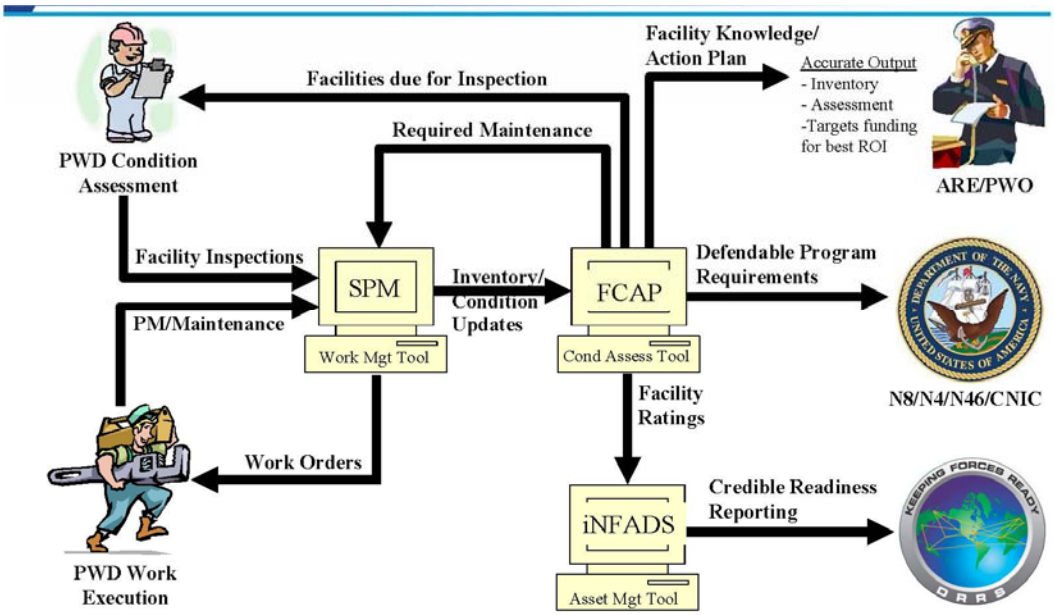

Figure 2-5-2. FCAP Process

The main output is a comprehensive and current condition rating for all Navy shore infrastructures with:

- Uniform ratings across the inventory, regardless of asset type.
- Ratings determined from a standardized inspection and information gathering process that aligns level of effort with value received.

Effective maintenance planning consists of balancing the short-term tactical view with the long-term strategic view, integrating the maximum return on investment of small repair, large renovations, and military construction projects that conform to the Enterprise GSIPs and long range installation and regional plans like NAV 2035.

At the installation level, the FMD is responsible for developing the facility maintenance plan, ensuring that there is accurate visibility of facility assets, their respective conditions, upcoming maintenance requirements and the priority of execution. The general planning process is as follows:

- Inventory – Identification of the facility component inventory is critical in determining what to fix and when. Of particular importance are age and/or remaining service life. The desired level of inventory detail depends on the type of facility and the systems within the facility. The inventory database comes from the baseline assessment, FCAP inspections, targeted inspections during operations, or through updating the inventory tool as systems are demolished or replaced.

- Defects by building – Input can come from the baseline assessment, FCAP inspections, engineering reports, environmental studies, tenant work requests, or targeted inspections during operations. These defects are typically sorted by facility and further by system. There may not be a cost associated with them at this point. If there is a cost then it would only be to a rough order of magnitude.
- External and internal factors – These are defined as factors that are mandated upon the Public Works Department. They can be customer driven, mission changes, new weapons platforms, regulatory or policy changes, or funding driven (color/type of money). They include all requirements that are not produced by the physical condition of facility components.
- Define requirements – Inputs are merged into logical groups to produce full and complete requirements. An initial cost estimate helps determine the appropriate means of execution. Budgetary work classification by SIC (ST, NF, DE, RM, EV, CT) and Title X classification (construction, sustainment, maintenance, repair) are assigned to the requirement. Requirements are typically packaged by facility, but sometimes a system-wide approach is more rationale or economic, e.g. replacing fire alarms in numerous buildings.
- Perform initial prioritization – All packaged requirements are prioritized for separation into the strategic and tactical plans. Tactical plans are separated by program. The projected budget control is identified for each program. Program submittals or Integrated Priority Lists (IPLs) include Demolition, Special Project, IDSP, Regional IPL, HA, Energy, GWOT, IAG, and others.
- Validate – Confirm requirements and generate sufficient projects for a minimum of 150% of the annual budget. Consider different ways to package projects and what the Navy has as current programs of interest if there is an overabundance of projects to fund in a particular category.
- Update priority – The prioritized list is updated reflecting the validation step. Methods of prioritization may include: mission impact, time to correction should it fail, environmental risk, safety risk, return on investment (ROI), CO priorities, CNIC priorities, client priorities, overall condition, etc.
- Evaluate the facility – Look at the facility in a holistic manner and determine if the initial plan is the most economical course of action and if the maintenance plan actually fits the long term intentions for the facility.
- Combine requirements into projects – All requirements are evaluated for project packaging. Once the different projects are identified, the work classification is verified and funding thresholds are considered, e.g. MILCON, service call, specific, etc.

- Budget control – Establish the control for projects, taking into account such as preventive maintenance and fixed costs like NWCF shops and BOS contracts.
- Execute the plan – A great plan requires coordination and follow through. Other budget and execution priorities will arise through the year, so the FMD must monitor execution and budget to insure acceptable progress is made. The plan is flexible and must be reevaluated throughout the year. It is also continuous, so the next fiscal year's plan is started as soon as the current year begins execution.

Annual Inspection Summary (AIS)

The AIS is being replaced by Facilities Condition Assessment Program (FCAP). As the PWO, you will likely see references to the AIS. Therefore, a brief description is provided below.

AIS was the Navy's means of identifying and reporting its cumulative backlog of real property maintenance and repair. It was the tool through which Installation Commanders identified and reported real property deficiencies for planning and budgeting. AIS contained the critical and the total maintenance and repair backlog as of the fiscal year's end. AIS also included the names of the organizations that performed facility inspections, the percentage of inspections completed, and explanations of large increases in the backlog.

SRM Programming and Funding Responsibility

There are many programs that fund PWD functions and SRM requirements. The programs are outlined in Figure 2-5-3, the CNIC Installation Management Accounting Project (IMAP). The IMAP is the roadmap for program and funding responsibility. The IMAP has eight Business Areas and describes their functions and sub-functions, including Special Interest Codes (SIC) that indicate the portion of the Navy's Operations and Maintenance (O&M) budget that should be used if it is the responsibility of the CNIC Budget Submitting Office (BSO). The PWD will frequently be asked by the Supported Commanders to fund requirements outside of their funding responsibility. The IMAP is a good reference to help determine where the funding responsibility should reside.

Fleet | Fighter | Family | Enable

Air Operations

Airfield Ops SIC AO CC AO SCC LB/NL
- Admin & Station Aircraft Operations
- Air Traffic Control
- Airfield Facilities
- Auxiliary Airfield Support
- Aviation Fuel Support
- Ground Electronics
- Passenger Terminal & Cargo Handling

Port Operations

Port Ops SIC PR CC PR SCC LB/NL
- Berthing & Hotel Services
- Magnetic Silencing
- Port Logistics
- Port Operations Center
- Spill Response
- Support Craft Berth Days
- Support Craft Ship Moves
- Harbor Security Boat Maintenance

Ship Charter SIC SC CC SC SCC LB/NL
- MSC NWCF Tug/Workboat Support - Ship Moves

Operations Support

Supply SIC SP CC SP SCC LB/NL
- Material Mgmt
- Supply Services

Public Safety

Emergency Management SIC EM CC EM – SCC LB/NL
- Current Ops
- Future Ops
- EM Command & Control
- EM Equip
- EM Planning & Preparedness
- EOD Support
- Weapons

Fire & Emergency Services SIC FI CC FI – SCC LB/NL
- Aircraft Rescue & Fire Fighting
- EMS Transport
- Fire Prevention
- Fire Protection & HAZMAT

Force Protection SIC CT CC CT – SCC LB/NL
- Antiterrorism
- Harbor Security
- Law Enforcement
- Physical Security Mgmt/ Planning
- Security Ops

Safety SIC SA CC SA – SCC LB/NL
- Explosive Safety
- NAVOSH
- Radiation Safety
- Recreational/ Off-Duty Safety
- Traffic Safety

Environment

Compliance SIC EC CC EC SCC LB/NL
- Management & Planning
- Non-recurring Activities Support
- Recurring Activities Support

Conservation SIC CN CC CN SCC LB/NL
- Non-recurring Activities Support
- Recurring Activities Support

Cultural SIC CR CC CR SCC LB/NL
- Non-recurring Activities Support
- Recurring Activities Support

Pollution Prevention SIC PP CC PP SCC LB/NL
- Non-recurring Activities Support
- Recurring Activities Support

Facility Support

Base Support Vehicle & Equipment SIC TR CC TR SCC LB/NL
- Construction
- Cranes
- MHE
- Railway Equipment
- Support
- Trailers
- Vehicles

Collateral Equipment SIC FQ CC FQ SCC LB/NL
- MILCON Collateral Equipment
- Non-MILCON Collateral Equipment

Facility Investment SIC _ _ CC_ _ SCC LB/NL
- Demolition DE – DE
- New Footprint NF – NF
- Restoration & Modernization RM – RM
- Sustainment ST – ST

Facility Management SIC FP CC FP SCC LB/NL
- Asset Mgmt
- Facility Investment Planning
- Real Estate

Facility Services SIC FX CC FX SCC LB/NL
- Custodial
- Grounds Maintenance & Landscaping
- Integrated Solid Waste Mgmt
- Other
- Pavement Clearance
- Pest Control

Utilities SIC UT CC UT SCC LB/NL
- Chiller Plant
- Compressed Gas
- Delivered Fuels
- Electrical
- Natural Gas
- Other
- Sewage
- Steam
- Water

Fleet & Family Readiness

Bachelor Housing & Dormitories SIC QO CC QO – SCC LB/NL
- BH FF&E
- BH Operations
- BH PPV
- Dorms FF&E
- Dorms Operations

Fisher House SIC FH CC FH – SCC LB/NL
- Fisher House

Galley SIC GL CC GL – SCC LB/NL
- Food Service Contracts
- Galley Operations

Lodging SIC LO CC LO – SCC LB/NL
- Contract Berthing
- Leased Quarters
- PCS Lodging
- VQ FF&E
- VQ Operations

MWR SIC MW CC MW – SCC LB/NL
- Cat A Activities
- Cat B Activities
- Cat C Activities

Child Development SIC CD CC CD – SCC LB/NL
- Child Development Centers
- Child Development Homes
- Contract Spaces
- School Age Care
- Youth Programs

Family Housing * SIC_ _ CC_ _ – SCC LB/NL
- Furnishings 14 – 14
- Leasing 15 – 15
- Maintenance 20 – 20, 22 – 22, 23 – 23
- Management 11 – 11
- Miscellaneous 16 – 16
- PPV 13 – 13
- Services 10 – 10
- Utilities 12 – 12
- Intra-station Moves IM – IM

Fleet & Family Support SIC FS CC FS – SCC LB/NL
- Career Support/ Retention
- Crisis Response
- Deployment Readiness

Other Community Support * SIC OC CC OC – SCC LB/NL
- Artifact Displays & Collections
- Ships' Store
- Voting Program

Command & Staff

Command SIC CA CC_ _ – SCC LB/NL
- Command/Admin CA
- Inspector General CG
- Off of Gen Counsel CF
- Public Affairs CH
- Religious CC
- Staff Judge Advocate CE

Info Tech Svcs SIC IT CC IT – SCC LB/NL
- Base Communications
- IT Support & Mgmt
- NMCI

Resource Mgmt SIC RN CC_ _ – SCC LB/NL
- Business Mgmt CL
- Financial Mgmt CM
- G&A Various

Total Force Mgmt SIC MS CC_ _ – SCC LB/NL
- Casualty Assistance/ Honor Guard CB
- HRO CJ
- Manpower Mgmt CI
- Other Personnel Services CV
- PASS CQ
- FECA DC – DC

Training & Readiness SIC CX CC CX – SCC LB/NL
- Exercises
- Range Operations
- Shore Response Plan

Notes: Sub-Cost Centers (SCCs) are:
LB = Labor; NL = Non-Labor

Final

Updated: 7/30/08

IMAP 2009

Core Business Model

(For OMN & OMNR, excludes MILCON & OPN)

- BOS N81 Accredited Models
- FOM (Facility Operation Model)
- FSM (Facility Sustainment Model)
- FMM (Facility Modernization Model)

Figure 2-5-3. IMAP Core Business Model

SRM Special Interest Codes (SICs)

Special Interest Codes are two-letter prefixes that indicate the project investment account or "color of money" for SRM. See Figure 2-5-4.

- "ST" (Sustainment) – Projects that fit the definition of sustainment.
- "RM" (Restoration and Modernization "recapitalization) – Projects that fit the restoration and modernization definition.
- "NF" (New Footprint) – New footprint is defined as new construction work that addresses facility deficits. This may include either construction of new facilities or expansion of existing facilities. However, for projects where new construction work increases the size of an existing facility by less than 50 percent the work is categorized as modernization.
- "DE" (Demolition) – Demolition is defined as dismantling and disposing of an excess real property facility either partially or in its entirety.
- "FP" (Facility Management) – Management and administration, installation plans and engineering, collateral equipment, real estate and quality assurance evaluation.
- "FX" (Facility Services) – Janitorial, pest control, refuses collection, recycling, grounds maintenance, street sweeping, and snow removal.
- "CT" (Counter Terrorism) – Actions taken to oppose terrorism throughout the entire threat spectrum, including antiterrorism (defensive measures taken to reduce vulnerability and property to terrorist acts, including limited response and containment by local military forces) and counter terrorism (offensive measures taken to prevent, deter and respond to terrorism
- "TR" (Transportation) – Base support vehicles, weight and material handling equipment.

FY09 Budget Guidance -- PWD Functions Mapped to NAVFAC BLs and Business Model (Jan 2007)										
					Business Model					
					Direct		Reimbursable			
								Navy Working Capital Fund		
Function/Product/Service	CNIC Typical SIC	CNIC Typical CAC	NAVFAC P&S Matrix (Note 5)	Supporting NAVFAC BL,SL,OPS/SBO	Mil. Pers. Navy	NAVFAC Mission	GF Reimb.	Direct	Prod. OH	G&A OH
PWD Leadership and Staff										
PWO (military)	FP	9110	H6	OPS/SBO (Note 1)						X (Note 2)
APWO (military)	FP	9110	H6	OPS/SBO (Note 1)	X					
Deputy PWO	FP	9110	H6	OPS/SBO (Note 1)					X (Note 2)	
Admin	FP	9110	H6	OPS/SBO (Note 1)					X (Note 2)	
Financial Management	FP	9110	H6	OPS/SBO (Note 1)					X (Note 2)	
Enterprise IT Systems Support	FP	9110	H6	OPS/SBO (Note 1)					X (Note 2)	
Safety Program Management	FP	9110	H6	OPS/SBO (Note 1)					X (Note 2)	
Facilities Management Division										
Facility Management Division Leadership	FP	9110	H6	PW				X (Note 3)		
Requirements Branch Leadership	FP	9110	H6	PW				X (Note 3)		
Work Induction/SPM	FP	9110	H6	OPS/SBO (Note 1)				X (Note 3)		
Service Desk	FP	9180	H6	PW				X (Note 3)		
Production Control (Work Management, MAP)	FP	9180	H6	PW				X (Note 3)		
Facility Mgmt Specialist (Customer POC, etc.)	FP	9180	H6	PW				X (Note 3)		
Facility Condition Assessment	FP	91EB	H6	PW				X (Note 3)		
Asset Management Branch Leadership	FP	9120, 91EA, 91EE	V	AM			X (Note 4)			
Planning	FP	9120, 91EA, 91EE	V	AM			X (Note 4)			
Real Estate Management	FP	9320, 9360	D	RES			X (Note 4)			
Facilities Engineering and Acquistion Div.										
Facilities Engineering and Acquistion Div. Leadership	-		Various	CI	X					
Project Mgt & Engineering Branch Leadership	ST	Various	G2/E/N	CI			X			
Engineering and Design Support (Cat I/II)	ST	Various	E2/N	CI			X			
CAT III/IV Project Development	FP/ST	Various	H	PW				X		
FSC TO/DO Development	FP	Various	J2	PW				X		
Construction Project Management	-		G2	CI		X				
Construction Quality Assurance	-		G2	CI		X				
Acquisition Branch Leadership	-		G2	CI (AQ)		X				
Acquisition (Construction)	-		G2	CI (AQ)		X				
Acquistion (Facility Services/FSC)	-		Y1	PW (AQ)		X				
Acquisition (Design and Services)	-		E/N	CI (AQ)		X				
FMFS Branch Leadership	FP		J2	PW				X		
FSC Perf. Work Statement Dev. & Mods.	FP		J2	PW				X		
FSC Performance Assessment	FP	9180	J2	PW				X		
Producton Division (in-house workforce)										
Production Division Leadership	UT/ST/TR	Various	Z/H/X	PW					X	
Fac. Sustainment Branch	ST	Various	H1-3	PW				X		
Utilities & Energy Management Branch Leadership	UT	Various	Z4	PW				X		
Utilities Operations	UT		Z11	PW				X		
Utilities Engineering	UT		Z4	PW				X		
Energy Management	UT	83TE	Z8	PW				X		
Base Support Vehicles and Equip Branch	TR		X66	PW				X		
SEABEE Self Help Branch	ST		H3	PW	X					
Environmental Division										
Environmental Compliance	EC, CN, PP		L	EV			X			
Environmental Services (Shops)	EC		L	EV				X		
Environmental Planning	EC		L	EV			X			
Environmental Restoration	-		M	EV		X				

Notes:

1. Shows functions that are typically managed by NAVFAC HQ OPS/SBO crossing multiple business lines; they are shown as PW H6 PL functions for general Facility Management. At the ECH III and IV level, the responsibility is coordinated between OPs and BO/BM.
2. These PWD Leadership and Staff functions should be cross-reimbursed, as appropriate, from the NAVFAC Mission Funds (CNIC General Fund reimbursable functions such as Planning/Project Development and Environmental, and from NAVFAC FEAD and Environmental Restoration Mission Funded functions).
3. This Facility Management NWCF service will be a fixed price for the installation/PWD to cover the anticipated workload.
4. These Planning and Project Development functions will stay General Fund reimbursable.
5. Revised P&S Matrix Row: H6 - 5 - Fac Mgmt Sus - Facility Management - PW Management (Product Line Leadership, PWD Facility Management, Client Coordination, PWD Management, Facility Condition Assessment and Analysis.) - Service - R - NWCF (H16 is now Navy - M (M is for Echelon 3).
   Revised P&S Matrix Row: J2 - 2 - FSC Mgmt - FSC Operations (Defining Element) - FSC technical support for PWS, PAP, and FAP development. Performance Assessment operations. FSCM. Post award technical and operational support including task order or delivery order development. Training beyond GF PWS and PA. FMFS PWD Branch leadership. - R - NWCF.
6. All PWBL Functions are NWCF in the new PWD matrix except FSC Acquisition.
7. NAVFAC FM Financial Fact Sheet, of 18 May 2005, provides guidance regarding cost allocation and reimbursement between Working Capital Fund and General Fund appropriations for shared support functions and services.

Figure 2-5-4. Special Interest Codes Mapped to PWD Functions

The two-letter prefix for projects with a combination of more than one investment type of work shall reflect the predominant type of investment work in the project, calculated by cost. For a detailed explanation of special interest code, refer to OPNAVINST 11010.20H.

SECTION 2-6. FACILITY PROJECTS

There are several different types of projects or programs that support installation infrastructure requirements The Navy has defined maintenance, repair, and construction projects as follows:

- Maintenance is the recurring, day-to-day, periodic, or scheduled work required to preserve or return a real property facility to such a condition that it may be used for its designated purpose.
- Repair is the return of a real property facility to such condition that it may be effectively utilized for its designated purpose, by overhaul, reconstruction, or replacement of constituent parts or materials that are damaged or deteriorated to the point where they cannot be economically maintained.
- Construction is the erection, installation, or assembly of a new real property facility; or the addition, expansion, extension, alteration, conversion, or replacement of an existing real property facility; or the relocation of a real property facility.

The Navy has established criteria, including funding limits, for facilities projects to comply with laws and regulations as described below. Chapter 6 provides the Navy's policy regarding cultural resources and items to considerations when planning facility projects.

Military Construction (MILCON)

MILCON, as defined in OPNAVINST 11010.20, includes any construction, development, conversion, or extension of any kind carried out with respect to a military installation. Installation project proponent is responsible associated project development cost such as the generation of a DD Form 1391s and environmental documentation. MILCON includes construction projects for all types of buildings, facilities, roads, airfield pavements, and utility systems with costs above $750,000 ($1,500,000 for life, safety, and health projects). The Navy MILCON program objective is to provide quality facilities to support the Navy mission. A MILCON project includes all construction work necessary to produce a complete and usable facility or complete and usable improvement to an existing facility. Additionally, instances may occur when maintenance and repair work will be accomplished as MILCON as part of a large project.

Authority to carry out a MILCON project includes authority for surveys and site preparation, acquisition, conversion, rehabilitation, or installation of facilities; acquisition and installation of equipment and appurtenances integral to the project; acquisition and installation of supporting facilities (including utilities) and appurtenances incident to the project; and planning, supervision, administration, inspection, and overhead incident to the project.

Each MILCON shall result in a complete and usable facility or improvement to a facility. Combining multiple facilities of different types into a single MILCON project is not recommended, except when each project is in the same Facility Class (FC) and the required completion date of each facility necessitates programming all of the facilities in the same fiscal year.

For full details regarding MILCON projects including programming and budgeting review OPNAVINST 11010.20.

NOTE

All planning and documentation for MILCONs (NEPA, DD Form 1391 preparation etc.) are completed outside of MILCON program funding and are typically funded by CNIC, the project sponsor or a combination of both. For example, the Navy Exchange (NEX) funded the DD Form 1391 preparation for a NEX sponsored and programmed MILCON project, but CNIC funded the preparation of the National Environmental Policy Act (NEPA) documentation.

Unspecified Minor Military Construction (UMC)

An unspecified minor military construction project is a military construction project that has an approved cost equal to or less than $2,000,000. However, if the military construction project is intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening, an unspecified minor military construction project may have an approved cost equal to or less than $3,000,000. Annual MILCON legislation provides lump sum authorizations and appropriations for UMC. Installations will submit requirements for UMCs through their respective Region to CNIC. For full details regarding UMC projects reference OPNAVINST 11010.20.

Congressional Add MILCONs

Congressional Add MILCONs are MILCON projects that are added by members of Congress to the program year MILCON list. Congressional add projects must be in the Future Year Defense Program (FYDP) and typically do not exceed $10 million. It is common for congress members or staff to ask Installation COs for their top "Congressional Add" MILCON candidates. The Public Works Department should be prepared to provide the Installation CO a list of potential congressional add projects that the CO can give to or discuss with congress members or staff.

MILCON Team Planning and Programming Process (MTP3)

The project development process for military construction projects is called the MILCON Team Planning and Programming Process (MTP^3). Project development is one of the most important actions in MILCON programming and is documented using a DD Form 1391. MTP^3 guidance provides specific details of DD Form 1391, by itself, shall explain and justify the project to all levels of the Navy, Office of the Secretary of Defense (OSD), Office of Management and Budget (OMB), and Congress. Justification data shall clearly describe the impact on mission, people, productivity, lifecycle cost, etc., if the project is not accomplished.

Special Projects

Special projects are construction, repair, maintenance, or equipment installation projects that exceed the funding authority of the installation commander but fall below the threshold for military construction. Navy guidelines restrict special project funding to no more than 10 percent of the total Real Property Management (RPM) annual spending.

Special projects are approved and funded by CNIC and are typically over $500K and/or construction projects under the MILCON threshold. Project monetary limits and approval authorities are promulgated in the OPNAVINST 11010.20. The Deputy Assistant Secretary of the Navy Installations and Facilities (DASN I&F) must approve all projects which exceeds $5 million. Congressional notification is required for all repair projects over $7.5 million. Sufficient time should be allowed for the necessary project approvals and notifications. Special projects compete for limited resources and are prioritized and programmed based on a number of considerations and developing scoring models. For full details regarding special projects reference OPNAVINST 11010.20.

A few key items to consider regarding special projects:

1. Special projects must be documented on DD Form 1391.
2. One time authority to exceed the special project limit can be requested from CNIC via the Regional Commander.
3. A formal net present value life-cycle economic analysis is required for all maintenance and repair projects with an estimated cost that is greater than $500,000 and more than 50 percent of the facility plant replacement value (PRV) and all repair projects with an estimated cost greater than $2,000,000.

Local Discretionary Projects

Typically, each PWD will get a certain amount sustainment (ST) funds to use at the Installation CO's discretion. This money is used to fund the SRM requirements that are below the special project threshold.

Others

There are other centrally managed programs that compete first at the Region and ultimately at CNIC. Examples include:

- Installation appearance projects
- Demolition projects
- Hazard abatement projects

Figure 2-6-1 shows the project authorities and funding levels.

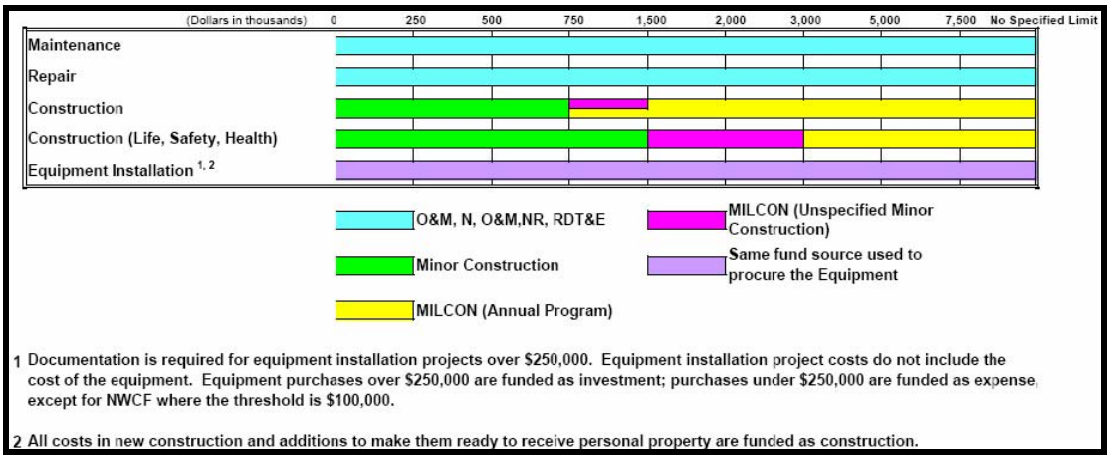

Figure 2-6-1. Cost Limits for Appropriated Funds Projects Classification of Work

SECTION 2-7. WORK INDUCTION SYSTEM (WIS)

The NAVFAC Work Induction System (WIS) is a standard, automated method to route incoming Supported Commands requirements for execution. Single Platform MAXIMO (SPM) is the information technology system which houses the WIS requirements entry screens and automated processing engine. The WIS Business Line (BL) rules are the heart of the automated WIS processing engine. Figure 2-7-1 shows a generic workflow model of how work is processed using BL rules. The BL rules are based on the product or service required, the category of work, and the location of the work, which are used in combination to route work to the appropriate responsible team. The responsible teams are the prime execution agents for the work and will typically have the project management function. The majority of work requests will be automatically routed through WIS. Unique requests that cannot be routed automatically through WIS are referred to a Work Induction Board (WIB). The WIB will manually determine the proper routing for a select few products and services. The WIB will only be used by special persons with appropriate access as determined by the NAVFAC component.

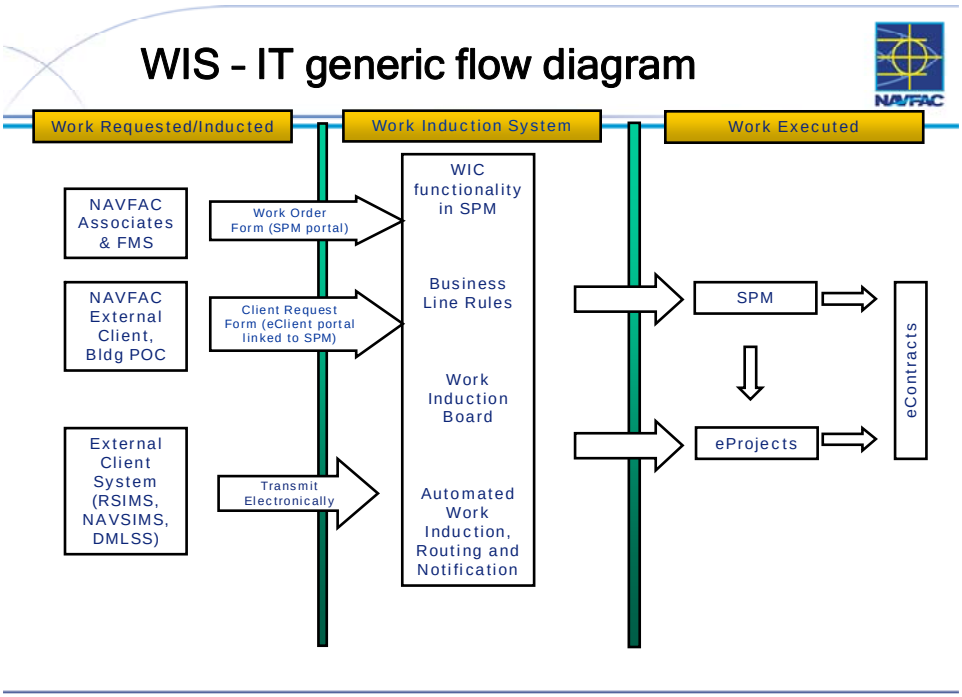

Figure 2-7-1. WIS IT Generic Workflow Model

The Work Induction System utilizes the BL rules to route work. The BL rules are standard across the NAVFAC corporation and use the following parameters to determine the responsible team and IT management system for each NAVFAC product and service project. The WIS entry screens automate this logic by creating a project in the proper IT project management system (SPM, eProjects, etc.) and tagging it with the respective responsible team for that work location. The execution team is initially set equal to the responsible team which is determined by the routing code.

The following are key data elements to process the WIS routing:

- NAVFAC Product and Service (Line + Deliverable Number)
- NAVFAC Category of Work (COW)
- Work Location (not part of BL rules but key to determining responsible team)

Based on the WIS input parameters, the following will be derived:

- IT management system (eProjects or SPM)
- Responsible teams (identified by one of the six alternatives below)

1	IPT	4	LANT/PAC Echelon III Core
2	FEC BL Core	5	NAVFAC Specialty Center
3	PWD/ROICC Site Team	6	WIB

A working knowledge of the different products and services and the category of work that must be performed will ensure an understanding of where the work should be performed

SECTION 2-8. FACILITY MANAGEMENT CATEGORIES

Definitions

- Facility emergency trouble calls (H2) – Situations which require immediate action to prevent loss or damage to government property, restore essential services that have been disrupted, eliminate hazard to personnel, restore essential mission operational capability. Facility emergency work hours stop when the emergency is arrested. If further work is required, the appropriate follow-on work category is to be established.
- Facility service trouble calls (H2) – Work that is relatively minor in scope, requires minimal amount of planning or processing, is not of an emergent nature. Trouble calls are classified as either a facility emergency or facility service work request.

Trouble calls are called into the work reception center by building occupants or generated by designated government or contractor representatives; are brief in scope; and do not reasonably require detailed job planning. Multiple maintenance, repair, and small scale construction requirements received for the same trade in the same building or structure at the same time will be combined into one trouble call as long as the trouble call threshold is not exceeded. Trouble calls of pure or predominant small scale construction scope is to be funded by either new footprint (NF) or restoration and modernization (RM) SRM funding accounts vice facility sustainment accounts. See Table 2-8-1 for additional details.

- Minor work (H3) – Work that is planned, estimated and scheduled, of a smaller scope than Specific Work; requires more extensive planning or processing than a trouble call.
- Specific work (H72) – Work projects that are planned, estimated and scheduled, and are individually cost accounted, requires more extensive planning or processing.
- Recurring work (H1) – Work of a repetitive nature, may be of either estimated or unestimated nature, e.g. , preventive maintenance, power plant watchstanding.

P&S Matrix	Work Category	Definition	Initial Metric	Measure
H2	Facility Emergency Trouble Calls	Situations which require immediate action to prevent loss or damage to government property; restore essential services that have been disrupted; eliminate hazard to personnel; restore essential mission operational capability.	90% of Emergency Work Trouble Calls responded to within two hours and all work completed within 48 hours.	Man-hours required to arrest the emergency.
H2	Facility Service Trouble Calls	Work that is relatively minor in scope; requires minimal amount of planning or processing; is not of an emergent nature.	90% of Service Work Trouble Calls are accomplished within 10 calendar days.	Maximum of 32 man-hours
H3	Minor Work	Work that is planned, estimated and scheduled, of a smaller scope than Specific Work; requires more extensive planning or processing than a trouble call.	90% of Minor Work projects completed by timeframe established.	Maximum of 80 man-hours
H72	Specific Work	Work projects that are planned, estimated and scheduled, and are individually cost accounted; requires more extensive planning or processing.	90% of Specific Work projects completed by timeframe established.	Greater than 80 man-hours
H1	Recurring Work	Work of a repetitive nature, may be of either estimated or unestimated nature, e.g. preventive maintenance, power plant watch standing.	80% of PMs completed by scheduled date. No more than 10% of PMs are missed.	

Table 2-8-1. Facility Management Categories

Personnel shall respond to emergency trouble calls and arrest emergent conditions to minimize and mitigate damage to facilities, systems, and equipment; danger to personnel or interruptions to essential mission operational capability. Associated repairs are completed to ensure facilities, systems, and equipment are restored to a safe, operable condition and function properly. The service provider shall respond to facility emergency calls with the appropriate service personnel and equipment to commence work immediately. The service provider shall remain at the work site until the emergency has been arrested.

If further labor and material (follow-up work) are required to complete the repair, the call will be reclassified as a service call or other appropriate classification and the corresponding completion time will then apply. Such follow-up work shall be considered part of the original trouble call.

SECTION 2-9. NAVFAC CATEGORIES OF WORK

NAVFAC has broken projects into four categories of work, as depicted in Table 2-9-1, to improve productivity and reduce production cost associated with its delivery of products and services. The categories of work are designed to eliminate redundant or unnecessary efforts associated with planning, designing, procuring, and sustaining facilities for our Supported Commands. The goal is to safely and responsibly deliver the right product with the right amount of engineering and construction oversight through either in-house or contract execution at the optimum lifecycle cost.

The four Capital Improvements categories of work are summarized in the below table and following description. A description of the categories of work for Asset Management, Public Works, and Environmental Business Lines can be found on the NAVFAC portal (BMS processes).

Work Category	Project Management			
	Project Development	Design/Engineering Effort	Construction Oversight	Schedule and Tracking
I	Programmatic	Multi-Discipline Design	Based on BMS	eProjects
II		Tailored Design		eProjects
III	Scoping	Limited Engineering	Limited	SPM
IV		None	By exception	SPM

Table 2-9-1. Categories of Work Used In Project Management

The following is provided as guidelines for classifying design, engineering, and construction work. Characteristics could result in actual projects being classified differently (for example, a carpet project may not be always be classified as Category IV if circumstances dictate a higher level of design/engineering or construction oversight).

Category I – Multi-Discipline Design, BMS-Based Construction Quality Management (CQM) Oversight

- High financial, schedule, and/or life safety risk
- Usually MILCON, BRAC, HSG, large O&M,&N
- Local, state, federal, or national environmental or usage permits required
- State Historic Preservation Officer (SHPO) consultation needed
- Building and/or site approval required
- Primarily multi-discipline design requirements
- New construction or major renovation, repair, and restoration
- Complex design, plans, specifications, calculations, site investigation, or studies required
- Includes installation of equipment/systems that incorporate leading-edge technology

Category II – Tailored Design, BMS-Based CQM Oversight

- Substantial financial, schedule, and/or life safety risk
- Usually large O&M,&N/special project, but could be MILCON, BRAC, HSG
- Local or state environmental or usage permits may be required
- Building and/or site approval required
- Limited number of design disciplines
- Renovations and/or some new construction
- Design obtained through combination of Designer of Record- and Contractor-furnished documents: routine design, plans and limited specifications (supplemented by contractor-furnished shop drawings and submittals), site investigation or studies
- Includes installation, replacement or repair of equipment/systems that incorporate conventional technology

Category III – Limited Engineering Oversight/ Limited CQM Oversight

- Moderate financial, schedule, and/or limited, very low life safety risk
- Local environmental or usage permits required (No state or federal)
- Building and/or site approval not required (exceptions may elevate work to Category II
- No plans and specifications; build from planner and estimator scope of work - supplemented by professional engineering staff as needed with sketches, catalog cuts and/or narrative descriptions
- Primarily minor renovation or repair
- Basic measurements and limited technical calculations required
- Includes (in kind) replacement or repair of fixtures, hardware and non-technical equipment
- Limited engineering and construction oversight

Category IV – No Engineering / CQM Oversight by Exception

- Very low financial, schedule, and very low life safety risk
- No permits required
- Build from client requirements
- Only minor renovation or repair

- No structural, electrical (primary distribution system), mechanical (HVAC), fire protection, intrusion detection, anti-terrorism force protection, environmental remediation, or hazard abatement (lead, asbestos) elements
- May include replacement or repair of fixtures, hardware, and finishes
- Client works directly with vendor/contractor
- NAVFAC Construction oversight by exception

SECTION 2-10. REAL ESTATE AND PROPERTY MANAGEMENT

Real estate is defined as the physical land and appurtenances attached to the land (structures). The Secretary of the Navy assigned the responsibility of buying, leasing, licensing, and disposing of Navy real estate to NAVFAC.

Real Estate Actions

The FECs are staffed to manage and execute real estate actions and retain expertise on the regulations and laws governing real estate actions. There are three major types of real estate actions, acquisition (in-grants), management (out-grants), and disposal. The Public Work Department Staff should reach back to the FEC for real estate action support.

Examples of **Acquisition** products are:

- Acquisition of 360 acres on Blount Island in Jacksonville, FL to support the Marine Corps Maritime Prepositioning Force (MPF)
- Construction and lease of the Gricignano Support Site in Naples, Italy that includes: 876 family housing units, hospital, schools, commissary, and exchange
- Revitalization and privatization of 700+ housing units at Camp Pendleton in San Diego, CA through a Public Private Venture (PPV) between the Navy and the private sector
- Acquisition of 2,420 acres around Marine Corp Base (MCB) Camp Lejeune in Jacksonville, NC under a new "Encroachment Partnering" legislative authority to preserve compatible land uses around the base

Examples of **Management** Services are:

- Leasing Navy property to banks, athletic groups, and education organizations to enhance the quality of life for military personnel and local communities

- Maintenance of official real estate records, including survey maps of all Navy property that depict boundary lines, legislative jurisdictions, and ownership information

Examples of **Disposals** are:

- Disposal of former MCAS El Toro in Orange County and Irvine, CA consisting of 4,738 acres
- Transfer of 71,000 acres at former Naval Air Facility Adak in Alaska to the Department of Interior to be reused for housing, fishing, and port facilities.

Site approvals

Site approval is the process that ensures that projects do not violate applicable instructions, regulations, site constraints or limitations examples include review for compliance with Environmental regulations like National Environmental Policy Act (NEPA), air permits, storm water etc., compliance with the Installation Appearance Guide, compatibility with Explosive Safety Quantity Distances and/or AICUZ zones etc. It also should ensure the project does not conflict or undo other planned or ongoing work and does not interfere with HVAC system performance without addressing it. Site Approval must be obtained if activities plan to change the category code for a facility, construct new facilities or change an existing facility footprint on Navy Class I property or performing any work on Class II property that pierce the building envelope or its components, including alteration, demolition, construction, installation, repair or replacement.

Navy Property Classification

There are two categories of property, plant, and equipment (PP&E) that have been defined for accounting and reporting purposes (general and stewardship PP&E).

<u>General PP&E</u>

General PP&E consists of tangible assets that meet all of the following criteria:

- Have an estimated useful life of two years or more.
- Are not intended for sale in the ordinary course of operations.
- Are acquired or constructed with the intention of being used or being available for use by the entity.

- Have an initial acquisition cost, book value, or when applicable, an estimated fair market value that equals, or exceeds, DoD capitalization threshold. The DoD capitalization threshold is $100,000, except for real property assets. The threshold for real property assets is $20,000. These thresholds are applicable to assets procured by both general and working capital funds.

General PP&E also includes:

- Assets acquired through capital leases, including leasehold improvements.
- Property under the accountability of the reporting entity even though it may be in the possession of others (e.g., state and local governments, colleges and universities, or contractors).
- Land, other than stewardship land with an identifiable cost that was specifically acquired for, or in connection with, the construction of general PP&E.
- Land rights, which are interests and privileges held by an entity in land owned by others, such as leaseholds, easements, water and water power rights, diversion rights, submersion rights, rights-of-way, mineral rights and other like interests in land General PP&E examples include but are not limited to real property including land, land rights, and facilities (includes buildings; structures, and linear structures), construction in progress, general equipment, assets under capital lease, leasehold improvements, internal use software military equipment.

Stewardship PP&E

Stewardship PP&E consists of tangible assets as either heritage assets or stewardship land.

- Heritage assets are PP&E of historical, natural, cultural, educational significance; artistic importance (e.g., aesthetic); or with significant architectural characteristics. heritage assets are expected to be preserved.
- Stewardship land is land and land rights owned by the federal government but not acquired for or in connection with general PP&E. “Acquired for or in connection with” is defined as including land acquired with the intent to construct General PP&E and land acquired in combination with general PP&E.

NAVFAC policy concentrates on the general PP&E, which is divided into two subcategories; real property and personal property.

Real property

Real property is defined as all interests, benefits, and rights inherent in the ownership of physical real estate; the bundle of rights with which the ownership of real estate is endowed. Real Property is defined as Class 1 (Land) and Class 2 (buildings, structures, and utilities).

- Class 1 is an item, defined as one single parcel, or a group of parcels of land which either have been acquired by the same method or are in-granted by a single acquisition contract. Burial plots in other than government-owned cemeteries are excluded from being reported.
- Class 2 (buildings, structures and utilities buildings and structures) is an item, defined as an individual Navy-owned building, structure or an individual building or structure, which is in-granted either totally or partially. Relocatable buildings and structures (which are portable and classified personal property) are reported as Class 3 property, unless the relocatable building was acquired with military or minor construction funds.

  All systems (electrical, mechanical, water, telecommunication, etc.) within 5 feet of the exterior wall of the building and required to provide a complete and usable facility shall be included as part of a building or structure. The specific plant property items described herein are typical of those that are to be reported as part of a building or structure.

Heat	*Crane Runways
Electrical Distribution	*Pits
Water	*Special Foundations
Telephone Infrastructure	Mechanical Doors
Communication	Built-in Safes & Vaults
Fire Alarm	Antennas
Fire Protection	Venetian Blinds
Air Conditioning	Permanently Installed Refrigerators
**Compressed Air	Partitions of the Firewall
Septic Tanks	Loading Platforms
Natural Gas	Household or Quarters Appliance
Manufactured Gas	Equipment Items

Elevators	Uninterrupted Power Supply
Elevator Shafts	Emergency Generators *(only if installed in support of the building electrical system)*

*Within a building or structure

**Air compressors used for shop tools is normally Class 3 or 4

A utility system is a steam and high temperature water system, a water supply system, a sanitary and/or combination sanitary/storm system, a natural or manufactured gas system, a compressed air system, a wire communication system, an electrical system, a fire alarm system, an air conditioning system, and a refuse collection system that serves more than one facility.

Personal Property

Personal property (sometimes referred to as Garrison Property) is defined as those items used, but not consumed, to produce goods or services in support of the Navy's mission. Some examples of personal property are office equipment, industrial plant equipment, vehicles, material handling equipment, automated data processing (ADA) equipment, government furnished equipment (GFE) acquired by the federal government or contractor, leased assets (capital or operating), and military equipment such as weapons, weapon systems, and weapon system components and support equipment. Personal property does not include, inventory items (e.g., items intended for sale), operating materials and supplies, real property (i.e., land buildings and structures)), or items of an historical nature.

Personal property is categorized as capitalized, minor, and sub-minor for both working capital fund (WCF) and general fund (GF). Personal property is further classified into Class 3 and Class 4.

- Capitalized personal property is property (Class 3)
  - Has an acquisition cost, book value, or when applicable, an estimated fair market value equal to or greater than $100,000, but is not considered industrial plant equipment.
  - Sub-Minor personal property is any asset that has an acquisition cost less than or equal to $5,000.
  - Has an estimated recovery period equal to or greater than 24 months.
  - Is not intended for sale in the ordinary course of operations.

- Has been acquired or constructed with the intention of being used or available to be used by DoN in its operations.
- Has an acquisition cost greater than $5,000 and less than $100,000.
- Has an acquisition cost greater than $100,000, but does not meet all the capitalization "criteria".
- Is equipment generally used for cutting, abrading, grinding, shaping, forming, joining, testing, measuring, heating, treating, or otherwise altering the physical, electrical or chemical properties of materials.

- Industrial plant equipment (Class 4)
  - Has estimated fair market value or initial acquisition cost that meets or exceed the DoD capitalization threshold or $100,000 is Class 4 property.
  - This equipment is generally used for cutting, abrading, grinding, shaping, forming, joining, testing, measuring, heating, treating, or otherwise altering the physical, electrical, or chemical properties of materials.

Real Property Requirements

NAVFAC is responsible for the technical direction of the Navy's real property inventory. The Command maintains a database of all Navy real property, including property of the Marine Corps. The database contains various data elements, including the unit identification code of the plant property accounting unit, date acquired, government cost, plant replacement value (PRV), investment category, use, and size (square feet, statute miles).

NAVFAC's objective is to make optimum use of available resources for real property management. Its goals include ensuring the most efficient use of resources, performing scheduled maintenance to avoid breakdowns, and performing routine maintenance to avoid having to perform major repairs. These tasks involve inspecting facilities, setting work priorities, planning and estimating work, and reporting facility condition.

<u>Facilities Requirement Plan (FRP)</u>

The FRP is the installation plan that provides recommendations to resolve the deficiencies and surpluses previously identified by the Basic Facility Requirements (BFR) and evaluating assets located in iNFADS. The FRPs are generated from the Planning Module of iNFADS.

An FRP includes the Facility Planning Document (FPD), for the installation, a Facility Requirements Plan Summary (FRPS), and the Activity General Information (AGI). The FRP provides a statement of facility requirements:

- Lists assets by their current use and condition
- Lists the existing deficiencies and surplus facilities
- Displays future plans to use, acquire, or dispose of assets
- Lists total adequate assets that will result from the plans recommendations

Basic Facility Requirements (BFR)

Basic Facility Requirements (BFRs) are the first indication of the needs of a local facility and, therefore, the starting point in the planning process. BFRs are the shore-based facilities, by category code, necessary to perform the peacetime missions of Navy shore activities. BFRs should not include contingencies. A BFR justification is a calculation of an installation's, a command's or a region's facilities allowances based upon planning criteria. The calculation can be modified to accommodate site-specific or unit-specific loading requirements, such as mission, personnel, functions, and equipment.

BFRs cover entire functional categories of use, such as administrative offices, general warehouses, or public works shops, for both the host and tenant commands. For each category code, if the sum of all assets is greater than the BFR, there is a surplus of space; if it is less, there is a deficiency. BFRs should be updated periodically and updated when there is a change in loading or when there is a mission change. Information about the process of preparing BFRs can be found in the NAVFAC Business Management System (BMS).

Mission Dependency Index (MDI)

MDI is the standard methodology within the Naval shore establishment for determining infrastructure SRM priorities based on mission criticality from a "warfighter", operator or users point of view. It does this by evaluating the impact to the mission if the function provided by the infrastructure is interrupted or relocated. MDI is reported on a scale of 1 to 100, with 100 representing the highest mission importance.

As of August 2007, MDI Assessments have been performed at all major navy bases. MDI scores are normally updated on a three year cycle. If the need arises to update or revise any MDI scores prior to that, a procedure has been developed. To learn about this procedure, click on the link Updating MDI Scores.

SECTION 2-11. DEFENSE READINESS REPORTING SYSTEM-NAVY (DRRS-N)

CNIC uses the Defense Readiness Reporting System - Navy (DRRS-N), the Navy-specific version of the DoD DRRS, to collect and report readiness information. DRRS-N provides a means to assess and display an installation's (and operational unit and group's) capability to execute its assigned mission(s). DRRS-N aids Navy Commanders and Commanding Officers in determining availability of resources and providing an assessment of their unit's ability to accomplish assigned missions and the essential tasks associated with those missions.

DRRS-N displays the availability of the Personnel, Equipment, Supply, Training, Ordnance, and Facilities (PESTOF) resources required to accomplish each CNIC Navy Mission Essential Task (NMET). The Commander's assessment of a unit's ability to perform a NMET or capability (readiness) will take into account PESTOF resource availability, observed performance, military judgment and the NMET conditions, and standards.

A Navy Mission Essential Task (NMET) is the combination of task, conditions and standards. A NMET that is assigned to a specific organization is deemed critical to the success of that organization's missions. A group of NMETs that are required to accomplish an assigned capability area (capability) makes up a capability Navy Mission Essential Task List (NMETL). CNIC capability NMETLs represent the enterprise's mission-critical activities.

The CNIC mission is broken down into capability areas (referred to as *capabilities* for short) which were formerly referred to as Primary Mission Areas (PRMAR). Each capability is then broken down into a list of NMETs (capability NMETL). The capabilities NMETLs assigned to installations are:

- Command and Staff
- Port Operations (Port Ops and Full Scope Installations only)
- Air Operations (Air Ops and Full Scope Installations only)
- Operations Support
- Fleet and Family Readiness
- Facility Support
- Environment
- Safety
- Anti –Terrorism/Force Protection (AT/FP)

- Emergency Preparedness

The Personnel, Equipment, Supply, Training, Ordnance and Facilities (PESTOF) pillars represent the six different resource types that may be required for the successful completion of a NMET.

- "P" (Personnel) – Includes Navy personnel skills required to perform a NMET or capability.
- "E" (Equipment) – Includes key equipment required to perform a NMET or capability.
- "S" (Supplies) – Includes key supplies and contracts to perform a NMET or capability.
- "T" (Training) – Includes unit/organizational training required to perform a NMET or capability.
- "O" (Ordnance) – Includes ammunition required to perform a NMET or capability.
- "F" (Facilities) – Includes key facilities required to perform a NMET or capability.

The DRRS-N system is responsible for collecting, evaluating, and monitoring the status of PESTOF resources. Each NMET will have displayed next to it in DRRS-N the availability of applicable PESTOF resources by an indicator showing *red*, *yellow* or *green*. The red, yellow, or green indication will be based on PESTOF algorithms using data fed by existing authoritative data sources (where available). Breakpoints will be established and when algorithm scores "cross" these breakpoints, the color indicator will change.

BREAKPOINTS	
RED	0-59
YELLOW	60-79
GREEN	80-100

Commanding Officers will take the displayed availability of PESTOF resources, and the 'computed' PESTOF score, in to account when assessing and reporting the ability of his/her organization to perform each NMET.

Facilities Pillar

The authoritative data source for facilities data in DRRS-N is the internet Navy Facility Assets Data Store (iNFADS), which is maintained by the Naval Facilities Engineering Command. Along with each condition rating and configuration rating, DRRS-N

calculates an upgrade cost to correct restoration and modernization deficiencies. DRRS-N also displays the capacity rating and the new footprint cost to bring the asset inventory to 85% of the basic facility requirement. The new footprint cost is calculated in iNFADS.

The facility status score provides the CO with an indicator of facility resource availability (condition, capability, and capacity) for each assigned capability and NMET.

At the capability, NMET and prime use category code levels, the facility status score is determined by taking a weighted average of the condition, configuration, and capacity Ratings, using the following algorithm:

Facility Status Score = (.48 x Capacity Rating) + (.29 x Condition Rating) + (.23 x Configuration Rating)

At the facility detail level, the facility status score is determined by taking a weighted average of the Condition and Configuration Ratings, using the following algorithm:

Facility Status Score = (.56 x Condition Rating) + (.44 x Configuration Rating)

The breakpoints for the facility status scores are ≤ 59 for red, 60-79 for yellow and ≥ 80 for green.

The condition rating is a measure of an asset's physical condition at a specific point in time. Condition ratings are generated from the Facility Condition Assessment Program (FCAP) Tool and stored in iNFADS. The configuration rating is a measure of the asset's capability to support the current occupant or mission with respect to functionality. The configuration rating is calculated from the adequate, sub-standard, and inadequate fields in iNFADS. The capacity rating is percentage of existing facilities that meet basic facility requirements.

DRRS-N is a real time system. Reporting for installations is completed during the first week of each month and Regions during the second week of each month on a minimum basis; however, all changes in readiness levels must be reported in DRRS-N within 24 hours of the incident that causes a change in readiness. A change in readiness is defined as a change in the value (Yes, Qualified Yes, No) of an assessment for an individual NMET, capability or core.

DRRS-N is a classified system that resides on the Secret Internet Protocol Router Network (SIPRNET). The assessment of current readiness for facilities and environmental NMETS is not classified until they are combined with the other assessments and entered into DRRS-N.

Installation Commanding Officers (ICOs) are responsible for reporting their installation's readiness status by NMET, capability and core. ICOs have the reporting role of the Enhanced Status of Resources and Training System (ESORTS) Commander in DRRS-N and can designate up to three of their staff to have this role in addition. Reporting by the ESORTS Commander is done by approving each NMET assessment draft individually, by submitting all draft NMET/capability assessments at once, or by submitting only those assessments that have changed. The ICO should provide the installation's core assessment.

The Public Works Officer (PWO) is typically responsible for completing the facilities and environmental section of the DRRS-N report. PWOs should coordinate with the Installation Executive Officer (XO) on how and when to update the monthly DRRS-N and what level of details is required for comments.

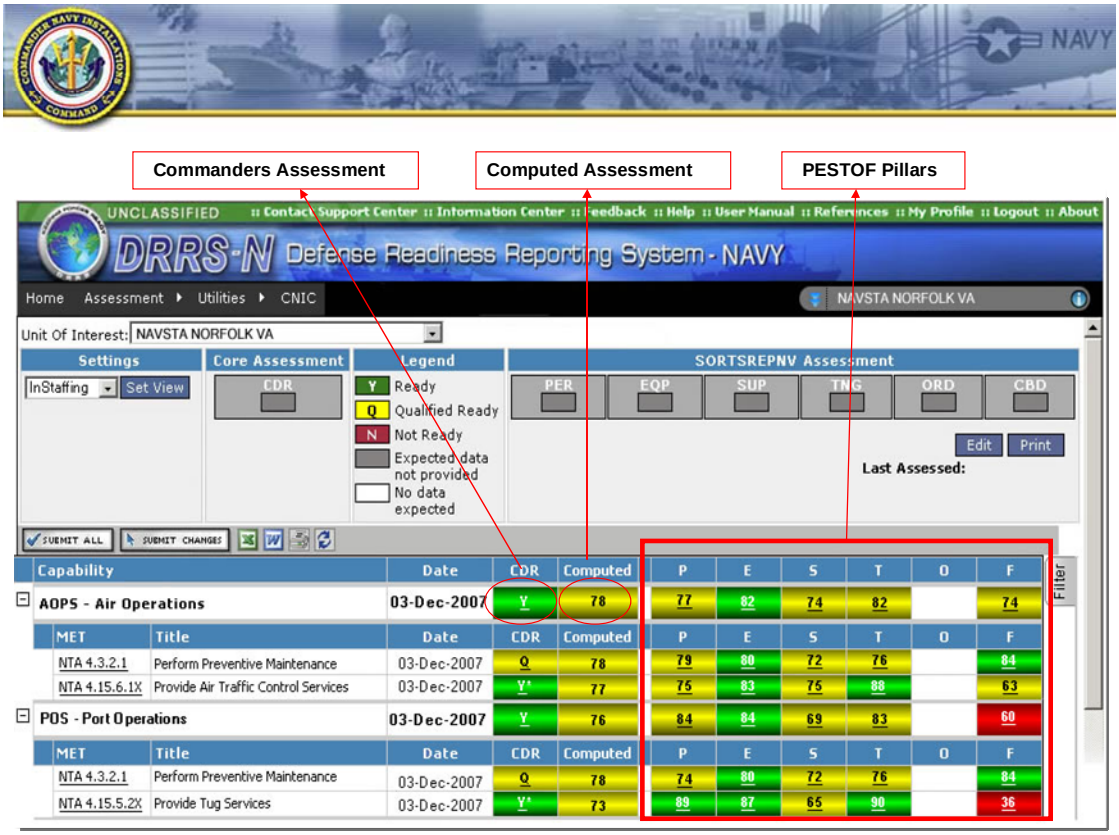

Figure 2-11-1. Snapshot of DRRS-N Database

Assessment Reporting Guidance

Assessment options are defined by U.S. Fleet Forces Command guidance:

- "Yes" (Green) Assessment - The unit can accomplish its MET, METL, or mission to prescribed standards under said conditions. The "Yes" assessment should reflect demonstrated performance in training or operations.
- "Qualified Yes" (Yellow) Assessment - The unit is expected to accomplish its MET, METL, or Mission to standard, under most conditions, but this performance has not been observed or demonstrated in training or operations. Organizations assessing their task or mission as a "Qualified Yes" can be employed for those tasks. The "Qualified Yes" assessment can also be construed as a stated measure of risk, indicating the ability to perform but with some level of specifically identified risk caused by some other influencing factor. An organization can assess as "Qualified Yes" if any of the following exist:
    - The organization can accomplish some, but not all of the capabilities.
    - For CNIC commands, a "Qualified Yes" assessment can be a signal to the chain of command that without corrective action, the command will assess the capability as "No" within four (4) months. This assessment also implies certain risks that should be identified in the comment fields. Supporting explanations are mandatory.
- "No" (Red) Assessment - The unit is unable to accomplish the MET, METL, or Mission to prescribed standards under said conditions at this time.

Once all of the NMETs that comprise a capability METL are assessed, the capability itself must be assessed. There are no firm business rules that guide what the capability assessment should be based on the assessments of the NMETs that comprise the capability nor are there firm business rules that guide what the capability assessment should be based on the computed score for that capability. Commanding Officers should consider their assessments of each NMET within the capability METL just as they should consider the computed score for the capability (once it is available) when making the capability assessment. However, the capability assessment is based on professional judgment and military experience first and foremost and the ultimate assessment is his or hers to make as the individual in command. The capability assessment is based on a "Yes" (Green), "Qualified Yes" (Yellow), or "No" (Red) system.

There are no algorithms or rigid rule sets underlying DRRS-N Commander's assessments—they are professional judgments made by the Commander. However, as DRRS-N prescribes, assessments must be soundly grounded on an analytical process

based on identified **conditions** that may be encountered and fairly objective **standards** that determine an organization's ability to accomplish its mission requirements. Assessments will be reviewed by the chain of command as Regional Commanders gather information required to conduct their own assessments. Assessments will also be reviewed and presented to CNIC on a regular basis in the form of readiness briefs.

SECTION 2-12. NAVY-MARINE CORPS INTRANET (NMCI)

As part of the Navy-Marine Corps Intranet (NMCI) contract, the Department of Navy (DoN) agreed to furnish the NMCI contractor (Electronic Data Systems) with space to perform their NMCI contractual duties; nearly one million square feet of facilities space is being used by EDS on our installations DoN-wide. Under the terms of the NMCI contract, the government provides basic working and storage space (including electricity, light, heat, basic office furniture, outlets, etc.) to EDS.

However, where non-standard facilities are needed for requirements such as server farms and network operation centers, EDS is responsible for this "build-out" - they do the design and construction (with PWD design review for safety, UFAS, fire protection and general code compliance) and they retain ownership to that infrastructure after completion. EDS must receive approval to use government space as well as request Work Permits for construction related to the NMCI network infrastructure build-out. There are numerous facility-related NMCI contract "playbook" issues, describing EDS and government roles, covering topics such as cabling, fire and lightning protection and backup electric power issues. A list of the playbook issues and/or copies of them may be obtained by contacting NAVFACHQ Ops staff."

SECTION 2-13. JOINT BASING

Joint Basing was established as part of the Base Realignment and Closure (BRAC) 2005 recommendations and puts nearby DoD installations in twelve different geographic areas under the administrative control of respective Joint Base Commanders, with the goal of optimizing delivery of installation management functions at those locations. Navy was assigned to be the lead service (the Supporting Command) at four joint bases.

- NAB Little Creek and Fort Story, Virginia
- Navy Base Guam and Andersen AFB, Guam
- Anacostia Annex and Bolling AFB, Washington, DC
- NS Pearl Harbor and Hickam AFB, Hawaii

The Navy will be the Supported Command at three locations, all of which have Air Force as the lead and supporting service.

- Andrews AFB and NAF Washington, Maryland
- McGuire AFB, Fort Dix, and NAES Lakehurst, New Jersey
- Charleston AFB and NWS Charleston, South Carolina

Commander, Navy Installations Command (CNIC) has the lead for Navy to ensure proper execution of the joint basing construct, including obtaining funds needed for implementation. NAVFAC supports the joint basing initiative by executing related requirements and providing technical and managerial support to the Regions. Key guidance documents for joint basing include:

- Joint Basing Implementation Guidance (JBIG) which defines terms, timeframes and the management oversight structure for joint basing.
- Supplemental Guidance documents which describe joint basing policies for functional areas such as facilities investment, facilities operations, environmental, emergency management, etc..
- Common Output Level Standards (COLS) documents which set standards and metrics for numerous installation management functions.
- Memorandum of Agreement (MOA) for each joint base location which is signed by the Vice Chief of Naval Operations for each affected Navy location and describes the base-level agreements reached between components.

Facilities Engineering and Acquisition Division (FEAD)

Chapter 3

All new installation construction activities and service contracts are managed and controlled by the Public Works Department. The PWD assigns engineering support, construction project management, and service contract management, to the FEAD.

SECTION 3-1. FACILITIES ENGINEERING AND ACQUISITION DIVISION

The Facilities Engineering and Acquisition Division (FEAD) is an essential element of the PWD providing engineering and acquisition in the delivery of NAVFAC products and services to the installation and other Support Commands Most FEADs are separated into three branches: Project Management and Engineering Branch, Acquisition Branch, and Facility Support Contract (FSC) Management and Facility Services (FMFS) Branch.

The FEAD Division will play a significant role in ensuring proper contract performance. In most cases, the PWD FEAD Division will share contract administration duties with the contracting officer assigned to support the awarded contract.

- The installation is responsible for developing the Performance Work Statement (PWS), preparing the Quality Assurance (QA) plan, and the safety plan. The Navy employs the use of the contractor's quality control (CQC) program and the government's QA program to monitor and measure performance. It is extremely important the Public Works Officer (PWO) provides qualified personnel to inspect and monitor all work performed by the contractors.
- The PWO must ensure the contractor is paid promptly and properly for services rendered. The PWO will work with the contracting officer to process all contract documents and negotiate contract changes, as needed.

Project Management and Engineering Branch

- Project package development - When a work request is initiated into to the PWD's work induction system (WIS), it is assigned to the PWD FEAD Project and Management Engineering Branch or to the FEC IPT for engineering support. Typically, the PWD handles project package development for Category III and IV projects (little to no engineering), and the FEC IPT and its team of cross-functional engineers handle Category I and II projects that require design and engineering. The ultimate product from this effort is a project package with a cost estimate, defined scope of work and enough technical details of the requirements so that the intended type of contractor or in-house workforce can be chosen.
- Design management and Request for Proposal (RFP) preparation - An RFP for design build (DB) design-bid-build (DBB) contract vehicles can be prepared in-house with qualified design engineers. In lieu of preparing a project package in-house, the PWD FEAD or the FEC IPT may use Architect/Engineer services to prepare RFPs for DB and DBB contract vehicles.
- Construction management - Construction management includes the safety compliance, overall administration of the construction and quality assurance efforts by the government team. Effective construction management includes coordinated oversight of contractor submittals, quality assurance, prospective contract modifications, scheduling and progress payments, and liaison with Supported Commands. After award of the construction contract, the Construction Manager (CM) assumes the role of project manager and is the lead point of contact for the project duration.
- Schedule and cost control - The government project team works closely with the contractor on each project to ensure an accurate schedule and corresponding schedule of prices. As the contract progresses, the reviewing and processing of each invoice and prospective retainage for punchlist work or withholding for possible liquidate damages becomes critical for the government to protect its interests.
- Maintenance engineering - The FEC IPT or PWD FEAD can coordinate maintenance engineering requirements for base operating support contracts (BOS) and in-house maintenance workforces.

- Engineering consultations, support, design, technical competency - The FEC IPT typically is the PWD reach-back resource for engineering consultations and design technical competency. During the work induction process, the level of engineering consultation is discussed and becomes a factor whether the work is identified as Category I and II or III and IV work. Each FEC will have business rules that provide a minimum number of hours of minor consultation before the work is considered reimbursable. Other factors considered include geography, workload, staffing, and technical requirements of the PWD and FEC IPT. Design work at the FEC levels is reimbursable.
- Quality assurance - At the execution level, engineering technicians are the eyes and ears of the government's quality assurance of construction contracts, and work closely on the day to day issues on each project, including review and surveillance of contractor daily quality control, production and safety reports. The government uses a variety of resources for quality assurance, including the project engineers and specialty engineers from technical areas such as fire protection, vertical transport equipment (VTE), boilers, and airfield pavements.
- Contracting Officer's Authorized Representative (COAR) - This designation, granted by the FEC Chief of Contracts, provides limited contact authority to non-warranted project engineers and CEC officers to negotiate and issue contract modifications up to $100,000. Specialized training courses are required for designation as a COAR, and are available from NAVFAC Acquisition Support Line.

Acquisition Branch

- Procuring Contracting Officer (PCO) Functions for Local Awards - All contract specialist work performed up to and including the contract awards are considered PCO functions. FECs have business rules that delineate the dollar value and/or complexity whether a contract PCO function will be performed at NAVFAC Echelon III, FEC IPT, or PWD FEAD. Contract awards made at the PWD FEAD are considered to be "local" awards. NAVFAC BMS outlines steps for a FEC IPT that performs PCO functions to turn over a contract file to the PWD FEAD for ACO. Additionally, the PWD can be an ACO and issue task orders or other indefinite quantity (IQ) work off of FEC IPT or NAVFAC awarded contracts.

- Administrative Contracting Officer (ACO) Functions - The ACO is responsible for contract administration after contract award, is responsible for ensuring all contract provisions, Federal Acquisition Regulations (FAR) and supplementary requirements are fulfilled. This includes submittals, compliance with labor laws, modifications, progress payments, compliance with IT-based systems that track and monitors contract performance. NAVFAC BMS outlines steps for a FEC IPT that performs PCO functions to turn over a contract file to the PWD FEAD for ACO.

FSC Management and Facility Services (FMFS) Branch

The FMFS is the branch that is responsible for utilizing best practices to increase planning and execution efficiency and to deliver services that fully meet the warfighter's requirements at the lowest lifecycle cost. Facility Support is one of the core business areas for which NAVFAC procures contracts such as grounds, janitorial, pest control refuse, facility operations and maintenance. The two basic types of contracts include:

- Facility Support Construction Contract (FSCC) - A Facility Support Construction Contracts (FSCCs) are a great tool for obtaining quality public works support services. FSCCs are used for recurring facility requirements of repair, maintenance, or restoration of real property assets and equipment to preserve facilities in a usable or operable condition. FSCCs are contracts in excess of the simplified acquisition threshold that provide for the repair or alteration of existing real property assets and required, by the character of the labor involved, to include a Department of Labor (DOL) Davis-Bacon Act Wage Determination. Typical contracts provide for the maintenance of building and structures, road and sidewalk repairs painting, roofing and asphalt patching, and minor building alterations or repairs. A DOL Davis-Bacon Act Wage Determination is not required for overseas.
- Facilities Support Service Contract (FSSC) - Facility Support Service Contracts (FSSCs) provide for the maintenance or operation of real property assets and are required by the character of the labor involved to include a DOL Service Contract Wage Determination. They may be contracts in excess of the simplified acquisition threshold for repair and alteration of real property assets. Typical contracts provide for janitorial services, grounds maintenance, guard services, transportation services, motor pool operations, demolition, and pest control services. A Service Contract Wage Determination is not required for overseas.

FMFS is one of the product lines within NAVFAC's Public Works business line. The main product line elements in FMFS include the following functions:

- Facility Support Contract Management (FSCM) - FSCM involves all PCO and ACO functions involved in the administration of service contracts at PWDs. Many service contracts have combined services and are referred to as Base Operating Support (BOS) contracts. BOS contracts that service multiple PWDs or other outlying/regional areas are often referred to as Regional BOS contracts (RBOS). The primary PWD pieces that make up an FSCM team include the FSC manager, contract specialists, specification writers, and performance assessment representatives.
- Performance Assessment (PA) - The PAs provide day-to-day quality assurance and oversight of all service contracts. PAs conduct various sampling methods of contractor performance, conduct interviews with Supported Commands, and act as the Supported Command point of contact (POC) for all service contract requirements. Additionally, PAs often have had trade experience in the area of the contract they oversee.
- Specification writing - A key part of every service contract is maintaining current and accurate specifications. Senior Performance Assessment Representatives (PARs) often comprise the core specification writers for a PWD, and work with the PARs, contract specialists, BOS contractors or in-house shops, PWD Facilities Management Division, and Supported Commands. Many of the functions included adding, updating, or deleting contract requirements for equipment, facilities or areas that come on or offline or due to budget constraints.

SECTION 3-2. ROLES AND RESPONSIBILITIES OF KEY PERSONNEL

The delineation of function and roles between contract specialists (1102s), project engineers/construction managers (8XX-PM/ENG), engineering technicians (802-QA), and procurement technical support (3XX/1106) are vital to ensuring a separation of functions and accountability. Figure 3-2-1 provides a sample of the functions performed by key personnel in the administration of construction contracts by the FEAD Project Management and Engineering and Acquisition Branches.

1102 - PCO	1102- ACO	8XX- PM/ENG	802-QA	3XX/1106
Procurement	**Contract Administration**		**QA**	**Admin**
Develop Acq Strategy Provide Acquisition Plan Issue Pre-Award Synopsis Prepare SSP Prepare Award Fee Plan Prepare Small Business Record Obtain Wage Determinations Prepare/Issue Solicitation Obtain appropriate funds Answer Pre-Bid Questions Conduct Pre-Prop Conf Evaluate Bids/Proposals Request Audits Conduct Negotiations Responsibility Determinations Prepare Pre/Post BCM Award Contract / TO Debrief Contractors Process Protest/Disputes Prepare Contract Files Prepare D&Fs, J&As	Issue Mod RFP / Obtain appropriate funding Process PNMs / BCMs Negotiate Mods / REAs (>$100K or out-of-scope) Issue Sup Agreements/ Mods/ Unilateral Changes Definitize Change Orders Labor Enforcement Process Invoices Process Claims/Termination Actions Participate in Proj Mtgs (PAKs, design reviews, partnering, precons) Close Out contracts/TOs Archive Contract Files Resolve Contractual Issues Interpret Contract Provisions / ACQ regulations Monitor subcontracting plans Review/Process Bonds & Administrative Submittals Oversight of Contract Files Process FOIA/Congressional requests	Primary POC for KTR & Client In Resp. Charge for Overall Contract Perf (sched, cost, safety, WIP reporting, etc.) Review/Assist in Prep Tech Reqmts for issuance of new TO's / Mods Constructability Reviews Review Technical Proposals (Source Select/TEBs/Value Engr) Participate in or Lead Tech Mtgs (PAKs, design review, partnering, precons/ prework, weekly QA/Production/Status,etc.) Review / Approve / Manage (Admin and Technical) Submittals and RFIs Tech Review and Input on Mods, REAs, Deviations, Invoices, etc. Ensure/Prepare Independent GE Invoice reviews (pencil draw) Manage/Negotiate in-scope Mods/ Obtain funds (<$100K) Final Acceptance (incl. Specialized Systems), Close out/Turnover, & (assist in preparation of) 1354s Prepare Ktr/AE Performance Evals	Site Visits Constructability Reviews Client Interface Coord KTR Passes /Permits QC/Safety Plan rvw Safety Enforcement Base Ops Coord (lay down, util outages, road closure, etc.) Develop & Lead for QA Plan, Monitor / Document Field Work & KTR QC Program Environ Compliance Prep Tech Solutions to Project Problems Invoice reviews Labor Interviews System and building acceptance Closeout reqts (as-builts, keys, punchlist, etc)	Admin: -Files -Mail -Supplies -SLDCADA/DTS -Inventory Control -Contractor Badges -Purchase Card Responsibilities -Payroll -Reception/ Phones -FOIA support Clerk/Analyst -Direct Cite Assistance -Metrics/Data Calls -SPS/FIS Queries -Process Invoices -Manage Budget -Focal point for eApps -FIS WIP entry

Figure 3-2-1. FEAD Key Personnel Functions

Facilities Engineering and Acquisition Division (FEAD) Director is a warranted CEC Officer, under the direction of the Public Works Officer, that directs all design and contracted construction and services activities for the installation Supported Commands and FEC business and support lines and ensuring attainment of all required regulatory and safety compliance.

Project Management and Engineering Branch Director provides internal direction, leadership and accountability for all construction project management efforts. Other responsibilities include:

- Ensures standardized practices for quality assurance, contract administration and safety on every construction project. Responsible for project assignments, staffing requirements, and Individual Development Plans (IDPs) for all construction managers (CMs) and engineering technicians (ETs).
- Oversees technical support efforts to the Acquisition Branch for contract scopes of work, proposed contract modifications, and the Technical Evaluation Board (TEB) for pre-award contract selection panels. In some FEADs, in-house engineers or engineering technicians write planning and estimating packages, scope of work, or other technical products that require little to minimal engineering technical expertise. Oversees the contractor's design build submittals and processes.

- Designs, implements, and assesses the effectiveness of standardized project management processes and procedures, which includes standardized project documentation and methodology and project tracking and reporting procedures.
- Defines project objectives and measures to be tracked by the contractor.
- Determines the economic value of any construction initiatives and garners commitment of all affected parties to achieve the stated financial, subjective, and objective goals.
- Coordinate planning, design, and delivery and other engineering services for the installation. Efforts include preparation of design drawings. PWS for A-E solicitation, cost estimates, plans and specification for contracts and engineering consultation.
- Ensures satisfaction of environmental requirements, including cultural resources.

Construction Manager (CM) administers and executes construction contract work and works closely with the Contracting Officer. Projects vary in size from several thousand dollars to multimillion dollars. This position occupant provides professional construction engineering support to the FEAD on assigned projects and is accountable for final results on those projects within established policy, particularly as regards to usability of the constructed facility to meet user's current mission requirements. After award of the construction contract, the CM is the lead contact point for the duration of contract.

CEC junior officers are often assigned as Project Engineers or CMs within the FEAD, and are given varying levels of responsibility based on their rank and experience. For example, a lieutenant may be assigned as a team lead of civilian construction managers, contract specialists, and engineering technicians, whereas an ensign or lieutenant junior grade may be assigned to project teams. The primary purpose is training and experience. It is expected that the contract specialists and engineering technicians will work closely with the junior officer as part of the project team. The military officers also typically are assigned a number of military or administrative collateral duties.

Construction Engineering Technician (ET) is responsible for quality assurance and safety oversight of assigned construction projects. The ET works most closely with the contractor superintendent on the day-to-day project execution, and is the PWD's primary POC for coordinating base support (utilities, dig permits, etc.).

Acquisition Branch Director is responsible for administering and controlling the acquisition functions. Some of the duties include:

- Works in partnership with FMD and Project Engineering Branch Head to develop the acquisition strategy to accomplish the installation contracting requirements.

- Serves as the senior contracting officer at the PWD and provides advice, guidance, and coordinates legal support with NAVFAC counsel.
- As the PCO, acts as the Procuring Contracting Officer (PCO) for all construction projects. The dollar threshold in which the PCO function is performed at the PWD or at the FEC is determined by the FEC's business rules and PWD staffing and capabilities.
- As the ACO, responsible for ensuring all contractual obligations are executed on construction and services contracts, including invoices, modifications, contractor evaluations, and all contract work and proposed changes are in accordance with the FAR, Defense Federal Acquisition Regulations (DFAR), National Anti-Poverty Strategy (NAPS) and NAVFAC guidance.

Contract Specialist assists the contracting officer in PCO and ACO functions. During PCO functions, provides contractual guidance in preparing the specifications. The contract specialist works with the specification writer in preparing the performance work statement, the performance requirements summary, the various price schedules, and related attachments. The specialist will also prepare the majority of the clauses in the remaining contract section. In ACO functions, the contract specialist works with the project engineer and engineering technician (ET) to form a project team. The contract specialist ensures compliance with the contract, invoicing and prompt payment, and prepares all contract modifications.

Facility Management and Facility Services (FMFS) Branch Head is responsible for the day-to-day management of the installations' FMFS program. As such, this person serves as the technical advisor to the Public Works Officer concerning the use and the management of facility support contracts and facility service providers. Other duties include:

- Coordinating pre-award technical specifications, government estimates, and quality assurance surveillance.
- Providing management oversight of contracts, supervision of quality control personnel, monitoring contractor performance.
- Coordinating with NAVFAC FMFS product line to ensure appropriate staffing and community management.

Performance Assessment Review Specialists and Quality Assurance Evaluators works in the FMFS Branch and provides day-to-day quality assurance and oversight of all service contracts. PARs conduct various sampling methods of contractor performance, conduct interviews with Supported Commands, and act as the Supported Command POC for all service contract requirements.

SECTION 3-3. CONTRACT DEVELOPMENT

Regional Acquisition Strategic Plan (RASP)

The Regional Acquisition Strategic Plan (RASP) outlines a regional and geographic approach to service delivery within the NAVFAC installation footprint. The plan provides for implementing optimized delivery of services and provides a high-level plan of action and milestones (POA&M) for future acquisitions. A part of the plan includes fulfilling the 15 key criteria for a successful RASP. To ensure the Facilities Engineering Commands (FECs) are effectively implementing FSC goals, NAVFAC established 15 key criteria for a successful RASP. These key criteria are identified:

- A capable, empowered acquisition team (technical, acquisition, small business and key stakeholders) is formed to develop and implement the plan.
- An effective process is developed to generate and execute the plan.
- Clear, unambiguous stretch goals for the plan are identified up front.
- NAVFAC Small Business Advocate (SBA) and SBA representatives are involved early and often to meet small business goals.
- Major clients are engaged and understand greater Navy objectives.
- Data gathering is accomplished to include existing contracts, all known planned requirements, and in-house efforts that could be contracted (potential A-76, utilities privatization, and other outsourcing initiatives).
- Efficient groupings of contracts are determined using appropriate acquisition tools (functional consolidation, multifunction consolidation, movement from SAPs to FSC, movement from solely IDIQ contracts to FFP where possible).
- The plan is aggressive and takes reasonable risks in both speed and content. The NAVFAC written plan is the result of detailed review of existing contracts, market research and communication with the SB advocates and the SBA.
- Market research (sources sought) is accomplished to define what contract grouping options are viable.
- Clear road map for the way ahead (year by year look) by contract, location, and year.

- Key stakeholders have approved (signed) the plan and have ownership of its content and schedule.
- The plan is recently developed or updated.
- The plan is clearly communicated to all field offices involved in its execution.
- Leadership measures progress and holds officers/managers responsible for execution accountable for results..
- Periodic reviews scheduled to ensure plan stays current in dynamic environment

Acquisition Planning

Acquisition planning is mandated by FAR Part 7 and DoD 5000 series. Acquisition planning is the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. Acquisition planning includes developing the overall strategy for managing the acquisition. The principal purpose of acquisition planning is to ensure that the government's needs are met in the most economical and timely manner.

- *Defining the requirement* is the first step in the procurement process. FAR Part 11 specifies that when describing a need, acquisition of supplies or services should be stated in terms of functions to be performed, performance required, or essential physical characteristics.
- *Market research* needed to ensure that the best value is identified for procurement actions greater than $100,000 throughout the acquisition process, lifecycle of the system, project, or equipment. Market research should identify products and technologies to determine if a commercial item can meet the government's requirements, identify the size and status of potential vendors, assess the competitiveness of the market, and identify commercial practices.
- *Independent Government Estimate (IGE)* establishes the anticipated cost of acquiring the services in the acquisition. This estimate is required by the FAR and is used by the contracting officer to determine whether an offeror's proposed price is fair and reasonable and reflects an understanding of the performance work statement (PWS) requirements. The IGE document also forms the basis for commitment of funds by the requesting installation comptroller—a commitment that must take place before the solicitation can be issued.
- *Acquisition Plan (AP)* contains the documented results of acquisition planning. The AP should address the technical, business, management, and other significant considerations that will affect the acquisition. The specific content of each plan will vary, depending on the nature, circumstances, and phase of the acquisition. Elements

include acquisition background and objectives (with statement of need, cost, performance characteristics, tradeoffs, risks, and streamlining), plan of action (with sources, competition, source selection procedures, budgeting and funding, product descriptions, and other factors).

- *Source Selection Plan (SSP)* is the written guide for the source selection process, and includes the evaluation factors and subfactors with their relative importance, the evaluation process, and schedule. The SSP forms the basis for specific sections of the Request for Proposals (RFP) and is approved by the Source Selection Authority (SSA).

Contract Formation

Contract formation consists of solicitation of offers, adhering to the uniform contract format, evaluation of offers, negotiations, and contract award.

- *Solicitation of offers* is the responsibility of the contracting officer. This step in the acquisition process, known as a RFP, is used to communicate the government's requirements to the general public. The contracting officer uploads the solicitation to the FedBizOpps website. FAR Part 5 has specific requirements about the number of days that a solicitation must remain open (typically 30 days) after it has been issued.
- *Uniform contract format* is used by the contracting officer when preparing the solicitation and the impending contract. The uniform contract format does not have to be used for construction and architect-engineer (A-E) contracts and letter requests for proposals.
- *Evaluation of offers and negotiations* is an assessment of the proposal and the offeror's ability to successfully perform the prospective contract. Three key factors include cost, past performance, and technical capability.
- *Contract award* is the responsibility of the contracting officer, and converts a funding commitment into an obligation for the Supported Command.

SECTION 3-4. LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

NAVFACINST 9830.1 states NAVFAC shall use the US Green Building Council (USGBC) Leadership Energy and Environmental Design (LEED) Green Building Rating System as a tool in applying sustainable development principles and as a metric to measure the sustainability achieved through the planning, design, and construction processes for all construction, renovation, and repair projects costing over $750K. Construction, renovation, and repair projects costing under $750K shall incorporate sustainable development concepts and principles to the fullest extent possible.

Leadership in Energy and Environmental Design (LEED) is a third party certification program and the nationally accepted benchmark for the design, construction, and operation, of high performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

LEED certification provides independent, third-party verification that a building project meets the highest green building and performance measures. All certified projects receive a LEED plaque, which is the nationally recognized symbol demonstrating that a building is environmentally responsible, profitable and a healthy place to live and work. There are both environmental and financial benefits to earning LEED certification.
LEED-certified buildings:

- Lower operating costs and increased asset value
- Reduce waste sent to landfills
- Conserve energy and water
- Healthier and safer for occupants
- Reduce harmful greenhouse gas emissions
- Qualify for tax rebates, zoning allowances and other incentives in hundreds of cities
- Demonstrate an owner's commitment to environmental stewardship and social responsibility

SECTION 3-5. CONTRACTING METHODS

There are three contracting methods FEAD will use to procure services and supplies. They are simplified acquisitions, sealed bidding, and negotiations.

Simplified Acquisitions

Simplified Acquisitions, once called small purchases or government quotes, provide an accelerated route to the federal government contracts. Simplified acquisitions are typically reserved for small dollar purchases, although they can be used for purchases of commercial items as high as $5 million. For simplified acquisitions between $2,500 and $100,000, federal contracting officials obtain either oral or written price quotes from businesses. These purchases usually require government buyers to obtain price quotes from at least three sources to ensure the price is reasonable. This process is known as a Request for Quotation (RFQ).

"Micro-purchases" under $3,000 (supplies), $2,000 (construction), and $2,500 (services) can be obtained without soliciting competitive quotes, as long as the contracting official determines the price is reasonable and other micro-purchases are distributed fairly among qualified suppliers. Officials often pay for micro-purchases with government commercial purchase cards, which are similar to commercial credit cards. Navy officials can make and pay for a simplified acquisition through cash, purchase orders, government purchase cards, or blanket purchase agreements.

- *Purchase orders* are written contract actions at or below the simplified acquisition threshold. They are offers by the government to buy supplies or services and describes everything the purchaser and seller must know to complete the transaction, including prices, delivery details, and federal contract and acquisition numbers. The purchase order is not a binding federal contract unless the seller accepts the order or performs the required work.
- *Government purchase card* is used to make routine purchases under the micro-purchase threshold or as a payment vehicle on GSA or eMALL contracts and often has safeguards to discourage misuse. These cards are typically classified as payment and incur no revolving interest payments — the government pays the card's accrued charges each month.
- *Blank purchase agreement (BPA)* is a simplified method of filling anticipated repetitive needs for supplies or services by establishing "charge accounts" with qualified sources of supply. It is pre-arranged with an agency and signed before any business is conducted. Awards can be made based upon a negotiated set of terms. In order to take part in a blanket purchase agreement, the business must be a part of the BPA program.

Sealed Bidding

Sealed bidding is a method of contracting that employs competitive bids, public opening of bids and awards. Sealed government bids are typically used to procure high dollar items that have easily definable characteristics. There are two types of sealed bidding, one-step sealed bidding and two-step sealed bidding.

During a one-step sealed bid process:

- An Invitation for Bid (IFB) or solicitation is advertised.
- Companies prepare and submit competitive government bids.
- At an appointed time, the contracting official opens all sealed bids, reads them aloud, and records each bid. Interested parties can view their competitor's bids.
- The contract is awarded to the company with the lowest bid. It is important to note that the government contracting official must ensure the lowest bidder is responsive, responsible, and capable of fulfilling the contract requirements.

The two-step sealed bidding process will include not only a price comparison consideration but a technical evaluation. The contract is awarded to the competitor with the lowest price and the technical capability. In some cases, the government may use prequalified or selected bidders.

- The government may use prequalified bidders when they are unsure how the work could be accomplished. Each contractor will submit a technical proposal. Those with acceptable technical proposals will submit a price. The contract is awarded to the lowest qualified bidder.
- Selected bidders are used when a high degree of specialization or expertise is needed. This restricted bidding requires a Justification and Authorization (J&A) or Determination and Finding (D&F) for non-appropriated funded contracts.

Negotiated Acquisitions

A negotiated contract is a contract awarded using other than sealed bidding procedures. There are two types of negotiated acquisitions; sole source acquisitions and competitive acquisitions.

- Sole Source Acquisition means a contract for the purchase of supplies or services (including construction) that is entered into or proposed to be entered into by an agency after soliciting and negotiating with only one source.

- Competitive Acquisition means a contract for the purchase of supplies or services (including construction) that is entered into or proposed to be entered into by an agency after soliciting and negotiating with more than one source. Sources may be small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, women-owned small business concerns, large business, non-profit agencies participating under the Ability One Program and/or eligible firms under the Section 8(a) Small Business Administration Program. Negotiated acquisitions could be procured and awarded to the SBA for performance by eligible 8(a) firms on either a sole source or competitive basis. Cost-reimbursement contracts must be procured as negotiated acquisitions.

  FAR Subpart 15 prescribes policies and procedures for governing competitive and noncompetitive negotiated acquisitions. The FAR also describes some of the acquisition processes and techniques that may be used to design competitive acquisition strategies suitable for the specific circumstances of the acquisition. An agency can obtain best value in negotiated acquisitions by using any one or a combination of source selection approaches. For instance, a tradeoff process is appropriate when it may be in the best interest of the government to consider award to other than the lowest priced offeror or other than the highest technically rated offeror. The lowest price technically acceptable source selection process is appropriate when best value is expected to result from selection of the technically acceptable proposal with the lowest evaluated price.
- Price-only negotiation 8(a) contracts are administered by the Small Business Administration 8(a) program. This program includes minority or disadvantaged construction contractors and normally includes contracts up to $3 million. Contracts over $3 million may be competed among all qualifying 8(a) contractors. This process gives the government the flexibility of a negotiated procurement and allows the 8(a) contractors experience with the competitive environment.
- Best value source selection process usually considers two primary evaluation factors: the technical proposal and the price proposal. The technical proposal is based on evaluation criteria established to define the most important requirements for the specific contract. These may be technical or management capabilities or experience. If the technical and price proposals indicate a clear leader, the government may award the contract without discussions if the RFP provides for such award. If this is not the case, the government will open and conduct discussions with the offerors in the competitive range so that each offeror may eliminate any weaknesses or deficiencies in its proposal. When discussions are completed, the offerors will be requested to submit their final proposal revisions. The government will then evaluate the Final Proposals and award to the offeror whose proposal is most advantageous to the government, in accordance with the stated guidelines of the RFP.

SECTION 3-6. TYPES OF CONTRACTS

Cost Reimbursement

Cost Reimbursement contracts provide for payment of allowable incurred costs to the extent prescribed in the contract. These contracts are suitable only when uncertainties prevent costs to be estimated with sufficient accuracy to use any type of fixed price contract. These contracts require contractors to have adequate cost accounting systems and require intense management by the government. The use of these contracts is justified when plans and specifications cannot adequately describe the work to be performed.

- A Remedial Action Contract (RAC), which involves site cleanup and mediation, is one example of cost reimbursement contracts.
- Construction Capabilities (CONCAP), sometimes referred to as contingency capabilities, provide for indefinite deliveries and quantities using a cost plus award fee contract for design, construction, and services to support the Navy in war, disaster recovery, and military operations other than war.

Firm Fixed Price (FFP)

Firm fixed price (FFP) contracts are the most preferred type of contract because it places maximum risk and full responsibility for all costs and resulting profit or loss upon the contractor. These types of contracts require less contracting office administrative oversight, and provide maximum incentive for the contractor to control cost and perform effectively. FFP contracts should be used when a reasonable definite specification is available and procurement is well defined in terms of quantity, quality and timelines.

Firm fixed price award fee (FFPAF) contracts are especially suited for large service contracts like BOS contracts (is a single facility support contracts intended to satisfy multiple facility service or facility construction requirements). A FFPAF starts as a FFP with definitive specifications, but it allows payment of an additional fee for exceptional performance. An FFPAF contract will specify the maximum amount of additional fee to be paid if the contractor is deemed to have performed outstandingly during the contractual term.

Construction Specific Indefinite Quantity (IDQ) Contracts

Construction Specific Indefinite Quantity (IDQ) contracts are composed of a number of specific acquisition vehicles within the general category of indefinite quantity that have been developed specifically for construction. Most of these vehicles involve multiple awards as a way of enhancing competition. Multiple Award Construction Contracts (MACC), Job Order Contracts (JOC), Solution Order Contracts (SOC), and Multiple Award Task Order Contract (TOC) are several contracting vehicles used to accomplish construction tasks.

- *MACC* is a contract with more than one contractor, awarded after selecting several contractors through prequalification and source selection. Selection factors normally include past performance, areas of specialty, and quality. Some MACCs seek to lower risk by requiring all MACC contractors to bid on each task order. Variants include Design-Build MACC, Utility MACC, and Regional MACC.
- *JOC* is a competitively negotiated, firm fixed unit price, indefinite delivery/indefinite quantity contract that contain a database of detailed priced tasks for a variety of facilities maintenance, repair, and construction work. JOC contracts typically do not need design solutions.
- *SOC* is a multiple award indefinite delivery/in definite quantity task order contract. This type of contract requires some design solutions. SOC combine the in-house capability with all of the contractors to provide solutions to meet Supported Command needs and jointly develop the statement of work.
- *TOC* is a multiple award indefinite delivery task order contract designed to accommodate repair, renovation and design/build construction projects between $100,000 and $10, 000,000. The TOC is essentially the same as a MACC.

Time and Materials Contracts

Time and materials contracts are for special situations when two conditions exist, the type of labor needed for the contract can be identified but not the actual time required and materials are necessary to perform the contract, but the exact extent cannot be estimated before the work is to begin. This creates certain restrictions that apply to this type of contract. The contracting officer must document the file that no other contract type is suitable, through a determination and findings, and a not-to-exceed ceiling price is established. Time and materials contracts are cumbersome for the government to administer and are often audited by Defense Contract Audit Agency.

Labor Hours Contract

Labor hours contracts are very similar to a time and materials contract except only labor, no materials, is required. This type of contract is also expensive for the government to administer.

Letter Contract

Letter contracts are a written preliminary contractual instrument that authorizes the contractor to begin immediately manufacturing supplies or performing services. It may only be used when the government's interests demand that the contractor be given a binding commitment so that work can start immediately and negotiating a definitive contract is not possible in sufficient time to meet the requirement. However, a letter contract should be as complete and definite as feasible under the circumstances.

SECTION 3-7. CONTRACT MANAGEMENT

Some of the key process terms throughout the life of a FEAD project are included below, and are broken into pre-award and post-award:

Pre-Award

- Design - The design can be executed through a number of sources, including by the Supported Command, FEC Capital Improvement Business Line Core, FEC IPT, and PWD FMD or FEAD.
- Site approval - A key part of the project includes site approval by the Public Works Officer, and includes a procedural review of the project compatibility with the base master plan, utilities plan, and environmental considerations (installation restoration, natural and cultural resources, storm water mitigation, air permit).
- Scope/funding, scope, programming - The contracting officer is required to ensure that the project has authorized and appropriate funding to obligate a contract award.
- RFP - The contract specialist prepares the RFP, which incorporates the contract clauses, and the scope of work and design.
- Constructability review - The FEAD project engineer and engineering technician typically conduct a detailed review of the scope of work and design to ensure constructability and minimization of contract modifications after award. Comments are provided back to the designer of record to incorporate into the scope of work and RFP.

Post Award

- Submittals (Quality Control, Safety, Schedule, Technical) - After award and acceptance of the bonds and insurance, the contractor will provide a number of submittals for government review and/or approval. For design-bid-build contracts, most submittals are contractor submitted-government approved. For most design-build contracts, many technical submittals will be contractor-approved, government-reviewed. The FEAD typically approves contractor quality control and safety plans prior to start of any construction.

ITEM	APPROVED BY	DUE BY	REFERENCE
Bonds (performance and payment	Contract Specialist	Before start of work	FAR 28.102.1 NFAS 28.108
Insurance	Contract Specialist	Before start of work	FAR 52.228-5 UFGS 01310
Schedule of prices	CM	15 days after award	FAR 52.232-5 UFGS 01200
Construction schedule	CM	21 days after award	FAR 52.236-13 UFGS 01320
Construction quality control (CQC) plan	CM	15 days after award or as specified	UFGS 01450
Environmental plan	CM	Before start of work	UFGS 01575a
Safety plan	CM	Before start of work when required	52.236-13 (Alt 1) EM-385-1

Table 3-7-1. Preconstruction Submittal Requirements Summary

- Groundbreaking - NAVFAC BMS provides a step-by-step procedure for groundbreaking ceremonies. Typically, the Supported Command is responsible for the ceremony; however, the FEAD will provide support for the ceremony, including contractor coordination and provision of ceremonial shovels.
- Partnering - The NAVFAC Partnering System involves a mindset, a commitment, and a process. The mindset component of partnering is consistent, regardless of the contract or the project's characteristics. The commitment component ensures that the contract is completed to the client's requirements. The process component deals

with the steps or activities that support the government-contractor-client partnership during performance under the contract. At NAVFAC, all contracts will be done using a partnering process. For more information, refer to the BMS on the NAVFAC portal.

- Government Furnished Equipment (GFE) - Some projects will include GFE for the contractor to install, and typically includes large equipment like generators, transformers, or other types of erection kits (like a firefighting tower, antenna, etc.). Challenges with GFE include accurate inventory of parts and equipment, incompatible components, or unforeseen or unintended design issues with the installation.
- Progress schedule and payments - The engineering technician and CM work with contractors to accurately pay the contractor for work performed according to the schedule of prices, and includes cost of materials delivered onsite and materials installed. The government may withhold retainage for poor quality, estimated costs to rework unsatisfactory work, or for prospective liquidated damages.
- Contract modifications - Contracts may require modification for a number of reasons. Some examples include: if the contractor encounters conditions unforeseen in the RFP or the Supported Command requests a scope change. The most common reasons for contract modifications are covered by seven FAR clauses incorporated into every construction contract, and cover whether monetary and/or time extension compensation is allowed:

Clause	FAR Clause	Money Allowed?	Time Allowed?
Changes	52.243.4	Yes	Yes
Differing Site Conditions	52.236-2	Yes	Yes
Default	52.249-10	No	Yes
Suspension of Work	52.242-14	Yes	No
Value Engineering	52.248-3	Yes	Yes
Variation in Estimated Quantities	52.211-18	Yes	Yes
Liquidated Damages	52.211-12	Yes	No

Table 3-7-2. FAR Clauses for Construction Contracts

- Constructive change - An unauthorization that happens when someone other then the contracting officer or his authorized representative directs the contractor (expressly or implicitly) to perform an action that constitutes a material change.

- Beneficial occupancy - The Beneficial Occupancy Date (BOD) is a significant milestone, as this establishes the date the project is turned over to the Supported Command for their use and move-in. Additionally, the BOD established the date that liquidated damages are no longer assessed.
- Punchlist - After BOD, any minor work remaining is considered punchlist. This work is accomplished after the Supported Command has taken possession of their spaces. The contractor must coordinate this work to minimize interference with the now-occupied spaces. The FEAD will withhold retainage to cover the cost of any punchlist work remaining through the project closeout and final payment.
- Project close out and final submittals - This includes completion of punchlist items, required test submittals, as-built drawings, and other administrative contract items required. Another item required could include the 1354 transfer of real property to the PWD Facilities Management Division. After all project closeout submittals are accepted by the FEAD, the contractor can submit for final payment.
- Ribbon cutting - The NAVFAC BMS provides a procedure for ribbon cutting ceremonies, and are the responsibility of the Supported Command. The FEAD will provide assistance as requested.
- Contractor evaluation - A critical FEAD function to ensure a supply of acceptable contractors includes the contractor evaluation, which documents the contractor performance. This information will be entered into the Architect Engineer Contract Administration Support System (ACASS) or the Construction Contractor Appraisal Support System (CCASS) and used by other Department of Defense agencies as reference for future work. In all source selections, contractor past performance is a key factor.

Late Interest Payment

As per FAR Subpart 32.907, interest penalties late payment states the designated payment office will pay an interest penalty automatically, without request from the contractor, when all of the following conditions, if applicable, have been met.

- The designated billing officer received a proper invoice.
- The government processed a receiving report or other government documentation authorizing payment, and there was no disagreement over quantity, quality, or contractor compliance with any contract requirement.
- In the case of a final invoice, the payment amount is not subject to further contract settlement actions between the government and the contractor.
- The designated payment office paid the contractor after the due date.

- In the case of interim payments on cost reimbursement contracts for services, when payment is made more than 30 days after the designated billing office receives a proper invoice.

Supervision, Inspection, and Overhead (SIOH)

NAVFAC is mission funded for all, and only, Navy and Marine Corps Operations and Maintenance funded maintenance, repair, minor construction, environmental, and service facility contract actions including reserves. The budget categories used include Navy and Marine Corps MRP and OBOS including demolition, environmental compliance, pollution prevention, and bachelors quarters maintenance. To determine the volume of these programs that actually become NAVFAC facilities contract workload we use execution experience over the last five years. NAVFAC's position is that the acquisition management mission line is totally workload driven and the level of risk associated with not matching resources to workload is a costly and unacceptable risk to DON clients who desire a cost effective and quality product. Anything else in the facilities contracting arena requested of us is reimbursable. The Navy is not financed to use its scarce O&M funds to execute DoD and other services facility contract actions. With non-DoD activities, we negotiate our actual cost for those limited services with the client in a memorandum of agreement.

NAVFAC develops the mission management requirement for acquisition management by applying a cost factor (not a SIOH "flat" rate charged directly to the client) against projected contract accruals. Based on cost experience, we apply an 8% cost factor to minor construction and maintenance/repair type accruals and a 4% cost factor against service type accruals. It is important to recognize that only Navy and Marine Corps O&M programs are considered our mission responsibility and are the basis upon which NAVFAC and the OPNAV resource sponsor develop the acquisition management mission line.

For all major and minor construction, as well as improvement and repair, workload in the Defense MILCON Act (Navy, AC or RC Navy Reserve, Air Force, Army, DoD Family Housing, etc.), we develop a "flat" SIOH rate for the entire program. We included it specifically in each major and minor construction project line item estimates as well as in the budget estimates for "lump sum" lines such as urgent minor, improvements, repair, etc. In FY06, the SIOH rate for military construction was updated to 5.7% CONUS and 6.2% OCONUS.

SECTION 3-8. SAFETY PLAN

Both the contractor and the government are responsible for construction safety. The U.S. Congress enacted the Occupational Safety and Health Act of 1970 (OSH Act) to ensure safe and healthful working conditions. The Department of Labor Occupational Safety and Health Administration, OSHA, establishes and enforces the regulations. In addition to statutory and FAR requirements, our contracts specifically require contractors to comply with the Corps of Engineers Safety and Health Requirements Manual, EM-385-1.

FEAD personnel, construction representatives and all technical field staff shall receive three levels of contract/construction safety training: on-the-job training, the NAVFAC construction safety and health correspondence course, and formal classroom training related to safety and health. The FEAD shall create, document and follow a process to assure that all personnel responsible for developing and compiling contract documents do not omit required safety provisions and clauses. This may require that contracting officers, contract specialists, design project managers, engineers and environmental project managers and engineers receive similar safety training as FEAD personnel and construction representatives.

A key to meeting our mutual goal of "ZERO" accidents through "ZERO" tolerance is to start with a comprehensive site-specific safety plan. To do this, we are actively enforcing contract requirements for Accident Prevention Plans by ensuring they are formatted as shown in Appendix A of EM 385-1-1. Accident Prevention Plans that do not follow these guidelines will be disapproved and returned for resubmittal. Internal processes should be in place to ensure the plans are reviewed by individuals who have met minimum training requirements to assist in identifying hazards associated with each project. The contractor must not start work on a contract until the Accident Prevention Plan has been submitted and accepted.

Particular attention shall be paid to excavations, scaffolding, medical and first aid requirements, sanitation, personal protective equipment, fire prevention, machinery and mechanized equipment, electrical safety, public safety requirements, and chemical, physical agent, and biological occupational exposure prevention requirements. Detailed site-specific hazards and controls shall be provided in the activity hazard analysis for each phase of the operation.

After the contract has begun it is imperative that an Activity Hazard Analysis be submitted before beginning each phase of the work. As a minimum, each phase corresponds to a specification section for the contract. Additional Activity Hazard Analyses may be necessary for special construction efforts such as a critical crane lift or

other special hazard operations. The Activity Hazard Analysis is normally prepared by the sub contractor performing that phase of the work. It is not intended to be submitted with the overall project safety plan described above. Activity Hazard Analysis must be reviewed with all parties involved in the work activity. Contractors are encouraged to perform this review during the preparatory inspection meeting required by the quality control specification section of the contract. Like the Activity Hazard Analysis the contractor must not start work on the phase until a preparatory inspection meeting is conducted.

The Activity Hazard Analysis can also act as an efficient tool when used as an outline for weekly safety meetings. In this way the project superintendent can ensure the meetings discuss relevant issues specific to the site. This requirement used in conjunction with contractor production schedules can assist in preventing unwanted delays due to poor planning before the work effort begins and most importantly, prevent accidents.

Additional information on worksite safety requirements and policies can be found in Chapter 5.

SECTION 3-9. QUALITY CONTROL

NAVFAC is committed to providing quality design and construction on all projects. The NAVFAC Business Management System provides policy for Construction Quality Management (CQM) and outlines the concepts, requirements, and procedures to be used to execute NAVFAC's Construction Quality Management (CQM) Program. Construction Quality Management requires the combined efforts of contractor Quality Control (QC) personnel and government Quality Assurance (QA) personnel to achieve our shared goals - quality construction built safely, on time and within budget.

Each contract contains Specification Section 01450, Quality Control. There is a standard version, Pre-edited specification, for less complex contracts, usually under $2 million, and a more in depth version adaptable for all other contracts. The constructability review should include verifying that Section 01450 is suitable for the particular contract.

Construction contractors enhance their opportunity for Navy business by maintaining a strong project Quality Control (QC) system. Schedule goals are achieved through regular production/QC meetings and proactive contractor leadership that "builds it right the first time" and builds it safely. Contractor QC staff manage specified QC processes, including submittals, preventive controls, inspections, tests and documentation. The contractor manages dally quality control of all trades from project award through completion inspections and acceptance by the government. The government, in its Quality Assurance (QA) role, ensures that the contractor's QC system is effective.

Contractor Responsibilities

- Produce a quality product on time, safely and in compliance with the contract.
- Provide a quality control program that prevents deficiencies.
- Identify each proposed Definable Feature of Work (DFOW) and establish a 3-phase control process.
- Inspect construction and perform specified testing to ensure quality.
- Track and correct any non-complying work.
- Provide submittals of all products incorporated into the work.
- Document and maintain records of all QC activities.
- Perform punch-out inspections and participate in prefinal and final acceptance inspections.

The Contractor's Quality Control (QC) Program consists of a QC organization, a QC Plan, a Coordination and Mutual Understanding Meeting, periodic QC Meetings, three phases of control technical submittal review and approval, testing, completion inspections and QC certifications as well as the documentation necessary to substantiate that materials, equipment, workmanship, fabrication, construction and operations comply with the requirements of a contract. The QC program covers both on-site and off-site work and the QC efforts are keyed to the construction schedule. No work or testing may be performed on a job unless the QC Manager is present at the work site.

Three Phase Control Concept

The contractor's control of quality is divided into three phases for each DFOW. A DFOW is a task that is separate from other tasks and has control requirements unique to that task. Typical examples of DFOWs are exterior water piping, excavation for foundations, concrete foundations, masonry walls, interior electrical wiring, etc.

Performance of all three phases is the contractor's responsibility. Each control phase is an opportunity to prevent problems and costly rework.

The preparatory phases performed and documented prior to starting the DFOW. Example actions include: reviewing and approving submittals; reviewing applicable contract drawings, specifications, and test requirements. Safety requirements and Activity Hazard Analyses; inspecting delivered materials and construction to be interfaced with, etc. Construction standards and contract interpretation issues are discussed and settled before start of the DFOW to avoid the need to tear out after work is in place. The preparatory process pays dividends by locating and resolving conflicts In advance of construction.

The initial phase is performed and documented at the beginning of each DFOW. This is an opportunity for the contractor to get the work off to a proper start in compliance with contract requirements and to establish standards and quality of workmanship. Testing procedures and compliance with safety standards are validated. The initial phase helps to achieve preventive control and to reach early agreements on quality.

The follow-up phase for each DFOW is surveillance, inspection and documentation of the work to determine continuation of compliance with the contract requirements and quality of workmanship confirmed during the preparatory and initial phases. The follow-up phase may be performed on a daily routine, or predetermined basis as required to ensure contract compliance. The follow-up phase is more productive when preceded by thorough preparatory and initial phases.

NAVFAC contracts require either a contractor superintendent, who also functions as the Quality Control (QC) Manager, or a superintendent separate from the QC staff. The specifics and complexity of the project dictate whether there is a single QC representative or whether there is a QC Manager and QC staff. The QC staff may include a submittal reviewer and/or specialists for complex portions of the work, such as: mechanical; electrical; roofing; specialized coatings; fire protection; RF shielding; or perhaps safety when appropriate.

The qualifications for members of the QC staff must define the required education and experience without becoming an impossibility to fulfill. NAVFAC has partnered with the Army Corps of Engineers in requiring that all QC managers (including superintendent/QCs) complete an 8-hour course entitled “Construction Quality Management for Contractors”. This course is offered periodically and is sponsored by both the Associated General Contractors (AGC) and the Associated Builders and Contractors (ABC) for the contractor’s convenience. The requirements stating when

supplemental QC Specialists staff members are to be on site must also be carefully considered. The specifications must indicate when a QC Specialist's must be on site and this normally occurs when any/all critical work is ongoing.

The government will review daily reports and other required documentation to determine the adequacy of the contractor's QC system. The government's interest is that the contractor maintains the necessary control to prevent any "rework" or tear out. The government should emphasize inadequacies in the quality control program instead of individual construction deficiencies.

SECTION 3-10. REQUIRED REPORTS

Work-in-Place (WIP)

WIP is an important NAVFAC construction workload and financial indicator. WIP is the accrued cost of construction, repair, installation or maintenance work in a construction contract, delivery orders, task orders, or provided by the Naval Construction Force (NCF) Seabees, including cost of onsite materials and land acquisition. WIP represents the total value of construction work completed.

WIP is generated within FIS via two accrual methods: the certification and payment of an invoice or by manual insertion of WIP data WIP is one of the key metrics that NAVFAC Capital Improvement Business Line uses to resource FEAD Project Management and Engineering Branch and the Acquisition Branch with personnel and budget. Accrued WIP (sometimes called actual WIP) is calculated by the value of the contractor invoices processed and paid during a given time period.

Construction workload, measured in WIP per FY, is used in the Resource Allocation Plan (RAP) process by NAVFAC, NAVFAC Pacific, NAVFAC Atlantic and Facilities Engineering Commands (FECs) to determine and equitably allocate resources to each NAVFAC component for delivery of NAVFAC construction. WIP by PWD/ROICCs is projected by FECs and 2-year WIP projections are submitted to NAVFAC Pacific and NAVFAC Atlantic during the annual RAP cycle. WIP accruals by FEC are tracked monthly with COGNOS™ data reports and compiled into the monthly report. WIP projection procedures are found in the BMS.

Facilities-in-Place (FIP)

FIP is a performance metric expressed in units of United States dollar. It represents satisfactory facility support contract (FSC) and base operation support (BOS) contract services that were invoiced by a contractor, assessed by a performance assessment representative, and approved by a contracting officer. Withholding of invoice amounts for liquidated damages, unsatisfactory, and nonconforming work are not included in FIP since these were not part of the approved invoice. There are two FIP categories: income and non-income.

- Income FIP includes all expensed contract lines of accounting (LOA) from three possible sources:
  - Non-Navy and Marine Corps clients; such as, Army, Air Force, Coast Guard, Defense Commissary Agency (DeCA), Defense Energy Support Center (DESC), Defense Logistics Agency (DLA) commands
  - Navy Working Capital Fund clients
  - Economy Act clients
- Non-Income FIP is expensed contract LOAs from Navy or Marine Corps clients.

FIP is one of the key metrics that NAVFAC Public Works Business Line uses to resource FEAD FMFS Branch with personnel and budget. FIP is calculated by the value of the contractor invoices processed and paid during a given time period. FIP tends to be more predictable and evenly distributed throughout the year as service contracts are largely funded up front for fixed price work, with supplemental IDQ work funded during the year as they occur.

Design-In-Place (DIP)

Design-In-Place (DIP) is the primary measurement of workload in design. DIP projections and accruals are reported in dollars as the percentage of design completion multiplied by the estimated construction cost of the project. The design cost does not play a part in DIP calculations. The measurement of the amount of design is applied to an algorithm that allows the determination of resources expressed in man-hours.

DIP applies to those projects for which a design is necessary. This typically is Category I and II work resourced through the E-Line (Design product line). Likewise, DIP typically does not apply to Category III and IV work as there is no design.

Safety Days Away/Restricted Time Rate (DART) and Injury/Illness Incident Rate (IIR)

- Days Away/Restricted Time Rate (DART) is the rate of injury or illness cases that result in employees missing one or more days of work (lost time), or working at less than full potential (restricted time).

- Injury/Illness Incident Rate (IIR) is the rate of injury or illness cases that require medical attention beyond first aid. Commonly referred to as the "Recordable Rate," this is the standard indicator that has been used by the U.S. Occupational Safety and Health Administration (OSHA) for many years and can easily be compared across similar companies.

Both IIR and DART are indicators of the rate of incidents per a 100-person population. For instance, an IIR of 5 would indicate that 5 out of 100 employees experienced an injury or illness requiring medical attention beyond first aid over the time period measured. The IIR is useful in assessing the frequency of work-related injuries and illness, helping us to identify high-risk areas and taking practical preventive actions before injuries occur. The DART is useful in assessing the severity of those injuries and illnesses so that our risk mitigation measures can be effectively prioritized.

SECTION 3-11. RECOMMENDED TRAINING

Recommended training for PWOs or FEAD employees include:

- Defense Acquisition Workforce Improvement Act (DAWIA) Training
- CTC342, NAVFAC Contracting Officer Representative, COR/ NTR/ COAR
- CTC 337, Facilities Support Contracting
- CTC 415, Source Selection and Technical Evaluation Board
- CTC 422, Application of Labor Laws to Federal Contracts
- CTC 423, Environmental Contracting
- CTC 466, Architect – Engineer Fixed Priced Contracting

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Production Division

Chapter 4

The Production Division is responsible for the successful execution of work within schedule and budget. This work typically includes complex projects that require considerable planning, coordination, and safety compliance. The Production Division must be fully aware of the impact scheduling equipment maintenance may have on other shops and ensures proper concessions and allowances that may occur due to the critical nature of waterfront, transportation (operations and maintenance), maintenance, utilities and production facility support.

SECTION 4-1. PRODUCTION DIVISION

The Production Division executes the full range of Facility Management and Sustainment (FM&S), Utilities and Energy Management (UEM), and Base Support Vehicles and Equipment (BSVE) programs for Public Works Department. Services are provided 24 hours, seven day a week to accomplish mission requirements and to respond to emergency calls. The Division provides continuous support when required in response to natural or manmade disasters and contingencies. The branch is responsible for facilities functions critical to base operations and quality of life. Services provided are highly visible and have an immediate and daily impact upon clients and their critical missions. Delivery of services are often under tight deadlines where planning and coordination is difficult due to uncontrollable events such as weather, unscheduled outages, unpredictable ship movements, and priority workload of serviced clients.

Facilities Management and Sustainment (FM&S) Branch

The maintenance system's basic objective is to optimize the use of available resources: manpower, equipment, materials, and money. The system provides the framework necessary to place decision-making at a level where all factors concerning Public Works operations can be analyzed.

Each Public Works functional area has information affecting maintenance accomplishment. For example, the shops may feel that a certain deficiency should be corrected, such as replacing a roof. However, as a result of fund limitations, it is possible that only a temporary repair may be authorized so that a more serious deficiency elsewhere may be corrected. The system serves to:

- To perform maintenance on a planned and scheduled basis rather than on an intermittent, breakdown basis.
- To assure that shore facilities meet their operational requirements.
- To provide more direct control over the use of the maintenance work force (both civilian and military).
- To guard against and eliminate over-maintenance and under-maintenance.
- To take corrective action before advanced deterioration necessitates major repairs.
- To correlate various components of work accomplishment with total work requirements.
- To obtain equitable distribution of shop forces.
- To provide facts and statistics that indicate trouble areas in need of corrective action.
- To reduce to a minimum the number of record-keeping procedures.
- To provide factual back-up for budget and project submissions.

Utilities and Energy Management (UEM) Branch

Utilities

The Utilities Department of the Production Division is responsible for maintaining and operating electrical and mechanical distribution systems, steam production facilities, and providing temporary utility services to ships in port. The Utility Department provides electricity, potable water, steam, natural gas, saltwater, boiler feedwater, compressed air, and wastewater collection systems maintenance. It offers operating, maintenance and repair services for client-owned utility systems on a cost-reimbursable basis. At the installation level, the five major functions of utilities management are defined as:

- System development includes the planned design and improvements of generation, distribution, and collection facilities to achieve efficient and economical utilities system operation.

- Commercial acquisition includes the determination of requirements and purchase of those requirements in the most cost effective manner. Acquisition is normally executed at the Echelon IV Core organization level vice PWD. Only authorized contracting officers may enter into acquisition agreements.
- Utilities operations and distribution is directed toward maximizing efficiency of production, distributions, and collection equipment using minimum manpower and materials.
- Inspections and maintenance is operations directed toward minimizing system down time at minimum cost.
- Usage control is directed toward minimizing waste by developing sound management practices by all users.

Utilities managers must provide sufficient personnel to operate the systems. Guidelines from NAVFAC for manpower should be followed. Management can also develop local staffing indices to support staffing level. Some factors that affect staffing requirements are:

- Age of the equipment
- Tempo and complexity of operations
- Amount of contract support
- Size of the installation
- Local site conditions
- Maintenance requirements

Energy

The FEC has energy experts available to conduct energy audits and to help create an energy management program. DoD's philosophy is to give the Navy activities the flexibility to manage their own energy programs to meet the goals of the Energy Policy Act of 2005 (EPAct) and Executive Order 13423. The Energy Independence and Security Act (EISA), signed in 2007, includes the EO requirements to reduce the installation energy by 3 percent through 2015 or 30 percent by 2015 relative to the 2003 baseline. The two methods for reducing energy cost are:

- Supply side management initiatives - actions that reduce energy cost through better acquisition procedures, more cost effective energy delivery methods, and renewables and cogeneration that increase energy security.
- Demand side initiatives - actions to reduce energy cost and consumption by changing operating procedures to use energy more efficiently or at off peak periods.

Water

Water supply planning and control is to ensure that an adequate and suitable water supply is available as economically as possible. Further, water demand should be monitored and projected for planning purposes. Water usage and peak demand must be charted for daily and longer periods, to identify seasonal patterns of consumption. Unit costs curves should be developed for each pumping installation and other water source.

The Navy has mandated installations reduce their FY 2007 water consumption by 2 percent.

Base Support Vehicles and Equipment (BSVE) Branch

As with all facets of Public Works business, the primary goal of the BSVE is to provide good, responsive, responsible service to the clients. The term used to describe the equipment managed by NAVFAC is Civil Engineering Support Equipment (CESE).

CESE is a procurement budget term referring to equipment for which NAVFAC has the responsibility for determining requirements, procuring, and assigning. The equipment includes automotive vehicles, construction, railway, fire fighting, and mobile weight handling equipment. Weight handling equipment such as portal, gantry, jib and other facility cranes normally fixed are not classified as CESE. There are three vehicle types:

- Passenger carrying vehicles include sedans, station wagons, ambulances, buses, sport utility vehicles (SUVs), and carryall passenger vans.
- Non-passenger carrying vehicle means conventional type trucks and trailers that in general are not primarily intended for transportation of personnel. Although scooters, motorcycles, multiple-drive weapons carriers, jeeps, and prime movers can be used to transport personnel, all are classed as non-passenger carrying vehicles.
- Other vehicles include railway, weight handling, material handling, fire fighting, construction, and specialized equipment.
    - Railway means all Navy-owned locomotives and rolling stock designed primarily for use on rails.
    - Weight handling equipment (WHE) includes mobile or transportable truck, crawler and railway mounted locomotive cranes normally used for lifting, moving, and placing heavy materials or equipment. The term also includes captive cranes of the gantry, portal, and hammerhead type which are not included in the CESE program. There are three categories of WHE. For more information, see NAVFAC P-307.

- Material handling equipment (MHE) means all self propelled and conveyor equipment used in storage and materials handling operations in and around warehouses, shipyards, industrial plants, airfields, magazines, depots, docks, terminals, and onboard ships. Included are warehouse tractors, forklift trucks, rough terrain forklift trucks, pallet trucks, conveyors and conveyor systems, and straddle carrying trucks. The Naval Supply Systems Command (NAVSUP) has cognizance over MHE.
- Construction equipment means all mechanical equipment used in the construction, alteration, or repair of buildings, bridges, roads, or other kinds of real property. It includes pile drivers, power shovels, and cranes with special attachments, road rollers, tractors, scrapers, plows, street sweepers, sprinkle carts, portable boilers, pumps, and air compressors. It also includes stationary machines and mechanical apparatus as rock crushing plants, concrete batching, and mixing plants, and similar equipment used exclusively in the construction and maintenance of public works. When used as a general term, construction equipment includes mobile weight handling equipment and equipment such as man lifts not normally associated with the term construction equipment.
- Specialized equipment describes vehicles or equipment which are designed, developed, and constructed for any office or command for its own predominate use in performance of a service peculiar to that command or office. It includes equipment which, though built with a standard engine and chassis, are otherwise modified to such a major extent that it can only be used by the specific command or office. This type equipment would normally be funded for by the specific command with sole use or ownership.

SECTION 4-2. ROLES AND RESPONSIBILITIES OF KEY PERSONNEL

In order for success, onus must be placed with well-qualified individuals. As a Public Works Officer, you must know what person to contact to achieve the end goal of achieving your Command requirements.

The Production Division Director is a senior PWD Manager who is responsible for maintaining the Division's most efficient and effective execution of workload within established PW Product Line budgets, goals, processes, and performance metrics. Other duties are as follows:

- Identifies external and internal systems requiring improvement and effects changes in work distribution, manpower utilization, and use of facilities and services. The Division Director meets with clients on a regular basis.

- Provides technical coordination and integration of factors required for accomplishing PW Business Line (BL) objectives.
- Solves problems that subordinate mangers and workforce encounter and communicates with other PW business/product lines, support lines and PWD staff.
- Represents the PWO/DPWO at conferences and meetings at which production client requirements, priorities and execution schedules are discussed.
- Coordinates with the Cultural Resource Manager to ensure that all work is consistent with the cultural resources management plans and agreements and does not adversely impact historic properties.

The Facility Management and Sustainment (FM&S) Branch Head is responsible for all management and operational issues within the branch, with the primary objective of providing cost effective and high quality facility maintenance and sustainment services.

- Promotes NAVOSH Safety Program Compliance for in-house operations. Coordinates closely with the Safety Officer to ensure safety training, mishap reporting and investigation, and enforcement of safety standards and procedures.
- Assures FM&S Product Line goals and objectives are met as developed by the FEC Public Works Business Line Coordinator and FEC Operation Officer.
- Ensures adequate quality control measures and metrics are in place to ensure effective job scheduling, accurate estimating, high levels of productivity and quality workmanship. The Single Platform MAXIMO (SPM) management information systems is used extensively to monitor measure and control productively and cost.
- Provides monthly FM&S metrics reports to FEC Headquarters.
- Responsible for all organizational and financial control issues associated with the branch including job order accounting and commodity rate development. Participates in the development of the FM&S Branch annual operating budget. Responsible for tracking all Branch expenditures and implementing controls necessary to keep budget execution in line.

The Utilities and Energy Management (UEM) Branch Head provides the full range of utility operations and maintenance, as well as a comprehensive energy management program. The UEM Branch Head is responsible for operating and maintaining steam boiler plants and distribution systems, water, sewage, gas and electric distribution systems, and oversight and management of utility services and energy management. Other duties are as follows:

- Promotes NAVOSH Safety Program Compliance for UEM operations. Coordinates closely with the Safety Officer to ensure safety training, mishap reporting and investigation, and enforcement of safety standards and procedures. Assures annual audit of the energy control program (lockout/tagout), and leads the planned utility outage process.
- Achieve and maintain UEM Product Line plan goals and objectives. Provides monthly UEM metric reports as required by the Public Works Business Line Coordinator (PWBLC) and UEM Product Line Coordinator (PLC).
- Ensures adequate quality control measures and metrics are in place to ensure effective job scheduling, accurate estimating, high levels of productivity and quality workmanship. Ensures computerized maintenance and utility automated management information systems are used effectively to monitor, measure and control productivity and cost.
- Develop long-range plans for complex utility major maintenance projects, future development of utilities distribution systems, shop facilities and equipment procurement. Planning includes facilities, equipment, tools and their replacement and improvements, specialized utilities equipment, maintenance support requirements, client installations and fleet utilities support, manpower and funding requirements, preventive maintenance programs, and special requirements for long-range projects.
- Develop projects for plant replacement/upgrade and acquisition of specialized mobile equipment for power generation and temporary power supplies and rolling stock in support of the utility system.
- Plans and directs the major work operations of the Branch in preventive maintenance and operations of the distribution of electricity, gas, steam, sewage, and water to all buildings and facilities.
- Notifies PWO/DPWO, Production Division Director, and key Supported Command officials of unplanned utility interruptions impacting base operations.

The Energy Manager coordinates the development of the Annual Energy and Water Reduction Plan. The Energy Manager is supplemented with contracted Resource Efficiency Mangers (REM) so that there is at least one work year of dedicated support to energy management for every $10 million dollars in energy commodity cost.

- Coordinate Installation wide energy programs acting as the central point of contact and technical advisor on energy and water conservation matters for the Command.
- Coordinate REM services.
- Review utility usage reports for the Defense Utility Energy Reporting System (DUERS), Utility Cost Analysis Report (UCAR), and trend utility consumption profiles and patterns.
- Monitor the Command's overall progress towards conformance with the goals set forth in this instruction.
- Develop viable energy management projects. Initiate investigations, energy surveys, and energy studies to support development of these projects.
- Inspect buildings and utility systems periodically to ensure efficient energy and utility usage.
- Represent the installation and tenant commands at pertinent workshops and seminars on energy management.
- Provide energy management and awareness training for the installation, including building energy monitors), general military training, local national employees, management, and others.
- Develop and coordinate the base electrical demand peak shaving and load shedding plan, to be used in the event of an emergency electric load shedding requirement or to capture utility based economic incentives.
- Coordinate with the Public Affairs Officer (PAO) to promote personal awareness of energy conservation and provide technical assistance for publishing energy related articles.
- Promote energy awareness in the community, including the coordination and execution of the annual Navy Energy Awareness Week.
- Serve as chairperson of the Installation Energy Board (IEB) and conduct meetings at least semiannually.
- Provide the PWO a quarterly report on the installation's energy conservation efforts and prepare and submit an annual nomination package for the Secretary of the Navy Energy Conservation Incentive Award.

The Base Support Vehicles and Equipment (BSVE) Branch Head is responsible for managing all aspects of transportation and weight handling equipment operations, including production control and budget formulation and execution. Coordinates program efforts with client activities and other managers to efficiently and effectively meet client requirements. Provide responsive quality and cost effective BSVE support to all clients. Operations services include fuel delivery, Civil Engineering Support Equipment (CESE) operations, and taxi services, and other BSVE services at specified common operating level standards (COLS).

The Transportation (BSVE) Commodity Supervisor is responsible for commodity management, budget, CESE, Weight Handling Equipment (WHE), Material Handling Equipment (MHE), the fleet purchase card program, and process oversight within the BSVE Product Line. The supervisor manages all facets of the transportation commodity, including vehicle assignment, utilization, maintenance operations and billing under the Navy Working Capitol Fund (NWCF) concept of operations.

SECTION 4-3. MAINTENANCE MANAGEMENT SYSTEM

Key Elements of the Maintenance Management System

There are five key elements of the Maintenance Management System.

Continuous Inspection

By leveraging production personnel, primarily through a Preventive Maintenance Programs (PMP), all equipment in your inventories are looked at and assessed on recurring schedules. During the performance of routine preventive maintenance duties, workers are tasked with identifying deficiencies in equipment, systems, and infrastructure. This process provides for detection of deficiencies at the earliest possible stage of development. Once a deficiency in noted, the Facilities Management Division (FMD) Requirements Branch can determine the most efficient and cost effective method of correcting the issue. The purpose of the PMP is to reduce the number of breakdowns. This process results in fewer high-cost emergency responses, longer equipment lifecycles, a reduction in and more balanced service call loading and improved labor usage. Furthermore, through the use of data derived from the PMP our Public Work Departments can provide more accurate cost projections to our clients. In addition to the use of the PMP for continuous inspections, there is also a reliance on equipment operators in staffed plants. These employees can provide feedback on equipment conditions through routine observations of systems in their areas of responsibility.

- Through the use of programs and processes, such as the Facility Condition Assessment Program (FCAP) and the Preventive Maintenance Program, determinations can be made concerning where facility infrastructure falls on lifecycle and degradation curves. Using this information, inspections that are focused on infrastructure known to be approaching critical lifecycle stages can be scheduled for "eyes-on" assessments. By employing Lifecycle Analysis programs, costs associated with facility and infrastructure inspections are greatly reduced. This is possible by eliminating the need to routinely inspect systems that are not at critical points in the lifecycle. This, in turn, reduces the number of required inspections and the frequency in which inspections are needed.

  Furthermore, through the use of lifecycle analysis the condition index of a facility can be increased by examining the lifecycle stage and condition of systems that impact the condition index most and improving those systems that are approaching the end of their lifecycle. Through the use of lifecycle analysis other determinations can also be made. For example, premature failures may be attributed to poor maintenance, incorrect PM tasks, frequencies or other maintenance program inadequacies. Adjustments in PM frequencies or Job Plan tasks can be made by analyzing this data. Coordination of lifecycle analysis should be coordinated through the FM&S Product Line Coordinator. Generally these analyses are performed using both installation and Product Line resources.
- Preventive Maintenance Inspections (PMI) is the systematic and periodic examination, lubrication, minor adjustment, and minor repair of dynamic equipment and systems for which the Public Works Department is responsible, but to which a specific operator is not assigned. It involves such duties as oiling, greasing, and tightening, which prevent accelerated deterioration, and thus keeps the equipment in continuous service or ready for service in a well managed plant. The cost of operation of properly serviced equipment is consistently lower in both manpower and materials than for poorly maintained equipment.
- Operator Inspections of constantly attended equipment is similar to a PMI but is performed by the operator assigned to the equipment as part of the day-to-day responsibilities.

<u>Work Input Control</u>

This control provides basic planning and status information on work from inception to completion. It includes screening individual jobs for necessity, determining the relative urgency, programming them through the planning phase, authorizing the work, maintaining a balanced and adequate workload for each source of accomplishment, assuring proper completion of jobs, and keeping management informed on the status of

jobs. This function is performed via the FMD Requirements Branch and the Work Induction Board (WIB). The Production Controller located in the Requirements Branch coordinates with FM&S Branch Heads to assure that the FM&S shops have a sufficient backlog of funded work to make effective use of resources.

Planning and Estimating

This element provides before-the-fact labor and material cost estimates, and a task performance sequence to allow for proper management control and follow-up.

Shop Scheduling

Shop scheduling provides the framework for maximum coordination between various shop crafts and minimizes delays due to lack of materials, equipment, transportation, tradesmen, and job site availability.

Management Reporting

This reporting provides Public Works managers with reliable, up-to-date information and data that can be utilized in planning, decision-making, and objectives review.

SECTION 4-4. WORK EXECUTION

Work execution can include maintenance, repair, and alteration of real property and minor construction for facilities, buildings, and equipment.

Classification of Work

There are five categories of work and generally separate stabilized labor rates for each type of work:

1. Emergency work
2. Recurring work
3. Service work
4. Minor work
5. Specific work

Emergency Work

An emergency service is work that must be addressed immediately in order to:

- Prevent immediate danger to personnel and equipment.
- Prevent loss or damage to property.
- Preclude fulfillment of an essential installation operation or training mission.

Emergency work is billed at predetermined rates which are published annually. The FM&S Branch Head will exercise control of emergency work by requiring craftsmen to note start and stop times on work authorization forms to determine total man-hours involved. Periodic reviews of emergency or service calls may often identify potential large problem areas that should be corrected by a major overhaul, replacement, or a change of equipment used. Emergency work should be responded to within 2 hours and completed within 48 hours. Work should continue without interruption until the emergency is corrected, remedied or other action has been taken to arrest or contain the condition before leaving the job site. If further resources are required to complete the repair, a follow up work request will be required. Generally, work required to correct the situation after the emergency has been secured should be processed according to the type of work involved. Often times the follow on work that is recurring in nature can be accomplished through a routine service call and/or minor work order.

Recurring Work

Recurring work covers repetitive type, preventive maintenance and operations work. Recurring work must meet the following criteria:

- The work is repetitive and follows an established cycle.
- The work can be defined and planned in advance.
- The work can be scheduled for completion without depending on the completion of some other task or event.

Recurring work is any work required to return a facility, system, equipment, or component to normal working condition that does not exceed $2500 or other threshold as established by the PWO or Facility Engineering Command (FEC).

Recurring work excludes repair work, repetitive tasks that cannot be scheduled in advance and must be done on an on-call basis, and dedicated service which is work under the direction of the client. Response and completion time standards for recurring work will be established by the FEC. Individual Performance Work Statements (PWS) may require the FM&S service provider to meet a different standard.; although future PWSs should require the same standards as expected of production shops.

Service Work

Service Work is work that is minor in scope and can be accomplished in 16 hours or less. It is billed at predetermined rates which are published annually. The goal is to respond within 48 hours and complete service work in 72 hours.

Minor Work

Minor work consists of work that will take over 16 hours to accomplish. This work requires no engineering or estimating and can be accomplished without complex planning or scheduling. The services offered are much the same as those offered under Service or Specific Work, the distinction being the timeframe, complexity, and support required to complete the work. Minor Work is billed at predetermined rates which are published annually. Public Works will respond to calls within 7 days and complete the work within 30 days. Minor work authorizations are limited to $25,000. It is work in excess of routine service work, but less than specific. It may involve a few trade skills and allows more flexibility to client changes. This work is usually scheduled by the work center supervisor as filler jobs in between specific job orders. Response and completion time standards will be established by the FEC.

Specific Work

Specific Work involves major repairs, replacements, new construction, and renovation of facilities requiring engineering, planning, and estimating services. The goal is to respond within 90 days and complete the work within 150 days. Typically, projects are Category III and IV, although not excluded from Categories I and II. Response and completion time standards will be established by the FEC.

Priority of Work

A priority assignment of work is essential in determining the importance of each project in relation to other identified requirements. Manpower and funding limitations may not permit the accomplishment of all necessary and desired work immediately upon its

identification. The use of a priority classification system will assist in optimum resource utilization. The assignment of a priority designator in accordance with a system similar to the procedures listed below will provide a sufficient definition of the relative importance of each project.

The importance of various functions and types of work may be expressed by the assignment of priorities in a priority matrix. After initial use of the priority matrix, the results should be reviewed periodically and revised as necessary. In general, jobs with highest priority (lowest number) will precede others of lower priority on the schedule. The priority matrix that allows classification of all work into one of four types based on the major work content and justification is listed below:

- Safety - Work identified primarily for safety reasons.
- Function - Work primarily identified with the installation's mission.
- Preventive - Work primarily required to prevent significant deterioration of plant or equipment owing to continued use or from natural forces.
- Appearance - Work primarily for preserving or upgrading the appearance of a facility.

Each of these work classifications will have three levels of importance. The importance level of an individual job is based on its impact in relation to other jobs in the same classification.

- High - The high level indicates that the urgency of work accomplishment is significantly greater than routine.
- Routine - The routine level designates the normal degree of urgency for the contemplated work to be accomplished. Most work necessarily will fall into this category.
- Low - The low level indicates that the degree of urgency in the accomplishment of the requested work is lower than normal.

The highest priority of work is reserved for use with specific approval of the Public Works Officer or Deputy Public Works Officer. This priority is an overriding emergency or urgent priority that will insert final estimated work into the schedule in any week by date specified-even as soon as the next week.

Work Order Estimating

Work order estimating can take three forms:

- Preliminary estimate - Simple computation made on an overall basis to provide labor and material cost information for management action; for example, to decide whether it is feasible to accomplish a project.
- Fundable estimate - An approximation of labor and material costs required by each work center to provide general planning information.
- Work plan - Completed once the decision has been made to fund the work job order. It is a detailed labor and material cost estimate for all project plan work operations and elements. The final estimate is the basis for issuing work to the shops. Final estimates can be of two general types: engineering estimates based on use of Engineered Performance Standards (EPS) or conventional estimates based on historical data, statistical data, or judgment and experience. It is desirable for all Planners and Estimators to be trained in EPS usage.

Work Permits

Work permits, in accordance with the applicable instruction, must be obtained if activities plan to construct new facilities or change an existing facility footprint on Navy Class I property or performing any work on Class II property that pierce the building envelope or its components, including alteration, demolition, construction, installation, repair or replacement of any part of the building. Some examples are door alterations, modifications to building structures and grounds, moving or penetrating walls, altering fire, emergency systems, new additions to buildings, electrical installations, installations, or modification of hard-wired equipment, installation of items on roofs, and moving electrical equipment.

- Alteration is defined as work and materials required to adjust interior arrangements or other physical characteristics of an existing real property facility so it may be more effectively adapted to or utilized for its designated purpose.
- Construction is defined as work and materials used to build a new facility or alter an existing facility.
- Installation is defined as work and materials to support incorporation of personal property into other than a new real property facility.
- Repair is defined as work and material used to renew or replace deteriorated components of a facility for continued utilization in existing designated purpose.

Alterations, construction, installation, and repairs to installation structures and grounds require a system to ensure all concerned parties understand and approve changes in accordance with applicable laws, regulations, and standard building practices before beginning work. The Regional Engineer (RE) is responsible for real property management and permits are an integral part of this responsibility. The RE usually assigns this responsibility to the installation Public Works Officer (PWO) or that person's representative. Therefore, requesting activities must confer with the PWO before performing any projects that fall under the scope of the applicable instruction.

SECTION 4-5. IN-HOUSE FORCES, SELF HELP AND CONSTRUCTION BATTALION MAINTENANCE UNIT (CBMU)

As the Public Works Officer, there are a number of resources with which to accomplish a particular task such as self help programs, Construction Battalion Maintenance Units, in-house forces, or contracts. The Work Induction Board (WIB) should decide the execution method early in the approval decision process to enable the proper funding estimate to be completed.

In-house forces

In-house work is performed by government employees or military personnel using government equipment where the physical plant is owned by the government. The in-house forces include all personnel within the FM&S, UEM, and BSVE branches. Services provided by PWD in-house forces are on a reimbursable NWCF basis.

Self Help

The self help program is a method of performing maintenance, repair, or construction on personnel support facilities by non-PWD shops personnel. To ensure the work is accomplished in a professional and economic manner, reliance should be made on CEC officers and Public Works and Seabee resources for technical guidance of personnel unskilled in the maintenance or construction trades.

Construction Battalion Maintenance Unit (CBMU)

Construction Battalion Maintenance Units are tasked to ensure Seabees ashore attain and maintain military and construction skills. CBMUs are employed for new construction, alterations, repair, or nonrecurring maintenance projects which provide for attaining and maintaining technical proficiency or for projects restricted by security.

CBMU personnel shall not be used in competition with civilian labor and are not a general labor pool to augment Public Works Departments. It is the installation's responsibility to provide the necessary resources to cover the CBMU to include plans, specifications, materials, self help labor hours, and special tools and equipment.

Although the CBMU is not an installation asset, the PWD and CBMU should be mutually supportive and leverage each other's capabilities. The PWD can set aside various size projects for the CBMU that provide good opportunities for hands on training while the CBMU can provide assistance with disaster recovery and in severe weather conditions. Support from other active duty and reserve Naval Construction Force units may be requested through the First Naval Construction Division and its Call for Work.

SECTION 4-6. UTILITIES AND ENERGY MANAGEMENT (UEM) BRANCH

Utility Management

Management control must be directed toward providing reliable, high quality and economical utilities services to accomplish the mission. To meet this objective, the utilities manager must:

- Maintain the proper staffing to operate the system. In order to reduce required staffing levels, heating plants, cold storage and refrigeration plants, and pumping plants are to be automatically controlled wherever practical.
- Establish standard operating procedures (SOP) for all major plants and systems. The SOP should cover operating instructions, start-up and shutdown instructions, operator maintenance, periodic maintenance, and actions in emergency situations. A single line diagram should be posted in all plants along with the SOP.
- Develop contingency plans for responding to utility outages. Interruptions of service reduce the installation effectiveness. A contingency plan should be maintained for each utility system and identify available emergency generation units, identify inter-connections and isolation points in service lines, identify all possible sources of outages, and establish a procedure for curtailment and restoration of utility service to clients in priority order.
- Schedule appropriate equipment and personnel to meet needs. Each installation should periodically collect demand data in order to develop typical seasonal demand curves for normal weekday and weekend loads. Operating schedules can be established to meet demand at the lowest production cost.

- Coordinate production operations with purchased utility services to optimize system reliability and overall cost effectiveness. Utility services should be purchased from existing commercial systems where economical. New construction or expansion of Navy owned utility systems should be avoided when possible.

The organization of the Utilities Department will vary based on local requirements. The branch is responsible for providing continuous technical assistance in the operation, maintenance, planning, and conservation of utilities. They serve as an advisor and expert consultant on utility matters involving the application of engineering techniques in the management of utilities. Their major goals are to increase production efficiency, to reduce distribution losses and to procure utilities at a minimum cost. Their major duties and responsibilities at a minimum cost include:

- Developing utilities systems, plans, programs and procedures.
- Planning and pursuing a progressive utilities (energy) conservation program at the installation.
- Furnishing information and guidance to operating and maintenance personnel for standards and criteria.
- Promoting continuous interest concerning the quality of the service provided.
- Performing technical and economic evaluation of the utilities service requirements, and developing information essential to long range planning for load growth, system flexibility and proper equipment selection.

Utility Inspection and Maintenance

Inspection and maintenance are needed to minimize system down time at minimum cost. Cost and down time can be achieved by maintaining all active real property to a standard which will prevent deterioration beyond normal wear and tear. Inactive facilities should be maintained to a standard commensurate with reactivation requirements.

Utility Service

At most shore activities the requirements and method of providing utilities are well established and typically regulated by a public utility. Further, the funding climate and pollution abatement regulations may restrict the selection of a future course of action. In this case, direct all efforts toward a better and more efficient management of the existing systems. However, local conditions are not static. Load or demand requirements, change in response, to changes in mission requirements, new types of equipment, the acquisition

of new facilities, or alteration and improvement of existing facilities, and well as other factors which constantly change system requirements.

Contracting for utility services is the responsibility of the FEC at the core vice Public Works Department level. They are the contracting agent and it is their responsibility to review services and requirements. The FEC has a vested interest in the services that are being received at your installation and are responsible for verifying the bills. The Utility Engineer should be familiar with the provisions of all existing utility contracts, particularly the rate schedules. As a matter of practice, all utility bills should be reviewed and verified by the FEC prior to certification of payment.

The standard unit of measurement for these specific utility requirements are pounds of steam, million British thermal units (MBTU) megawatt hours of electricity (MWH), and million gallons of water (Mgal), or acre foot water (acre of land covered by a foot of water).

Rate schedules, whether applicable to electricity, water or another utility service, have several similar or standard billing charges. Standard charges usually are of two types or levels:

- Flat rate or minimum is a charge regardless of quantity of service used.
- Quantitative charges are based upon MWH or Mgals consumed or processed.

Special charges vary from service to service, but can represent a significant portion of a utility bill.

- Electricity is usually the most costly service. There are two special charges which should be continuously monitored, billing demand and power factor. Both charges are penalty assessments because they may be adjusted or reduced by effective management.
- Natural gas rate schedules are usually formulated on the factor of continuity of service, interruptible, firm, and preferential. Interruptible service is the least expensive, preferential the most expensive.

- Under the Defense Fuel Supply Center (DFSC) Source Supply Natural Gas Program, shore activities may purchase interruptible natural gas at a price lower than the local distribution company's tariff price. This method of purchasing natural gas requires the activities to monitor their usage and make projections on expected consumption for the next month as well as make nominations to the DFSC supplier.

Utility Operations

Inspection and maintenance programs must be maintained to insure the systems retain their capability to provide the required services. It is estimated that improved operations alone can account for one half of the potential Navy wide, short term utilities savings, if not more. Continuous review of past analysis and programming must be accomplished to ensure the systems required are available when and where needed.

- A viable casualty repair plan must be prepared and exercised.
- Repetitive inspection and maintenance programs must be maintained to insure the systems retain their capability to provide the required services.

The goal is continuous improvement of utilities management at all levels of supervision. This implies stricter control of the operational phases of utilities production and distribution.

The following discusses some of the aspects of the major utilities operations which require continuing observation.

<u>Steam Operations</u>

Steam is universally required for domestic, industrial, shipboard, or utilities production usages. Management of this utility requires the control of four major functions:

- Equipment
- Equipment operations
- Fuel selection
- Distribution system operation
- Hotwater distribution

Electricity

Electricity is the major utility at most shore activities. Although many activities purchase all their electricity for activities, they may also be equipped to produce all or part of its electric needs. The management of the electrical system requires planning and control of four primary elements, minimizing peak demands, equipment scheduling, equipment operation, and distribution system operation. At activities purchasing all of their electricity only the first and last elements require planning and controlling.

- Minimizing of peak demand is necessary to reduce the cost of purchase and produced electricity. Of concern are both the quantity of electricity used and the extent and duration of the peak loads. The effect upon purchase cost is caused by the relationship between the peaks and demand rates. In producing electricity, the effect is similar because satisfying peaks usually requires additional manpower and the use of lower efficiency equipment.
- The Utility and Energy Officer should be particularly alert to all possibilities for reducing peak load by shifting and rescheduling loads which are the major contributing factors. Both volume and peak demands should be plotted regularly to provide visual observation of changing patterns and practices in electrical consumption. They should work closely with peak load, to identify loads which can be rescheduled, to shift the demand to other times when the loads can be absorbed more economically.
- Distribution System Operation should be concerned primarily with minimizing losses and detecting and correcting defects in operation. Most losses occur in the lines, transformers, and other equipment
    - Periodically check lines to assure that losses are not excessive.
    - Check the voltage at selected points to assure that the systems and equipment are not being jeopardized by excessively low voltage.
    - Transformer losses should be minimized by consolidating loads and removing under utilized transformers. Know where the PCB transformers are. Have a plan to replace them.
    - Check power factor regularly to determine if improvements are needed to improve efficiency and reduce penalty costs. Distribute power at highest feasible voltage.

Water Requirements

Water requirements include potable, non potable and fire protection demands. Management of water operations require comprehensive planning and control in four principal areas, water supply, pump equipment selection and operations, water treatment, and water distribution. The operators of water treatment facilities are normally licensed by the state authorities.

- Distribution control requires assuring that adequate pressures are maintained and losses are minimized. Be alert to the potential for savings by determining the cause of every break in the mains and making engineering investigations to ascertain proper corrective measures if breaks occur too frequently.
- Pump equipment selection and operation must be based upon predicted production requirements and assuring the lowest overall pumping costs. Each pump should be checked under various operating conditions if the efficiency is low, changes in operating conditions may permit more efficient operations.
- Water treatment control should be continuous. Analysis should be made frequent enough to note any changes in water quality and increased use of treatment supplies. Treatment may be satisfactory in quality and still offer possible savings in the cost of treatment.

Other Utility Systems

Although representing a less significant portion of your expenditures they require a proportionate share of management attention and control. Requirements must be predetermined and equipment selected to meet demands economically. Other utility systems include but are not limited to the following:

1. Sewage collection, disposal, or treatment
2. Central air conditioning
3. Hydraulic power systems
4. Compressed air
5. Refrigeration
6. Natural gas and petroleum
7. Storm drains
8. Liquefied gases

- Sewage disposal - Sewage disposal operations depend on the amount of sewage to be collected and treated. The volume of sewage varies with the season of the year, climatic conditions, type of installation, type, and size of population, type, and number of industrial facilities, ground conditions for infiltration, the day of the week

and the hour of the day. The operators of sewage treatment facilities are normally licensed by the state authorities.

- Central air conditioning, compressed air, hydraulic power and refrigeration systems - Major systems will serve more than one facility. Individual systems are systems that serve one building or portion of one building operation of individual systems are the responsibility of the organization served. Maintenance may be the responsibility of the Maintenance Branch depending on the type and ownership of the unit.

Operating of Petroleum, Natural Gas and Liquefied Gas Systems

The Utilities Branch is responsible for the operation, operator inspection, preventative maintenance inspection, and service work per maintenance control procedures for petroleum, natural gas and liquefied gas systems, except supply department fuel storage plants.

Utility Systems Assessments

Local installation utilities engineering resources are often not sufficient to maintain and upgrade the Navy's shore utility systems. As a result, many systems have deteriorated, are approaching capacity limits, or are of questionable reliability. Resource Efficiency Manager (REM) is a contract resource used to identify energy efficiency savings projects at your PWD, which when executed will realize cost savings well in excess of the cost of the REM services. The process for obtaining and managing the REM services is UEM BMS process located on the NAVFAC portal.

Utility Sales to DoD and Private Clients

DoD clients purchase, on the basis of consumption, utilities as per NAVCOMPT Volume III. An activities budget is directly impacted by the reimbursement of utility services provided to DoD clients. Therefore, it is important that the installation establish rates and periodically adjust the rates when dictated by cost. The supplying installation should not make or lose money on utility services.

Private party sales of utilities will require the approval of NAVFAC Atlantic or Pacific. FECs are responsible for ensuring that there are no reasonable alternatives to selling utilities to private parties, that the Navy is not in competition with private or public utility companies, that private parties reimburse all costs of producing and distributing utility services and that rates are at least equal to local commercial utility rates.

Utilities Cost Analysis Report (UCAR) consolidates fuel consumption, production and purchased quantities and associated costs into one report. This report is designed for management control and planning at the installation level. The UCAR provides comparison of the quantities of production with the cost of operations.

- Data to develop cost trends
- Data to develop consumption trends
- Data to project the utilities operating budget
- Data to project operating cost for future major projects
- An early warning of potential problem areas

When used by management on a regular basis, the UCAR can improve overall effectiveness of utilities operation. Selected line items from the UCAR, such as total quantities, total costs and unit costs for produced, purchased, and delivered utilizes, should be charted monthly or quarterly to analyze trends. Each utility type must be studied independently and thoroughly so the data presented in graphic form is meaningful.

A “projected” UCAR should be developed for future and budget years to properly establish the predicted installation rate used to determine reimbursable cost. The projected UCAR is a projection of utilities operation and maintenance performance and is prepared in the same manner as the regular report except that projected cost increases will be added to know costs.

SECTION 4-7. OUTAGES

Both scheduled and unscheduled outages affect the primary utility systems on the installation and can have a significant impact to the installation and its Supported Commands. The primary utility systems include but are not limited to high voltage electrical cables, transformers, main utility pipes such as water, steam, saltwater, and compressed air.

Most utilities systems in the areas served by the Public Works Department are "looped" making it possible to isolate small sections of any utilities systems and reduce the area affected when a scheduled outage is required for periodic maintenance or repair.

Scheduled Outages

The PWD and FEAD and contractor engaged in repair or construction work shall normally request a utilities outage by memorandum to the UEM Branch at least 10 days prior to the desired date of the outage. The 10 day period is the minimum to allow the UEM to Branch to complete required verification, the outage coordination, and notification by the following procedures:

- Ensure that the area affected will be limited to the smallest area possible consistent with operational and safety requirements.
- Coordinate the outage with a responsible individual of each activity affected, both across the base, internal to the PWD and with contractors working in the affected area.
- After coordinating the proposed outage with all parties and activities affected, establish a firm schedule of the outage including time, date, activity or area affected.
- Ensure that proper prior notification of the outage is promulgated. This includes submitting information for the Plan of the Week or Housing Bulletin, distributing written notices and taking any other actions deemed necessary, such as radio and television coverage when appropriate, to ensure that all activities and individuals to be affected by a scheduled outage are notified.

Unscheduled Outages

Unscheduled outages, such as those caused by electrical equipment failure, or ruptured steam or water mains, may affect large areas for a short period of time until the damaged section is isolated. The UEM shall take immediate action to isolate the damaged section and restore service to other areas. Where an alternate supply line is available, cut over to the alternate line shall be made as soon as possible. Repairs required to put utility systems back in service after an unscheduled outage are to be performed expeditiously to minimize the inconvenience and possible danger to life and property.

The PWO, DPWO, Production Officer, and UEM Branch manager (as well as the installation Command Duty Officer during non-working hours) shall be immediately notified of the accidental interruption and kept informed of the status or progress of work to restore service. It is of utmost importance that activities affected are properly informed so that the effects of a utility service interruption can be kept to the minimum. Customer activities affected by the outage should also be provided with regular updates of the best estimate of when resumption of service may be expected.

SECTION 4-8. ENERGY PROJECTS

Energy Conservation Investment Program (ECIP)

The Energy Conservation Investment Program (ECIP) is a military construction program specifically for renewable energy projects.

- Usage - This tool is used to achieve energy conservation reduction and renewable generation. It can also be used to install meters and will assist in meeting your comprehensive survey requirements.
- Types of technologies - This tool can be used to implement renewable technologies only.
- Typical project size - ECIP projects range from $300K to about $5M, but the typical project is around $2M.
- Impact on reductions - These projects can have significant impact on your annual energy and water reduction. SRM projects should incorporate energy efficiency upgrades.
- Impact on budget - These projects have no impact on your budget for implementation since they are funded by your Budget Submitting Office. They will decrease your utilities requirements in the out-years, and projects that improves on your operations and maintenance practices will free up SRM funding in the out-years. Funds are granted by Congress and divided among the various agencies.
- Who do you contact? Contact your Public Works Officer, who will work with your local FEC to develop and submit projects for ECIP consideration.
- Timeframe - ECIP Projects may take several years to be selected for funding (shortest time frame would be about 3 months) and then an additional year for design and then six to nine months for award.

Utility Energy Services Contract (UESC)

One of the best ways for federal agencies to implement efficiency and renewable energy projects is through partnerships with their franchised or serving utilities. Federal agencies often enter into utility energy service contracts (UESCs) to implement energy improvements at their facilities.

With a UESC, the utility typically arranges financing to cover the capital costs of the project. Then the utility is repaid over the contract term from the cost savings generated by the energy efficiency measures. With this arrangement, agencies can implement energy improvements with no initial capital investment; the net cost to the federal agency is minimal, and the agency saves time and resources by using the one-stop shopping provided by the utility.

The Energy Policy Act of 1992 authorizes and encourages federal agencies to participate in utility energy efficiency programs offered by electric and gas utilities and by other program administrators (e.g., state agencies). These programs range from equipment rebates (i.e., utility incentives) to delivery of a complete turnkey project. Federal legislation and numerous legal opinions demonstrate that agencies have full authority to enter into utility energy service contracts as well as take advantage of utility incentive programs.

Energy Savings Performance Contracting (ESPC)

An ESPC is a contracting vehicle that allows government agencies to accomplish energy projects for their facilities without up-front capital costs and without special Congressional appropriations to pay for the improvements.

An ESPC is a partnership between the customer (a government organization) and an energy services company (ESCO). The ESCO conducts a detailed energy survey and identifies improvements that will save energy and reduce energy and energy-related costs at the facility. The ESCO designs and constructs a project that meets the agency's needs, and arranges financing to pay for it. The ESCO guarantees that the installed energy conservation measures (ECMs) will generate cost savings sufficient to pay for the project over the term of the contract. The government uses the guaranteed cost savings to make payments to the ESCO over the life of the contract. The ESCO in turn uses these payments to pay the financing for the project and to fund any performance-period services (such as equipment maintenance and repair) provided for in the contract.

At least once per year, the ESCO should provide a measurement and verification (M&V) report to the government containing observations, measurements, and analysis intended to show whether the cost savings guaranteed by the contract have been delivered during the year. After the contract ends, all additional cost savings accrue to the government. Contract terms up to 25 years are allowed.

SECTION 4-9. BASE SUPPORT VEHICLES AND EQUIPMENT (BSVE) BRANCH

Whether the BSVE Branch utilizes government personnel and government-owned vehicles or the entire capability is contracted out, the NAVFAC P-300, Management of Civil Engineering Support Equipment, provides assistance in management of the transportation program. The instructions, guides, procedures, and criteria are provided for exercising both technical and management controls to attain full and cost effective utilization of funds, personnel, and equipment. The additional guidance that follows in this section addresses principle BSVE program management focus areas.

Product Line Management Office (PLMO)

The Product Line Management Office promulgates the program and administers the assignment, replacement, and disposal of transportation, and construction equipment and provides the technical advice and assistance for operation and maintenance of transportation department functions, which include:

- Provide technical assistance to activities/claimants.
- Perform inventory objective analysis of all transportation equipment.
- Maintain the Navy Enterprise Transportation (NET) module in Single Platform MAXIMO (SPM)
- Review all transportation equipment requirements for the submission year.
- Act as a central clearing agency for the Navy in exchanging and disposing of assigned equipment. Reassign excess usable transportation equipment to best fill approved inventory objectives. If excess equipment is in usable condition but not economical to ship or transfer any distance, the PLMO is authorized to provide disposal instructions to the installation.
- Coordinate resources when assistance is needed requiring reassignment and disposals between activities/claimants.
- Emphasize the most economical mix of CESE for mission accomplishment.
- Ensure that continual review of installation requirements is accomplished.

Intra-Service Support Agreements (ISSA)

Navy policy, in accordance with OPNAVINST 11000.16, is to combine full transportation support services in a geographic area under one main public works department wherever feasible. Intra-service support agreements (ISSAs) or memorandums of agreements provide in detail the arrangements made between the host and tenant. Where an installation has an authorized inventory objective, or public works department, the host installation should request assistance from its PLMO to coordinate the transfer. The PLMO shall obtain the concurrence of all concerned parties, and establish a time frame for the transfer based on budgeting and programming requirements for both activities.

Vehicle Classification

The determination of justifiable requirements for all types of vehicle service and proper assignment of DoD motor vehicles shall be based on the following categories:

Class A (Continuing Assignment) - Personnel authorized Class A assignments shall not use such vehicle for other than the actual performance of official duties, nor shall such vehicles is reassigned to personnel not authorized or qualified to use them. Class A assignments are:

- Approved by the CNO
- High visibility billet
- Essential to mission
- Assigned to a specific billet
- Continuous dispatch

Class B (Recurring Dispatch) - Generally, the requirements for recurring dispatch relate to activities and functions that by their nature require the use of a vehicle or vehicles on a daily recurring basis for the efficient and orderly conduct of official business. Vehicles assigned in this category shall not be assigned for purposes of convenience or to avoid the use of pool vehicles. Installation documentation for Class B dispatches shall contain specific rational for the vehicle and identify why scheduled bus, taxi systems, or Class C vehicles will not satisfy the requirement. Class B assignments are:

- Approved by the PWO
- Continuous dispatch
- Reviewed annually
- Assigned to an organization
- Daily Class “C” not adequate

Class C (Pool Vehicles) - All DoD motor vehicle resources not covered under Class A and B assignments shall be pooled for performance of services on an on call basis and to provide resources for operation of scheduled services. This portion of the motor pool resources is normally expected to handle the bulk of administrative vehicle requirements. Alternative fuel vehicles will be the first to be dispatched, still taking into consideration mission requirements and balancing fleet use. Class C assignments are:

- Installation motor pool (UDrive-it car)
- Daily dispatch
- Short term
- Optimum use of vehicle

Many PWD clients will desire Class B assignments to preclude the daily checkout procedures. Therefore, PWO should be aware of any abuse. A review of Class B assignments should be conducted annually.

Penalties for Misuse of DoD Motor Vehicles

Disciplinary Action - The unauthorized or willful misuse of a DoD motor vehicle shall be cause for disciplinary actions as follows:

- Civilian personnel - Any officer or employee of the government who willfully uses or authorizes the use of any U.S. government-owned or -leased passenger motor vehicle except for official purposes according to 31 United States Code (U.S.C.) 1344 (b) (Reference (d)), or otherwise violates section 1344, shall be suspended from duty without compensation for not less than 1 month by the Head of the DoD Component concerned. The officer or employee shall be suspended for a longer period or summarily removed from office if circumstances warrant according to 31 U.S.C. 1349b (Reference (e)).
- Military personnel - Military personnel who willfully use or authorize the use of any U.S. government-owned or -leased passenger motor vehicle except for official purposes as authorized or otherwise violate policy can be disciplined under provisions of the Uniform Code of Military Justice (Reference (f)), or other administrative procedures deemed appropriate.

Criminal Sanctions - Depending on the facts and circumstances, the criminal sanctions of 18 U.S.C. 641 (Reference (g)), may apply to the misuse of a government motor vehicle. The statute provides for a fine and imprisonment for up to 10 years or both.

Safety

5

All levels of command must implement and manage their Safety and Occupational Health (SOH) Program in accordance with the policies, procedures, and actions set forth in OPNAVINST 5100.23 (series), NAVFACINST 5100.11, and associated Business Management System (BMS) Safety Processes. This section provides general and supplemental guidance for NAVFAC mission-related safety policies and requirements. For specific NAVFAC guidance, refer to the NAVFAC portal process database, NAVFAC Business Management System (BMS) section F-12 or as denoted under a specific business line.

SECTION 5-1. SAFETY PROGRAM OVERVIEW

The purpose of the NAVFAC Safety and Health Program as it relates to Public Works Departments is to ensure the safety and health of all employees including contractors. Direction and control of the safety and health program must be through the chain of command, with line managers and supervisors being primarily responsible.

The diverse nature and complexity of the work performed by a Public Works Department requires that safety be the number one priority when executing work. The NAVFAC and Navy-wide goal is ZERO mishaps. Although this may seem like an overly aggressive goal, a vast majority of accidents are preventable through having the right personal protective equipment, training programs or safety policies in place and enforced.

NAVFAC's organizational structure supports the clear communication and standardization of the safety program. Safety awareness and accountability is the responsibility of every member of the NAVFAC workforce, and each member of the workforce is empowered to contribute to the safety and health of the Command.

A limited portion of your funding for safety is part of Base Operating Support (BOS) through Commander, Naval Installations Command (CNIC). The CNIC BOS Safety support services include Traffic Safety, Recreation and Off-duty Safety (RODS), and BOS-related Explosives Safety. The installation and regional safety programs shall actively involve all installation tenants in these safety programs.

- SOH support, where provided, includes management and coordination of region-wide programs, including but not limited to inspections, evaluations, surveys,

education, training, instructions, mishap prevention, mishap investigation and reporting, and other activities involved with the operation of the Navy and Marine Corps safety and occupational health programs. NAVFAC has a well defined and robust safety staff that is capable of providing these functions at most of the enterprise PWDs. Where geography or limited size dictate, PWDs may obtain some of all of these services from the installation SOH service provider.

- Traffic safety meets the traffic safety program requirements per OPNAVINST 5100.12 (series). Provides support for management and coordination of region-wide program, including but not limited to management inspections, evaluations, surveys, education, training, instructions, and mishap prevention.
- RODS - Meets the RODS program requirements per OPNAVINST 5100.25 (series). Provides support for management and coordination of region-wide program, including but not limited to management inspections, evaluations, surveys, education, training, instructions, and mishap prevention.
- Explosives safety meets the Navy's Explosives Safety program requirements per OPNAV Instruction 8020.14. Provides support for management and coordination of region-wide program, including but not limited to management inspections, evaluations, surveys, education, training, instructions, and mishap prevention.

SECTION 5-2. ROLES AND RESPONSIBILITIES OF KEY PERSONNEL

The safety and occupational health of Navy military and civilian personnel is an inherent responsibility of the command, thus direction and control of installation safety and occupational health programs must be through the chain of command, with line managers and supervisors being primarily responsible.

FEC Safety Office

All Safety Specialists, including those forward deployed at the PWDs, have additional FEC-wide duties as assigned by the Headquarters Safety Director.

The functions of the FEC Safety Core include prioritization of process development, community management, management of safety goals in Execution Plan, coordination of safety metrics, safety reporting requirements, and safety assessments.

Site Safety Managers (SSM) are the single safety point of contact at the Public Works Departments. The SSM is also responsible for FEC level Safety Program Manager duties (e.g. confined space, fall protection, ergonomics). A SSM may serve multiple PWDs, as needed. Figure 5-2-1 illustrates the FEC Safety staffing model.

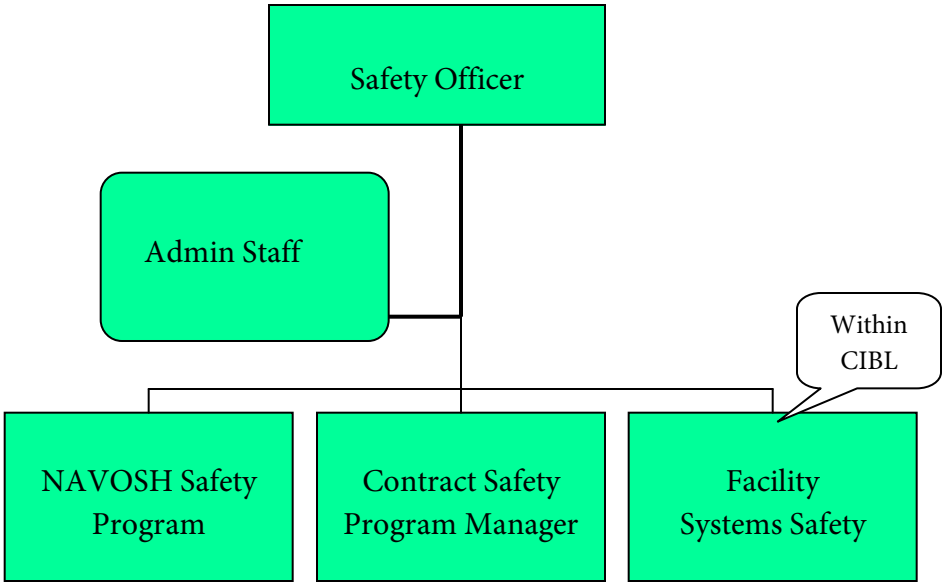

Figure 5-2-1. PWD Integrated Safety Model

The Site Safety Manager (SSM) manages the administrative aspects of the command safety program including recordkeeping, reporting, and dissemination of safety information for the PWD (see Figure 5-2-2) and acts as the onsite PWO touch point for all safety matters. The SSM does not replace key functions of the safety program (i.e., contract oversight personnel still have safety incorporated within their duties).

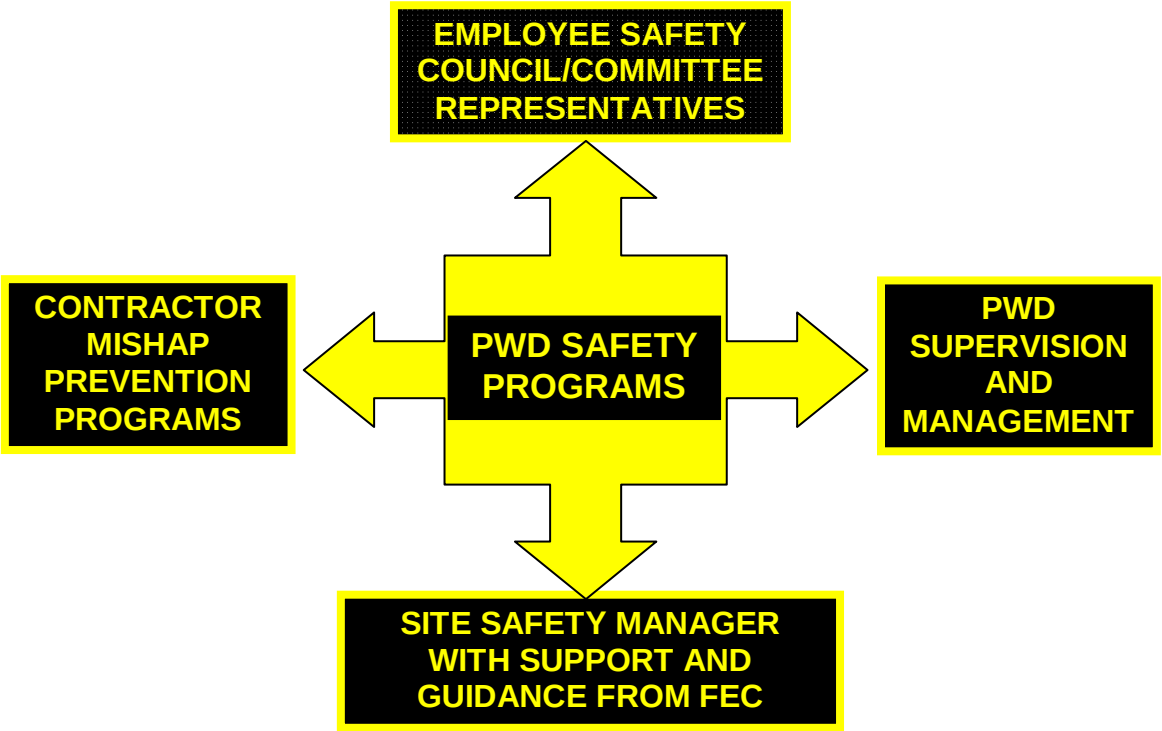

Figure 5-2-2. PWD Integrated Safety Model

Key responsibilities of the SSM include (expectations):

- Coordinates supervisor safety surveillance reporting.
- Receives guidance and occasional tasks from the ECH IV safety manager.
- May serve ECH IV as resource for specific program management activities (i.e. confined space program or respiratory protection program).
- Inspection and hazard abatement deficiency reports.
- Mishap investigation reporting - Enterprise Safety Application Management System (ESAMS) and Facility Accident and Incident Reporting (FAIR) database administrator.
- PWO's first responder for all in-house and contractor (Capital Improvements, Public Works Facilities Support Contracts and Environmental) mishap investigations (photos, witness names, interviews, etc.).
- Maintains PWD safety bulletin board.
- Standup safety meetings and attendance rosters.
- Coordinates Job Hazard Analysis and Worksite Assessment reports.
- Safety alert bulletins, safety newsletters, library, and other safety materials.
- Monitor of region safety support service where available.
- Schedule training and medical/physicals and maintains records.
- Manages the Mishap Review Board process with PWO.
- Provides routine reporting to Echelon IV Safety Office.
- Personal protection equipment procurement, issuance, and reimbursement.
- Coordination with Facility System Safety Program via Capital Improvements business line.
- Participates in the PWD leadership board meetings providing feedback on safety programs, trends, and topics.
- Resource for safety consultation.
- Manage employee reports on unsafe and unhealthful working conditions.
- Participates as liaison with Occupational Safety and Health Administration (OSHA) during inspections of contractor and PWD worksites.
- Coordination with Industrial Hygiene and the Bureau of Medicine and Surgery (BUMED).
- Coordinates PWD Employee-Driven Safety Committee meetings.

Public Works Officer (PWO)

The PWO shall support the Site Safety Manager by ensuring that all PWD employees and contractors adhere to Navy SOH program policies, procedures and actions. The PWO shall actively participate in all PWD and installation safety programs and ensure PWD supervisors facilitate safe work environments and practices throughout the Public Works Department.

Supervisors

Supervisors at all levels are responsible for ensuring personnel supervised:

- Are properly trained and have the necessary knowledge to perform their work the right way prior to commencing any new work activity. Specialized safety training such as respiratory protection, asbestos, hazardous materials, etc., is normally conducted by safety and occupational health professionals.
- Are provided the proper tools, equipment, and personal protective equipment, and that it is properly used and cared for.
- Follow written/oral directives including safety rules and standards.

And are personally responsible for:

- Identifying unsafe/unhealthful acts and conditions and take corrective action.
- Investigating mishaps to find causal factors and take corrective action to prevent recurrences.

Employee

Employees are responsible for following all safety and occupational health rules and instructions issued by the installation or their supervisor. They should:

- Report immediately to the supervisor any injury, illness, or property damage caused by a mishap.
- Report unsafe or unhealthful conditions to their supervisor or SSM.

Navy Contractors

Navy contractors are required to work safely in accordance with their company safety program which is legally required to comply with local, state or federal OSHA laws, rules and standards. Many Navy contracts have special safety requirements for high hazard or special hazards work. It is important that contractors not expose Navy employees to any hazards arising from contract work, such as noise, chemicals, fall hazards, asbestos, lead paint, fire, explosions, etc. NAVFAC has a six step process for assuring safety in the execution of contract work. This process includes integrating Safety in contractor selection, contract preparation, contract award, contractor orientation and contract employee training, contract execution management, and post-contract evaluation. Imbedding safety in each of these steps helps assure safety, higher quality, and more timely delivery of the next each successive step. Taking the time to accurately articulate the contractor's safety performance in the post-contract evaluation will help influence future contract awards.

USACE Safety and Health Requirements, EM-385-1-1 and UFGS 01 35 26 Governmental Safety Requirements must be specified and enforced on contracts for construction, demolition, repair, or renovation, including a comprehensive site specific safety plan. Before each task or work sequence, contractors are required to provide an Activity Hazard Analysis (aligned with ORM) outlining the plan to control specific hazards associated with that work task.

- Contractors are required to comply with OSHA standards at all times, and are subject to no notice inspections by OSHA representatives while on federal property.
- The Federal Acquisition Regulation (FAR) has a standard clause (FAR clause 52.236-13, *Accident Prevention*) which must be inserted in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount exceeds the simplified acquisition threshold. The clause requires contractors to also follow USACE Safety and Health Requirements Manual, EM-385.1-1. PWD/ROICC personnel are responsible for enforcing contract provisions including compliance with EM-385.1-1. PWD/ROICC personnel are responsible for enforcing contract provisions. Minimum training is required with assistance available from the FEC and SSM. If the contract involves work of a long duration or hazardous nature, the contracting officer shall use the clause with its Alternate I. Use FAR clause 52.223-3, *Hazardous Material Identification and Material Safety Data*, whenever hazardous material will be brought onto Navy property.

- Construction/renovation - UFGS 01 Governmental Safety Requirements must be specified and enforced for all contracts involving construction, demolition, repair, or renovation.
- Facilities services - NAVFAC activities that write or contract for facility services shall use the latest version of the NAVFAC Performance Work Statements (PWS) and incorporate Federal Acquisition Regulations (FAR), when appropriate.
- Weight handling equipment - For weight handling equipment, appropriate sections of NAVFAC P-307 dealing with contractors shall be incorporated into contracts and complied with for operation, maintenance, certification and accident reporting.

SECTION 5-3. SAFETY PROGRAM RESOURCES

The NAVFAC Safety Program is a dynamic program that strives to evolve through effective initiatives, frequent and candid communication, and a robust assortment of proven mishap prevention tools. To keep this as current as possible, the NAVFAC Safety Portal and supporting resources are continuously updated. Site Safety Managers and PWD leadership should utilize these on-line tools as a principle resource and communicate feedback through the chain of command to the NAVFAC Safety Program Manager.

NAVFAC Safety Portal

The NAVFAC Safety Program maintains a NAVFAC-wide public and private portal for providing employees, contractors, and the general public information regarding the NAVFAC Safety program. These sites contain current NAVFAC program policies, information, and additional resources for assisting with the implementation of the NAVFAC Safety program. Out-of-date or information not found on the web-page but believed to be of value to the enterprise, can be suggested for addition by contacting the NAVFAC Safety Program Manager.

<u>Lessons Learned</u>

The lessons learned library contains a series of documentation from mishaps involving work across NAVFAC, and are a valuable resource for communicating mishap prevention information.

Communication Plan

The NAVFAC Safety Communication plan, which outlines the elements of the NAVFAC Safety program and its foundation in the Operational Risk Management (ORM) framework, offers topics, information, and media suggestions for communicating the Safety program

Contract Safety

NAVFAC executes a predominance of its industrial products and services through contracts. This section provides checklists, directives and references to sources that can provide valuable information for maintaining a safe and mishap free contractor workplace.

Best Practices

A library of NAVFAC contractor and in-house safety best practices are provided for adoption and incorporation into local mishap prevention programs. These best practices provide a brief synopsis of business practices and processes that contractors and in-house work centers have found positively contribute to the safety culture of their organization.

This section also contains information regarding the submittal of a business processes or practices that you consider a "Best Practice" and would like to communicate across the enterprise. You are encouraged to contribute to this section of the NAVFAC Safety web-site and visit the section often to obtain diverse and dynamic ideas for your office.

Business Management System

The Safety Section of the Business Management System (F-12) lists the most significant business processes that govern NAVFAC's Safety program. These have been established and published by the NAVFAC Safety community. The Corrective Action Request (CAR) process has been an effective tool to help modify these processes to ensure they are applicable and effective across NAVFAC. You are encouraged to submit a CAR for any existing process or any process that you feel is absent from the existing inventory.

Enterprise Safety Application Management System (ESAMS)

ESAMS is a web-based safety management system that allows NAVFAC to standardize SOH mishap, training, medical monitoring, and facility deficiency data. ESAMS provides a secure, NMCI-compliant, web-based means to manage all of the Navy's SOH program requirements. The system provides leadership at all levels the ability to monitor safety

programs and performance. Additionally, ESAMS has the ability to link with other planning and work execution programs to provide safety training and job-specific preventative measures for our in-house civilian and military workforce. Those features will be leveraged as the utilization of ESAMS matures. Once fully implemented, ESAMS will decrease the effort required to conduct and record training, increasing efficiency by automating many of the SOH data calls and recurring reporting requirements.

Naval Safety Center

The Naval Safety Center's website (http://www.safetycenter.navy.mil/index.asp) contains an extensive library of safety technical resources including DoD, DoN, and OPNAVINST, program communication information, data and statistics, news, articles, podcasts, and other safety program services.

SECTION 5-4. NAVFAC AND PUBLIC WORKS DEPARTMENT SAFETY

To ensure compliance with SOH policies, PWDs shall follow NAVFAC safety programs and establish sufficient authority and responsibility of the Site Safety Manager, supervisors at all levels and with employees to manage and administer the safety program.

OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual and the NAVFAC Program affirm the Navy-wide Safety and Occupational Health Program for all Navy personnel and those business elements specific to NAVFAC. Required Navy Safety Program functional elements under the OPNAV instruction include:

- Occupational health
- Employee reports of unsafe and unhealthful working conditions
- Prevention and control of workplace hazards
- Training
- Safety and Health Occupational Health Inspection Program
- Hazard Abatement Program
- Fall Protection Program
- Mishap investigation, reporting, and recordkeeping
- Respiratory protection
- Asbestos control
- Hearing conservation and noise abatement
- Sight conservation

- Personal protective equipment
- Lead
- Non-ionizing radiation
- Ergonomics Program
- Energy Control Program (LOCKOUT/TAGOUT)
- Chemical, Biological, Radiological. Nuclear, Explosive (CBRNE) incidents
- Confined Space Entry (CSE) Program (non-maritime)
- Bloodborne pathogens
- Occupational reproductive hazards
- Indoor air quality management

For Operational Risk Management (ORM) implementation NAVFAC uses Standard Operating Procedures (SOPs) developed from job hazard analyses for in-house workers that identify the hazards or potential hazards associated with each step of a particular job/task, determine the severity of the hazard, attempt to establish a probability of accident occurrence, and attempt to eliminate hazards. Samples SOPs developed by Public Works Departments are available from the Naval Facilities Safety and Health Support Office or the ESAMS safety management tool. Sample SOPs provide guidance for a wide range of operations involving inspection, operation, repair, maintenance, and replacement of electrical, steam, and various other types of equipment. They may be modified to fit activities needs, thus saving time in developing them from scratch. They are organized to search alphabetically by type of operation are being refined in a consolidation effort to streamline the process called Safe Acts for Employees or SAFEs.

The NAVFAC Safety Through Awards and Recognition (STAR) program recognizes significant contributions to the NAVFAC safety culture. Each award recognizes individuals or groups that meet or exceed Command safety objectives.

SECTION 5-5. NAVY MISHAP PREVENTION AND HAZARD ABATEMENT

The Navy's Mishap Prevention and Hazard Abatement (MPHA) Program is a Navy wide program that is managed by NAVFAC to provide central funding where local installation funds are insufficient to abate identified hazards or mishap prevention initiatives.

Program support is available for services ranging from free ergonomic consultations and industrial process evaluations to projects valued up to one million dollars ($1M) with a minimum threshold for ergonomic projects being ten thousand dollars ($10K) and minimum threshold of fifty thousand dollars ($50K) for engineering-type projects. Examples of projects eligible for funding by the MPHA program include:

- Abating a hazard that is an OSHA violation
- Abating a hazard to protect people, not solely property
- Abating a hazard for a non-Navy Working Capital Fund (NWCF) installation
- Projects not resulting from or related to neglected maintenance or the avoidance of future maintenance
- Projects that do not include “ergonomic” office furniture

Upon identifying a project or initiative for MPHA funds, the next step is to contact one of the Hazard Abatement Program Managers (HAPM), who will ensure the project meets program criteria and will work to support your project submittal process. Upon acceptance of your project into the MPHA program, it will be annually evaluated against other projects and ranked according to its relative risk. Consequently, project funding depends on relative risk, number of exposed individuals and annual program budget, which typically averages eight million dollars ($8M) for engineered projects.

Additional information and response to frequently asked questions can be found under the Hazard Abatement heading at the NAVFAC Safety website, www.navfac.navy.mil/safety.

SECTION 5-6. MISHAP REPORTING, INVESTIGATION AND REVIEW BOARDS

All mishaps shall be investigated, reported and recorded IAW OPNAVINST 5102.1 (series), OPNAVINST 5100.23 series) and NAVFAC P-307. Indoctrinate all subordinates, especially new arrivals, to report all personal and property damage mishaps, no matter how perceptually small, as well as the "near misses" where only chance prevented a mishap.

Lesson learned documentation shall be created upon the conclusion of the mishap review board, and shall be provided through the technical chain of command to the NAVFAC Safety Program Manager for publication on the NAVFAC Safety web-site. This documentation should include a brief description of the details of the mishap, root and contributing causes, and necessary precautions that must or should be take by other individuals performing similar work in effort that they may avoid similar mishaps.

BMS F-12.12 processes provide additional guidance regarding mishap reporting, investigation and review boards.

SECTION 5-7. MEDICAL AND FIRST AID

Basic Requirements

The Occupational Safety and Health Administration (OSHA), 29 CFR 1910.151 and 29 CFR 1926.50, requires employers to ensure the ready availability of medical personnel for advice and consultation on matters of occupational health. BUMED maintains medical treatment facilities in many areas; these facilities meet the OSHA requirement. In such a facility is not reasonably accessible in terms of time and distance to the work site, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the work site to render first aid. For Navy personnel, the primary source of CPR training should be through the American Heart Association facilitator located at Navy

First aid or CPR training shall be provided to those personnel who require it due to the nature of their work and responsibility. OPNAVINST 5100.23 (series), paragraph 0602.f specifically requires training for emergency response teams, electrical power plant personnel, power distribution personnel, electrical and electronics personnel, personnel who work at remote sites, personnel whose jobs pose comparable risks to the above personnel, and supervisors of personnel in the categories above. Position descriptions for these positions should include the requirement for training and administering CPR as a condition of employment for Navy civilian personnel.

Provisions shall be made prior to commencement of any construction project for prompt medical attention in case of serious injury. Proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service, shall be provided. In areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances shall be conspicuously posted.

If it is reasonably anticipated employees will be exposed to blood or other potentially infectious materials while using first-aid supplies, employers should provide personal protective equipment (PPE). Appropriate PPE includes gloves, gowns, face shields, masks and eye protection. See the section on Bloodborne Pathogens.

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use. Work centers shall activate plumbed units weekly for a minimum of 3 minutes to flush the line and to verify proper operation. Activities shall service self-contained eyewash units quarterly or per the manufacturer's recommendations, whichever is more frequent. Activities shall not use personal eyewash (hand-held units) in locations that require eye wash units.

SECTION 5-8. EMERGENCY ACTION AND FIRE PROTECTION

Every building or structure designed for human occupancy shall be provided with enough exits to permit the prompt escape of occupants in case of fire or other emergency. Every exit shall be clearly visible or the route to reach it shall be conspicuously indicated so that any occupant who is physically and mentally capable will readily know the direction of escape from any point. Each path of escape, in its entirety, shall be so arranged or marked that the way to a place of safety outside is unmistakable. Any doorway or passageway that is not an exit or way to reach an exit, but which could be mistaken for an exit, shall be so arranged or marked as to minimize its possible confusion with an exit.

In every building or structure equipped for artificial illumination, adequate and reliable illumination shall be provided for all exit facilities. Required exits, paths of travel to the exit and paths of travel from the exit into the street or open space shall be kept clear at all times. Every automatic sprinkler system, fire detection and alarm system, exit lighting, fire door, and other item of equipment, where provided, shall be in proper operating condition at all times.

Emergency Action Plans

Emergency action plans are required by 29 CFR Part 1910.38. Emergency action plans must be in writing and include the following elements:

- Emergency escape procedures and emergency escape route assignments.
- Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.

- Procedures to account for all employees after emergency evacuation has been completed.
- Rescue and medical duties for those employees who are to perform them.
- The preferred means of reporting fires and other emergencies.
- Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.

The employer shall establish an employee alarm system which complies with 29 CFR 1910.165. If the employee alarm system is used for alerting fire brigade members, or for other purposes, a distinctive signal for each purpose shall be used. Before implementing the emergency action plan, a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees must be designated and trained. Review the plan with each employee covered by the plan at the following times:

- Initially when the plan is developed
- Whenever the employee's responsibilities or designated actions under the plan change
- Whenever the plan is changed.

Review with each employee upon initial assignment those parts of the plan that the employee must know to protect the employee in the event of an emergency. The written plan shall be kept at the workplace and made available for employee review

Fire Prevention Plans

Fire prevention plans are required by 29 CFR 1910.38. The fire prevention plan shall be in writing and include the following elements:

- A list of the major workplace fire hazards and their proper handling storage procedures, potential ignition sources (such as welding, smoking and others) and their control procedures, and the type of fire protection equipment or systems which can control a fire involving them.
- Names or regular job titles of those personnel responsible for maintenance of equipment and systems installed to prevent or control ignitions or fires.
- Names or regular job titles of those personnel responsible for control of fuel source hazards.

Apprise employees of the fire hazards of the materials and processes to which they are exposed. Control accumulations of flammable and combustible waste materials and residues so that they do not contribute to a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan.

Review with each employee upon initial assignment those parts of the fire prevention plan that the employee must know to protect the employee in the event of an emergency. The written plan shall be kept in the workplace and made available for employee review. Regularly and properly maintain, according to established procedures, equipment and systems installed on heat producing equipment to prevent accidental ignition of combustible materials. The maintenance procedures shall be included in the written fire prevention plan.

SECTION 5-9. INSPECTIONS BY FEDERAL OR STATE OSHA

Navy working environments, including PWD work centers, are subject to inspections by compliance officers from the Department of Labor's Occupational Safety and Health Administration or host nation public oversight and enforcement agency. OSHA compliance officers may inspect all Navy workplaces except military unique workplaces, workplaces staffed exclusively with military personnel. These same exceptions not exist in foreign countries, where the Status of Forces Agreement (SOFA) will likely govern safety and occupational health requirements, including oversight. With few exceptions, contractor operations at Navy activities are also subject to inspection. Navy shore activities shall grant permission for federal and State Occupational Safety and Health Administration (OSHA) officials to enter their installations without delay and at reasonable times to conduct inspections of Navy civilian or contractor workplaces. These inspections may be routine or based on reports of unsafe or unhealthful conditions, specific complaints, accidents or illnesses of employees, or part of a targeted inspection.

Federal and state safety and health officials shall present appropriate identifying credentials and shall state the purpose of the visit to the Navy shore installation commander or his/her authorized representative and to the administrative contracting officer (ACO) (if appropriate), before conducting an inspection of workplaces situated on a Navy shore installation. Appropriate security clearances are required prior to entering any restricted area.

Only federal OSHA officials may perform inspections in DoD contractor workplaces situated in areas where the United States holds exclusive federal jurisdiction. Installation commanders shall not provide DoD contractors with advance notice of OSH inspections by federal or state OSHA officials except:

- In cases of apparent imminent danger to Navy or contractor employees.
- When specifically requested by federal OSHA or state OSHA officials.

Representatives of the Navy shore installation commander should accompany federal OSHA and state OSHA officials on inspections and investigations, however oversight officials must check-in with a safety representative or site superintendent prior to entering any NAVFAC in-house or contractor worksite to ensure they are made aware of the potential hazards located throughout the site and to be provided with the required PPE. Federal OSHA officials may interview or be accompanied by civilian employees or employee representatives with appropriate clearances during their visit. For contractor workplaces, representatives of the contractor and contractor employees may accompany these officials where requisite security clearances are verified.

Federal OSHA or state OSHA officials shall have access to, and be provided with, copies of records and reports pertinent to specific Navy contractor accident investigations, upon request, unless prohibited from release by the Privacy Act or exempted from release under the Freedom of Information Act.

If federal OSHA officials issue reports or notices of unsafe or unhealthful working conditions discovered during their inspections, the commander of the inspected Navy installation shall forward a summary report with a copy of such notices immediately to CNO (N09F) and COMNAVSAFECEN (Code 41). The commanding officer shall provide information copies to the chain of command having management cognizance. The commanding officer shall treat deficiencies discovered during such inspections in the same manner as deficiencies noted during internal Navy inspections.

Navy shore installation commanders shall refer all information regarding citations and notices issued to Navy contractors for violations of OSHA, state OSHA or other state safety and health standards involving DoD furnished equipment, facilities or other property to the responsible Administrative Contracting Officer (ACO) for appropriate action. Shore installation commanders shall send a copy to Chief of Naval Operations (N09F).

DoD policy states that the contractor is responsible for resolving issues related to citations and initiating requests for delays in compliance with variations, tolerances, or exemptions from applicable OSH standards.

SECTION 5-10. SITE POLICIES AND PROGRAMS

Each PWD shall have in place the necessary policies and programs to comply with and administer the NAVFAC Safety program. These policies should be site adapted to be specific to the unique hazards, requirements, processes, conditions that are presented at each installation. These policies, while locally adapted, must retain overall compliance with overarching governing requirements. Many safety programs may be locally adapted, but they too much be in alignment and conformance with the Command specific requirements for the specific program. Below are lists of several programs that present conditions of exceptionally increased risk.

Hazard Signs

In accordance with 29 CFR 1910.145 and 29 CFR 1926.200 accident prevention signs and tags are intended to convey information concerning specific hazards to industrial workers or members of the public who may be exposed to the hazard. Signs and tags may provide warnings specific to the hazard, or they may provide safety instructions.

Danger signs shall be used only where an immediate hazard exists. Danger signs shall have red as the predominating color for the upper panel; black outline on the borders; and a white lower panel for additional sign wording. Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices. Caution signs shall have yellow as the predominating color; black upper panel and borders: yellow lettering of "caution" on the black panel; and the lower yellow panel for additional sign wording. Black lettering shall be used for additional wording.

- Safety instruction signs. Safety instruction signs, when used, shall be white with green upper panel with white letters to convey the principal message. Any additional wording on the sign shall be black letters on the white background.
- Directional signs. Directional signs, other than automotive traffic signs, shall be white with a black panel and a white directional symbol. Any additional wording on the sign shall be black letters on the white background.
- Traffic signs. Construction areas shall be posted with legible traffic signs at points of hazard. All traffic control signs or devices used for protection of construction workmen shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways.

- Accident prevention tags shall be used as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc. They shall not be used in place of, or as a substitute for, accident prevention signs.
- Tags used as part of the Energy Control Program (Lockout/Tagout) shall be singularly identified, shall not be used for other purposes, and shall be durable and standardized across the facility in terms of color, shape, size, print and format.

Personal Protection Equipment (PPE)

Once hazards are identified there are generally four corrective measures which may be taken. These measures, in order of priority in which they should be applied, are:

- Eliminate or minimize the hazard through substitution or engineering controls.
- Isolate the hazard from people.
- Provide training and supervise workers to work with the existing hazard
- Provide personal protective equipment.
- If a hazard cannot be eliminated then a combination of corrective measures including isolation, training and PPE is normally needed to provide adequate protection for personnel.

BMS Process F-12.17.5 identifies personal protective equipment requirements for NAVFAC employees.

Hazardous Material

The Navy has established a policy for life-cycle control of hazardous material (HM). Environment, safety and health considerations shall be included in all HM planning and acquisition. Activities shall limit the amount of HM and less hazardous materials shall be substituted whenever possible. Each installation is required to have:

- A written hazard communication program.
- A complete inventory of all hazardous material (HM) used in the workplace including quantity, stock number, common name, and disposal requirements.
- Material Safety Data Sheets (MSDS) for each HM.
- MSDS available during each shift to all employees.
- Procedures established to ensure all containers of HM are labeled with identity and appropriate hazard warnings.
- Establish procedures for informing contractor personnel of HM used at the command.

- A written HM training program.
- An authorized HM use list.
- Installations shall also implement the Hazardous Substances Management System (HSMS), including establishment of HAZMIN Centers to facilitate the central management of all HM at the installation.

Hazardous Waste Operations and Emergency Response

29 CFR 1910.120 addresses hazardous waste operations at hazardous waste sites. These include:

- Clean-up operations required by a governmental body, whether federal, state local or other involving hazardous substances that are conducted at uncontrolled hazardous waste sites (including, but not limited to, the EPA's National Priority Site List (NPL), state priority site lists, sites recommended for the EPA NPL, and initial investigations of government identified sites which are conducted before the presence or absence of hazardous substances has been ascertained.
- Corrective actions involving clean-up operations at sites covered by the Resource Conservation and Recovery Act of 1976 (RCRA).
- Voluntary clean-up operations at sites recognized by federal, state, local or other governmental bodies as uncontrolled hazardous waste sites.
- Operations involving hazardous waste that are conducted at treatment, storage, disposal (TSD) facilities regulated by 40 CFR Parts 264 and 265 pursuant to RCRA; or by agencies under agreement with USEPA. to implement RCRA regulations.
- Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard.

Employers shall develop and implement a written safety and health program for their employees involved in hazardous waste operations. The program shall be designed to identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations. An employer who retains contractor or sub-contractor services for work in hazardous waste operations shall inform those contractors, sub-contractors, or their representatives of the site emergency response procedures and any potential fire, explosion, health, safety or other hazards of the hazardous waste operation that have been identified by the employer's information program.

All employees working on site (such as but not limited to equipment operators, general laborers and others) exposed to hazardous substances, health hazards, or safety hazards and their supervisors and management responsible for the site shall receive training meeting the requirements of 29 CFR 1910.120 before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards. Employees shall not be permitted to participate in or supervise field activities until they have been trained to a level required by their job function and responsibility.

Employees who are engaged in responding to hazardous emergency situations at hazardous waste clean-up sites that may expose them to hazardous substances shall be trained in how to respond to such expected emergencies.

Lead

Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X) is Congressional direction to OSHA, EPA, and Housing and Urban Development (HUD) to issue regulations regarding lead based paint hazards. OSHA, 29 CFR 1926.62, Lead Exposure in Construction is the OSHA construction industry standard, which focuses on worker protection during construction, maintenance and repair work. EPA and HUD regulations primarily focus on family housing operations and protection of children from lead hazards.

General industry lead activities, such as radiation shielding, handling ballast, small arms ammunition, etc., are addressed in 29 CFR 1910.1025 and OPNAVINST 5100.23(series).

BMS Process F-12.24.1 provides Lead Program governing standards.

<u>Construction and Facilities</u>

All construction, alteration and repair activities where lead exposure may occur, such as demolition, removal/encapsulation of leaded materials, renovation of structures containing lead, installation of lead products, clean-up of lead contamination, or maintenance operations associated with the above are regulated by OSHA, 29 CFR 1926.62. UFGS 02 82 33.13 20 Removal/Control and Disposal of Paint with Lead must be specified for all contracts involving removal and disposal of lead-containing paint. UFGS-02 83 13.00 20 Lead in Construction is for the removal of materials or building components that contain lead.

In general, the Navy recommends managing lead paint in-place and performing preventive maintenance to keep painted surfaces from deterioration. Wholesale testing and removal of paint is not recommended.

Housing

Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X) required EPA and HUD to issue regulations that focus on housing. Navy policy follows the EPA regulations to disclose information regarding lead paint in housing when occupants move into housing units. Additional regulations require training by EPA accredited training providers or state licensing to perform lead-based paint (LBP) activities (abatement of hazards). Housing occupants are to be notified in advance of maintenance or repair work that disturbs more than 2 square feet of a painted surface.

Asbestos Control Program

Public Works Departments must use the policies outlined in OPNAVINST 5100.23 and 29 CFR 1910.1001 when developing their asbestos control program.

All shore facilities are required to locate, verify, document and prioritize asbestos containing materials (ACM) in facilities in accordance with OPNAVINST 5100.23 series and 29 CFR 1910.1001. Personnel working in areas where ACM is present must be notified and advised of applicable precautions Contract personnel must be informed of location of ACM in facilities.

Personnel shall assess identified facility asbestos hazards for appropriate corrective abatement actions. Assessment for appropriate action must be by EPA accredited personnel. Guidance for survey and material assessments is provided in OPNAVINST 5100.23. It will also be necessary to determine corrective actions of removal, enclosure or encapsulation for each hazardous location. Personnel developing plans and specs must be EPA accredited.

Until abated, ensure known/suspected asbestos materials are regularly inspected to minimize employee exposure until abatement actions are completed. Minimize damage or disturbance to asbestos materials to prevent further release of fibers. Development and Implementation of O&M Plans must be by EPA accredited personnel.

The following documents should be referenced when developing installation workplace practice plan:

- OPNAVINST 5100.23 series
- 40 CFR 61
- 29 CFR 1910.1001 and 29 CFR 1926.1101

UFGS 02 82 16.00 20 Engineering Control of Asbestos Containing Materials must be specified and enforced for all renovation and demolition work performed by contractors which may impact asbestos.

Electrical Safety

UFC 3-560-01 Electrical Safety, O&M; provides safety requirements and guidance for anyone working on or near electrical components rated at 50 volts or above.

- All activities must implement a Lock-Out/Tag-Out Program IAW29 CFR Part 1910.147 (Control of Hazardous Energy (Lock-Out/Tag-Out)) and OPNAVINST 5100.23 series.
- All construction site areas must have either assured equipment grounding conductor program or be protected with ground fault circuit interrupters (GFCI) (29 CFR 1926.404).
- Shops using automotive diagnostic equipment, shop lights, or electric hand tools must also be protected with GFCI.
- Use of flexible cords and cables is restricted to "temporary service" per National Electric Code (NFPA 70).
- The path to ground from all circuits and equipment must be permanent and continuous. All disconnecting means must be labeled unless device controlled is apparent.
- First aid and CPR training shall be provided to personnel identified by the installation safety manager (e.g., high voltage workers).
- Specifications and periodic testing requirements for electrical protective equipment (insulating gloves, blankets, matting, etc.) is provided in ASTM Volume 10.02, Electrical Protective Equipment.
- Working clearances shall be maintained in front of electrical equipment to not less than 30 inches.
- Work on energized equipment is prohibited.

Control of Hazardous Energy

29 CFR Part 1910.147, Control of Hazardous Energy is the OSHA standard that covers servicing and maintenance of machines and equipment in which the unexpected energization or startup of the machines or equipment, or release of stored energy could cause injury to employees. OPNAVINST 5100.23 series establishes Navy policy and minimum procedures for locking out or tagging out the sources of energy to equipment or systems under the requirements of 29 CFR 1910.147, and under the guidance of ANSI Z 244.1.

BMS Process F-12.27.1 provides NAVFAC Energy Program governing standards.

Welding and Cutting

All welding and cutting equipment shall be kept in working condition. Equipment shall be inspected to ensure proper working condition. If equipment is defective it shall be removed from service. Welding and cutting shall not be performed unless the atmosphere is nonflammable and combustibles can be separated from fire hazards.

Fire extinguishing equipment shall be maintained, ready for use, while welding and cutting are being performed. A trained fire watch is required whenever welding or cutting is performed in locations where a fire might develop.

Suitable, approved eye protection shall be worn by all personnel exposed to the hazards of the particular welding or cutting operation being performed. All eye protection, including filter lenses and plates shall meet the specifications prescribed in ANSI Z87.1. All welders and oxygen cutters shall wear protective gloves. Appropriate protective clothing shall be worn and selected on the basis of the size, nature, and location of the operation.

When welding or cutting in confined spaces:

- Gas cylinders and welding power sources shall be located outside the space.
- Means shall be provided for quick removal of the worker in case of an emergency.
- A worker, capable of putting a preplanned rescue procedure into effect, shall be stationed outside the space to observe the worker at all times.
- Adequate ventilation shall be used to prevent the accumulation of toxic materials or possible oxygen deficiency.

Potentially hazardous materials are employed or released during welding or cutting. These hazards include but are not limited to: cadmium, fluorine compounds, zinc, lead, beryllium, mercury, cleaning compounds, and stainless steel. The hazards and hazardous properties of these materials must be determined and controlled before welding or cutting operations commence. Local exhaust or general ventilation shall be provided and arranged to keep levels of toxic fumes, gases, or dusts below acceptable concentrations as prescribed by the threshold limit values of the American Conference of Governmental Hygienists, or the exposure limits established by OSHA.

Specific requirements for oxygen fuel gas welding and cutting are listed in 29 CFR Part 1910.253. Requirements for arc welding and cutting are described in 29 CFR Part 1910.254 and specific requirements for resistance welding are listed in 29 CFR Part 1910.255.

Fall Protection

Work performed on unprotected walking/working surfaces greater than 6 feet from a lower level requires use of fall protection systems. Handrails and guardrails are two forms of conventional fall protection. Whenever possible, engineer out potential hazards by using conventional forms of fall protection rather than personal fall restraint or arrest systems. Designs for new or renovated facilities should consider and eliminate potential fall hazards for operational, maintenance, and contractor personnel.

Fall protection systems consist of:

- Guardrails
- Full-body harness with a maximum six (6) ft. lanyard (personal fall arrest)
- Lifelines (vertical and horizontal)
- Safety nets
- Warning lines
- Safety monitoring systems

When employees are expected to move continuously on unprotected walking/working surfaces the work shall be evaluated by those doing the work and the supervisor to determine the type of fall arrest system (such as a horizontal lifeline for anchorage to allow movement). Where personal fall arrest is required, it must be fully utilized to ensure no exposure to a fall hazard is permitted.

BMS Process F-12.19.1 provides Fall Protection Program governing standards.

Scaffolds

Scaffold safety is primarily dependent upon proper erection and use of equipment. 29 CFR Part 1926.451 Scaffolds, 29 CFR Part 1910.28 Safety Requirements for Scaffolding, EM-385-1-1, and manufacturer manuals provide specific safety requirements for scaffolds. Scaffolding requirements discussed below cover equipment and operations typical of most operations. They are not all inclusive. Supplemental safety and precautionary measures may be required to cover unusual conditions.

- A "competent person" shall supervise the erection, dismantlement, or movement of any scaffolding.
- All personnel constructing or utilizing scaffolding shall be instructed in their proper and safe use.
- All equipment shall be inspected before each use. Damaged or weakened scaffold and equipment shall be repaired immediately or pulled from service.
- Scaffold legs shall be set on bases placed on mud sills or other foundations adequate to support the maximum intended load.
- Adjusting screw bases shall be used to compensate for any unevenness of ground or working surfaces. Unstable objects such as boxes, loose bricks or cinder blocks shall not be used. Adjusting screws may not extend more than 12 inches.
- Scaffolding and their components shall be able to support four times their intended load.
- Scaffolds shall be level, plumb, and rigidly braced at all times.
- Guardrails and toe boards shall be used on all open sides and ends of scaffoldings 10 feet or more in height. Wire mesh screening should be used between toe board and guard railings whenever persons are required to pass near scaffolding.
- Personnel on scaffolds exposed to overhead hazards shall be provided with overhead protection.
- Ladders or steps shall be provided to scaffold platforms. Scaffolding bracing shall not be utilized as a access means.

- Running scaffold shall be tied to and securely braced to the structure at intervals not to exceed 30 feet horizontally and 26 feet vertically.
- Work shall not be performed on scaffolding during high winds or storms.
- Scaffolds must not be placed in proximity of power lines or energized equipment unless special precautions are taken.
- All scaffold accessories shall be used and installed in accordance with manufacturer's recommended procedures. Scaffolding components from different manufacturers shall not be assembled together.

When utilized, standards for use of manually propelled mobile scaffolds and suspended powered scaffolds should be reviewed for specific safety requirements and standards. Both of these specific scaffolding systems have additional training requirements

BMS Process F-12.35.1 provides Scaffolding Program governing standards.

Trenching and Excavations

A competent person must supervise all excavation work and inspect sites at least daily prior to the start of work, throughout the shift, and after every hazard increasing event such as rain storms, earthquakes, etc. 29 CFR Part 1926.650 thru 1926.652 defines a "competent person" as one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. Prior to digging, the exact location of electric power, natural gas and water lines must be identified and marked.

Weather and climate can adversely affect conditions at job sites. Rain, melting snow, ground water, etc., can loosen soil and/or increase pressure on walls. Manmade hazards such as spoils (excavated materials), heavy equipment, timbers, etc., can exert great pressures on trench walls. Vibrations caused by moving machinery, vehicle traffic, etc., can loosen soil and cause walls to collapse.

Unless excavating in stable rock or digging less than five feet down and examination of the ground by a competent person provides no indication of a potential cave-in, a protective support system of (1) sloping or benching; or, (2) shoring and shielding must be employed. Shoring sheeting consists of tightly placed timber shores, bracing, trench jacks, etc., installed in a manner strong enough to resist the pressures surrounding the excavation. Shoring must be designed and approved by a registered professional engineer. Trench shields, which are prefabricated movable structures composed of steel plates

welded to a heavy steel frame may also be used. Plywood sheeting used to prevent sloughing at the trench face must be a minimum of 1-1/4 inches thick. Ladders must be located within 25 feet of any workers in trenches four feet deep or more. If ramps are used in lieu of ladders, the angle of egress must allow employees the ability to walk upright.

A hazardous atmosphere may develop in trenches and excavations. Poisonous gases and/or combustible gases can build up in confined spaces which can overcome workers, lead to danger of fire or explosion or result in oxygen deficient atmosphere. Potential locations where a hazardous or oxygen deficient atmosphere may exist include, but are not limited to, landfill areas, areas near underground fuel and gas tanks, and areas near natural gas, sewer lines, etc.

Excavated material and other objects must be at least two feet away from the edge of an excavation. Adequate barrier protection must be provided for trenches and excavations at the end of the shift. Special precautions must be provided for trenches and excavations in housing areas. Walkways or bridges with guardrails must be provided whenever employees are required to cross over trenches. Protective equipment such as hard hats, safety glasses and safety shoes should be required and worn by all personnel.

BMS Process F-12.37.1 provides Trenching and Excavations Program governing standards.

Confined Space Entry (CSE) Program

Confined space is a space that is not designed for routine occupancy but is large enough and so configured that an employee can enter to perform work, is poorly ventilated and/or has limited or restricted means of entry or exit, and contains potential and/or known hazards. At non-maritime facilities a confined space is either a permit required confined space (PRCS) or a non-permit required confined space.

Navy policy is that installations shall consider all confined spaces or poorly ventilated enclosed spaces hazardous and prohibit entry into or work on the boundaries of such spaces until the space has been evaluated and the appropriate safety precautions taken. When an installation has knowledge of a confined space, the host employer shall inform the contractor about the confined space including: classification of the space (e.g., permit required confined space); hazards within the space, employer's experience with the space and any precautions or procedures that the host employer had implemented for the protection of employees in or near the space.

Confined space and enclosed space hazards include:

- Atmospheric hazards: oxygen-deficiency, oxygen-enrichment, explosive gases and vapors, and toxic air contaminants.
- Physical hazards: moving mechanical equipment, energized electrical conductor, in-flowing fluids (caustics, acids, solvents), and heat/cold.

Due to liability, contractors shall be required to provide their own competent personnel to test confined spaces they work in. Contractors are required to comply with the applicable policies. EM 385-1-1, Safety and Health Requirements Manual and UFGS-01 35 26 must be specified in construction contracts and enforced for all work performed by construction contractors.

BMS Process F-12.29.1 provides Confined Space Entry (CSE) Program governing standards.

SECTION 5-11. MOTOR VEHICLE PROGRAMS

Policy and guidance for implementation of the Navy Traffic Safety Program is provided in OPNAVINST 5100.12 series and applies to:

- All Navy military personnel at all times (on and off Naval Stations)
- All Navy civilian personnel in a duty status (on and off a Naval Station)
- All persons in/on any Navy motor vehicle (on and off a Naval Station)

Due to the inherent danger involved in operating motor vehicles, motorcycles, construction equipment and weight handling equipment, the PWD shall actively enforce both general vehicle safety and Navy specific policies.

- Navy motor vehicles are required to pass a safety and exhaust emissions inspection annually in addition to the inspection requirement in DoD Regulation 4500.39.
- Seat belts must be worn by all personnel operating or riding in motor vehicles on Naval property (except busses not equipped with seat belts).
- Personnel shall not ride in cargo areas of vehicles unless the vehicle has been modified to include installation of seat belts.
- All traffic control devices or signs must in accordance with the applicable regulations and standards.
- No person shall drive or require another to drive a motor vehicle during any duty period unless that duty period was preceded by at least eight consecutive hours off duty or in accordance with federal regulations.

- Personnel shall not be required to drive for more than 10 hours or after having been on duty for 15 hours or after 8 hours if the vehicle is carrying explosives or other hazardous cargo. (NOTE: Fire, crash, and rescue personnel assigned 24 hour rotating shifts with sleeping accommodations are exempted.)
- Wearing portable headphones, earphones, etc., while operating a motor vehicle, while jogging, walking, and bicycling on Naval Station roads is prohibited.

Motor Vehicle Mishaps

Motor vehicle mishaps required to be investigated and reported under OPNAVINST 5102.1 include:

- Government motor vehicle mishaps when there is $2,000 in property damage, a fatality or lost time to DoD personnel, or a fatality or injury requiring treatment greater than first aid to a non-DoD personnel.
- Private motor vehicle mishaps which result in a fatality or lost time injury to military or non-duty DoD civilian personnel, or $2,000 damage to DoD property.

Motorcycle Safety

- All motorcycle operators must successfully complete training courses approved and/or conducted by the Naval Safety Center.
- Headlights shall be turned on at all times while operating motorcycles.
- Motorcycle operators/passengers must wear:
  - US DOT approved helmets
  - Eyeglasses, goggles or face shield attached to the helmet
  - Long sleeved shirt/jacket, long legged trousers and full finger leather gloves
  - Hart-soled shoes with heals
  - Yellow or orange vest with 1 1/2 to 2 inch wide reflective strips front or back

Commercial Driver's Licenses

NAVFAC P-300 provides guidance concerning the Commercial Driver's License Program (CDLP) established by the Commercial Motor Vehicle Act of 1986. The provisions of the Act apply both to interstate and intrastate drivers. Drivers of commercial vehicles must have a single driver's license; be tested for the knowledge and skills needed to drive a commercial motor vehicle; and be disqualified from driving a commercial motor vehicle if the driver commits certain criminal or traffic violations.

A commercial vehicle is defined as being a vehicle that: (1) Has a manufacturer's gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of 26,001 pounds or more, or has a GCWR, inclusive of a towed unit with a GVWR of more than 10,000 pounds; or (2) Is designed to carry 16 or more passengers, including the driver; or (3) Is of any size and used in the transportation of hazardous materials in a quantity requiring placarding by federal law or regulations. Personnel who operate a commercial motor vehicle on public highways must possess a state-issued Commercial Driver's License (CDL).

The following personnel are waived/exempted from the Act's requirements and are not required to obtain/possess a CDL: (1) Military personnel on active duty who operate equipment owned or operated by the Department of Defense in pursuit of military purposes. (2) All operators of fire fighting and other emergency equipment. (3) Operators of farming equipment.

Construction Equipment

NAVFAC P-300 addresses the management of Civil Engineering Support Equipment (CESE). CESE includes automotive vehicles, construction, railway, fire fighting, and mobile weight handling equipment. weight handling equipment such as portal, gantry, jib and other facility cranes normally fixed are not classified as CESE and are covered NAVFAC P-307.

All personnel who are or may be assigned to duties involving the operation of government furnished construction and railroad equipment shall be tested and licensed in accordance with the provisions of NAVFAC P-300 before being permitted to operate such equipment. Equipment listed above requires licensing under this program. Operators of weight handling equipment must be licensed in accordance with NAVFAC P-307. DoD contract personnel will not be issued a government license. NAVFAC P-300 requires persons licensed to operate construction or weight handling equipment to carry a Construction Equipment Operators License, NAVFAC Form 11260/2, as official evidence that the person named therein has been officially accepted as qualified to operate the types of equipment specified on the license. Such license is required to be on one’s person when operating specified equipment. The NAVFAC licensing requirement specifically applies to persons operating equipment with a gross vehicle weight greater than 10,000 pounds. Persons operating vehicles with a gross vehicle weight under 10,000 pounds must hold a valid state drivers license.

Construction equipment includes asphalt/water distributors, core drills, earth augers, crawler cranes, ditching machines, excavators, graders, loaders, rollers, scrapers, off-highway trucks, trailers, and tractors, crawler tractors, wheel tractors, sweepers, snowplows, refuse trucks, railroad cars, railway locomotives, truck-mounted cranes, crash cranes, hydraulic cranes, and railway cranes.

Weight Handling Equipment

NAVFAC P-307 provides requirements for the maintenance, inspection, test, certification, repair, alteration, operation, and/or use of weight handling equipment (WHE) and related equipment under the technical cognizance of the Naval Facilities Engineering Command (NAVFAC). Navy crane operations must comply with relevant portions of NAVFAC P-307, OPNAVINST 5100.23, 29 CFR 1926, Subpart N, and 29 CFR 1910, Subpart N.

Personnel involved in the maintenance, alteration, repair, inspection, testing, and operation of WHE, shall be technically competent to perform their assigned duties. Specific requirements for crane operator qualification, training requirements and licensing are addressed of NAVFAC P-307. Records of training or other verification of competency shall be maintained.

Ashore Navy weight handling equipment shall be operated, maintained, inspected, tested, repaired, altered and certified in accordance with NAVFAC P-307. Ashore Navy weight handling equipment consists of cranes (e.g. portal cranes, mobile cranes), rigging gear (e.g. slings, shackles), and associated equipment (e.g. chainfalls, dynamometers).

- Category 1 cranes: portal cranes, hammerhead cranes, locomotive cranes, derricks, floating cranes, tower cranes, container cranes, mobile cranes, aircraft crash cranes.
- Category 2 and 3 cranes: overhead traveling cranes, gantry cranes, wall cranes, jib cranes, pillar cranes, pillar jib cranes, monorails and associated hoists, fixed overhead hoists including chainfalls, and pedestal mounted commercial boom assemblies attached to stake trucks/trailers/flatbeds/ railcars/stationary mounted to piers (rated capacities less than 2,000 pounds).
- Category 4 cranes: commercial truck mounted cranes, truck mounted articulating boom cranes, and pedestal mounted commercial boom assemblies attached to stake trucks/trailers/flatbeds/railcars/stationary mounted to piers (rated capacities 2,000 pounds and greater).

Contractors that operate cranes aboard navy facilities must notify the contracting officer, in advance, of any cranes entering the installation. Contractors must comply with ASME B30.5 for mobile cranes and ASME B30.22 for articulating boom cranes. Contractors must provide a certificate of compliance that certifies that the crane and rigging gear meet applicable OSHA regulations. The contractor must also certify that all of its crane operators working on the Naval installation are qualified and trained for the operation of the crane to be used. These certifications must be posted on the crane. A critical lift plan is required for any lift over 80 percent of the capacity of the crane or hoist (at any radius of lift); any lift involving more than one crane or hoist; any lift of personnel; and any lift involving non-routine rigging or operation, sensitive equipment, or unusual safety risks.
Construction contracts shall specify that work performed by contractor owned and operated cranes on government property shall be in conformance with applicable OSHA Regulations; EM-385-1-1; and UFGS 01 35 26 pertaining to crane safety and operation (including allowable crane access routes and ground loading limitations); and the equipment manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work.

Construction contracts shall state that the contractor shall notify the contracting officer no less than 5 working days in advance of the intent to bring a contractor-operated crane onto government property, and that the contractor shall provide the following documentation:

- Certificate of compliance - Contractor cranes being operated on government property shall have a completed certificate of compliance posted in a conspicuous place on or in the cab of the crane/vehicle to which it pertains. The certificate of compliance shall state that the crane and rigging gear meet all applicable regulations contained in 9 CFR 1926 Subpart N (cranes, derricks, and hoists). The certificate of compliance shall remain posted on the crane while the crane is on government property.
- Crane Records - Cranes used by a contractor shall have in the cab of the crane all pertinent documentation, such as inspection records; crane manufacturer operating manual, including crane equipped operator aids; load rating chart; crane log book that records operating hours; and all crane inspections, tests, maintenance, and repair records.
- Crane Operator Qualification Documentation - The contractor shall certify that contractor personnel operating cranes on government property are qualified and trained to operate the crane to be used, are qualified to perform the assigned work, and have passed a practical operating examination for the specific type of crane being operated. The contractor shall also certify that all of its crane operators have been trained not to bypass safety devices (e.g., anti-twoblock devices) during lifting operations.

A critical lift plan shall be prepared by the construction contractor if a critical lift is scheduled. Critical lifts are defined in EM-385-1-1 (Safety and Health Requirements Manual). Critical lift plans shall be developed, reviewed, and signed by all personnel involved.

BMS Process F-12.33 provides guidance on Weight Handling Equipment (WHE).

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Environmental Division

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The Environmental Division's mission is to execute the Navy's Environmental Readiness Program at the shore installation level, supporting the ability of the United States Navy forces to effectively operate worldwide in an environmentally responsible manner.

SECTION 6-1. ENVIRONMENTAL DIVISION

The mission of the Navy's Environmental Readiness Program is to ensure the ability of United States Navy forces to effectively operate world-wide in an environmentally responsible manner, both ashore and afloat. The Navy is committed to operating in a manner compatible with the environment. The Environmental Division executes a wide variety of environmental compliance programs ashore, ensuring the installation maintains operational readiness and compliance with applicable environmental laws and regulations.

OPNAVINST 5090.1C is the Environmental Readiness Program Manual for the Navy. It provides detailed requirements, delineates responsibilities and issues policy for the management of the environmental, natural and cultural resources for all the Navy ships and shore facilities. It is a key resource for information on environmental issues.

The PWD Environmental Division is led by the Environmental Division Director and includes three branches: environmental services, environmental compliance, and environmental planning and conservation. In practice, the Environmental Division is scalable so that the three branches may be collapsed into one or two branches depending on workload, staffing, and operational tempo of the individual installation and PWD.

Environmental Compliance Branch

The Environmental Compliance Branch manages and executes environmental programs that ensure compliance with applicable environmental regulations at the installation. The Navy is required by law to comply with all applicable environmental regulations, including installation-specific permit requirements. Failure to do so can lead to Notice of Violations (NOVs), fines and penalties (paid from the Command's operating funds) and/or civil lawsuit or criminal penalties.

Environmental compliance is required and it's the right thing to do. Failure to comply with environmental regulations can cause loss of mission accomplishment, critical delays in proposed projects, and less tangible impacts such as loss of public trust and credibility by the Navy. In the U.S., the Environmental Compliance Branch program areas typically include, but are not limited to:

- Clean air
- Clean water
- Drinking water
- Oil and Hazardous Substance Spill Preparedness and Response
- Hazardous Waste (HW)
- Solid waste and recycling
- Storage tanks
- Polychlorinated Biphenyl (PCB) management
- Pest management

The Compliance Branch will play a role in other environmental programs such as Installation Restoration (IR) as needed.

The Compliance Branch performs the following functions with respect to the various environmental compliance program areas:

- Develops installation-level environmental policies.
- Prepares permits and/or permit applications.
- Negotiates permits and other issues with local, state, and federal regulators.
- Provides technical consultation to and collaborates with Utilities, Transportation, Capital Improvements, the FEAD and other NAVFAC organizations regarding installation environmental requirements.
- Collects and maintains data required for permits and reporting.
- Prepares compliance reports.
- Reviews compliance related documents.
- Conducts annual Environmental Management System (EMS)/Environmental quality assessment (EQA) self-audits.

In the United States, the clean air, clean water, hazardous waste, etc., program areas typically fall under the Environmental Compliance Branch. Key federal legislation and highlights of compliance requirements are provided for each program area. **It is important to recognize that many state and local regulations exist and are applicable to Navy installations. In addition, federal compliance programs may be enforced by state regulators and may include state requirements that are more stringent than minimum federal requirements.** The Environmental Compliance Branch is responsible for identifying the specific regulatory requirements applicable at the installation from all sources: federal, state, and local.

Environmental Services Branch

The Environmental Services Branch provides environmental protection services, including hazardous waste management, lab sampling and testing, industrial waste treatment, bulk oil handling, bilge water treatment, oil and hazardous substance spill cleanup, treatment and recycling of biosolids, and other environmental functions. Environmental services are a navy working capital Fund function of the PWD, which may be provided in-house or by contract support as appropriate. The following environmental services are provided by the Environmental Services Branch at a typical Navy installation:

- Identification, collection, and disposal of hazardous waste.
- Oversight for spill control, response and clean up on the base and any ranges associated with the base. This includes training and practice drills.
- Collection and treatment of waste water and industrial waste water.
- Cleaning and maintenance of oil water separators and storm drains.
- Laboratory sampling and/ or testing of water, air, wastes or unknown materials coming from the base.
- Pest management.

Proper execution of the services listed above is necessary to achieve and maintain compliance with many of the environmental regulations cited in the following sections, and will prevent regulatory violations, fines, and penalties. In addition, data required for certain permits, regulatory reports, and administrative reports are generated by the Environmental Services Branch.

Environmental Planning and Conservation Branch

The Environmental Planning and Conservation Branch ensures that environmental planning is conducted for decision makers and plans and executes environmental programs for management of natural and cultural resources. Appropriate environmental planning and natural and cultural resource management is mandated by federal law. There are three key program areas within the Environmental Planning and Conservation Branch:

- Environmental Planning
- Natural Resource Management
- Cultural Resource Management

SECTION 6-2. ROLES AND RESPONSIBILITIES OF KEY PERSONNEL

In coordination with CNIC, NAVFAC established and implemented an integrated ashore environmental compliance program. To improve effectiveness and efficiency, CNIC Region and Installation environmental personnel were functionally transferred to NAVFAC on October 1, 2007. The combined strengths of CNIC and NAVFAC are a highly responsive, consistent, but flexible system of environmental resource management that enables the Navy to improve environmental stewardship and compliance. Leveraging the combined expertise and assets from both organizations enables standardized business processes and increases effectiveness and efficiency. This alignment is consistent with the CNO's guidance to all Navy commands to improve organizational alignment and become more effective.

Each Region and Installation Environmental Director/Manager is a NAVFAC employee acting in a double-hatted capacity and reporting to the Regional Engineer N4 or Installation PWO. This enables CNIC to take full advantage of NAVFAC technical expertise, contracting authority and process standardization without relinquishing operational control of shore environmental functions and responsibilities. Additionally, the Regional Environmental Coordinator (REC)/Overseas Lead Environmental Component Ashore support, Navy On-scene Coordinator (NOSC) support, and fleet environmental operations support are part of NAVFAC at all Regions, except Southwest, and Northwest. Figure 6-2-1 depicts an installation environmental organization chart.

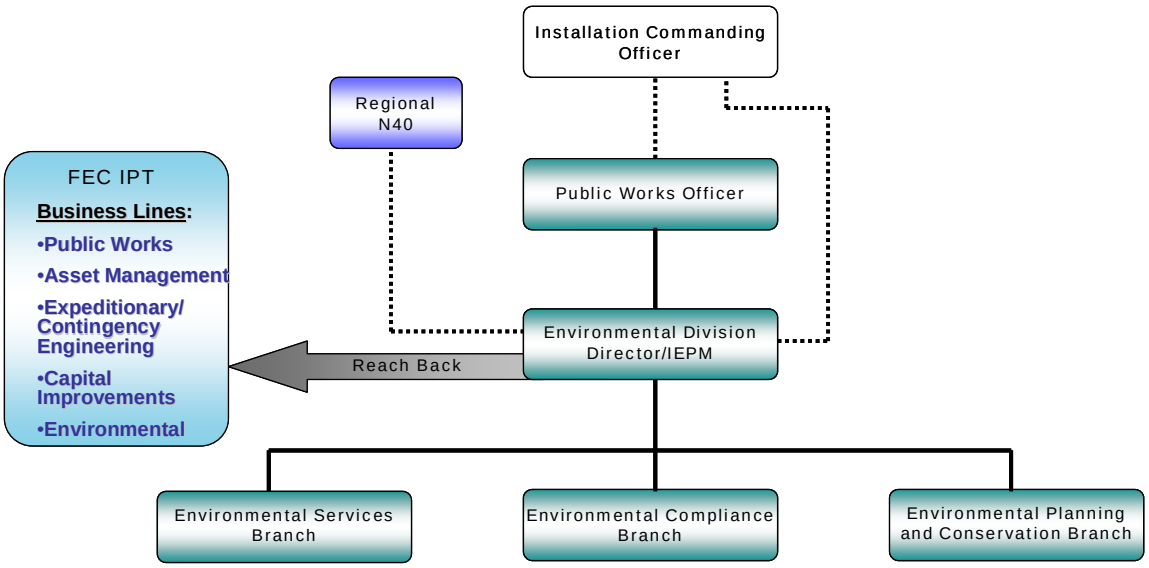

Figure 6-2-1. Installation Environmental Organization

The Installation Commanding Officer has overall responsibility for environmental readiness at his/her installation. This includes all aspects of environmental compliance and planning as well as stewardship of natural and cultural resources.

The Public Works Officer is accountable for shore installation environmental program management, including:

- Environmental compliance and stewardship, which can cover either a single installation or group of installations, including ranges and Reserve Centers. This extends beyond the PWD to include mission support.
- Maintaining permits, and monitoring performance through metrics (e.g. Environmental Management Systems (EMS) implementation).
- Communicating all environmental issues, both the good news and bad news, especially potential Notices of Violation (NOV), to the Installation Commanding Officer, the FEC Commanding Officer, OPS, and the Environmental Business Line Coordinator/N45.
- Assuring the quality and timeliness of environmental data, reports, planning documents, etc., prepared on behalf of the installation Commanding Officer, many of which will be reported to upper echelons in the chain of command and possibly the public.
- Obtaining required environmental training through CECOS per OPNAVINST 5090.1C Appendix P.

The Environmental Division Director reports directly to the PWO and is responsible for the effective and efficient operation of the three branches of the Environmental Division. The Environmental Division Director is also the Installation Environmental Program Manager (IEPM).

The Installation Environmental Program Manager is the N45 at the installation and the onsite environmental program management presence. At the installation level the IEPM is responsible for:

- Serving as the principal advisor to the Commanding Officer on environmental compliance oversight, conservation management, and pollution prevention for all activities on the installation.
- Serving as liaison with the Region N40 with respect to operational requirements, executing appropriate requirements at the installation level, and ensuring coordination with installation environmental programs as necessary.
- Managing installation level day-to-day environmental compliance, conservation management, and pollution prevention.
- Managing installation aspects of environmental plans and permits, conducting inspections, and performing routine minor updates to environmental plans.
- Developing local environmental processes and instructions, consistent with DoD, Navy, and CNIC instructions and guidance.
- Overseeing mission, tenant, and service provider operations at the installation level to ensure compliance with federal, state, and local environmental laws and regulations (and overseas standards for overseas installations).
- Serving as the Planning, Programming, Budget, and Execution System (PPBES) interface with the N45/BLC for installation environmental program requirements. This includes coordination, identification, and submission of environmental program requirements and management of environmental funding.
- Supporting the shore installation Commanding Officer as the interface with federal, state, and local regulators and local community on compliance related issues at the installation level.
- Reviewing environmental deliverables for quality, completeness, and technical accuracy.
- Maintaining an EMS that continually improves environmental quality consistent with regional and local objectives and targets.
- Coordinating delivery of environmental products and services at the installation level in conjunction with the N45/BLC.

The FEC Integrated Product Team supports execution of environmental requirements beyond the capacity or capability of an installation. As needed, the IEPM will "reach-back" to the FEC IPT. When required, the FEC IPT will reach-back to NAVFAC PAC or NAVFAC LANT, ensuring that the requirements are met via in-house staff, Naval Facilities Engineering Service Center (NFESC), other government agency, or contract.

Regional Commanders are Echelon III commanders reporting to CNIC and the Fleets, and are the focal point for all shore services, Fleet support, and delegated mission environmental programs in the region. Regional Commanders serve as Navy Regional Environmental Coordinators (NRECs) and where so designated, DoD Regional Environmental Coordinators. They also serve as the Navy On-Scene Coordinator (NOSC), and perform a variety of roles and responsibilities related to management of the Navy's environmental program. Among these roles and responsibilities are coordination of public affairs for environmental matters; ensuring consistent positions, agreements, permit conditions, and responses to regulatory agencies; serving as primary interface with regional federal and state regulatory agencies; coordinating the exchange of environmental information; monitor environmental compliance, and developing regional plans of action for environmental initiatives.

The Regional Engineer (N4), as the Regional Facilities and Environmental Program Director, provides environmental program management at the Regional level for shore installations. The N4 is typically the Commanding Officer (CO) of the NAVFAC Facilities Engineering Command (FEC) that is geographically aligned with the supported Navy Region. See Figure 6-2-2.

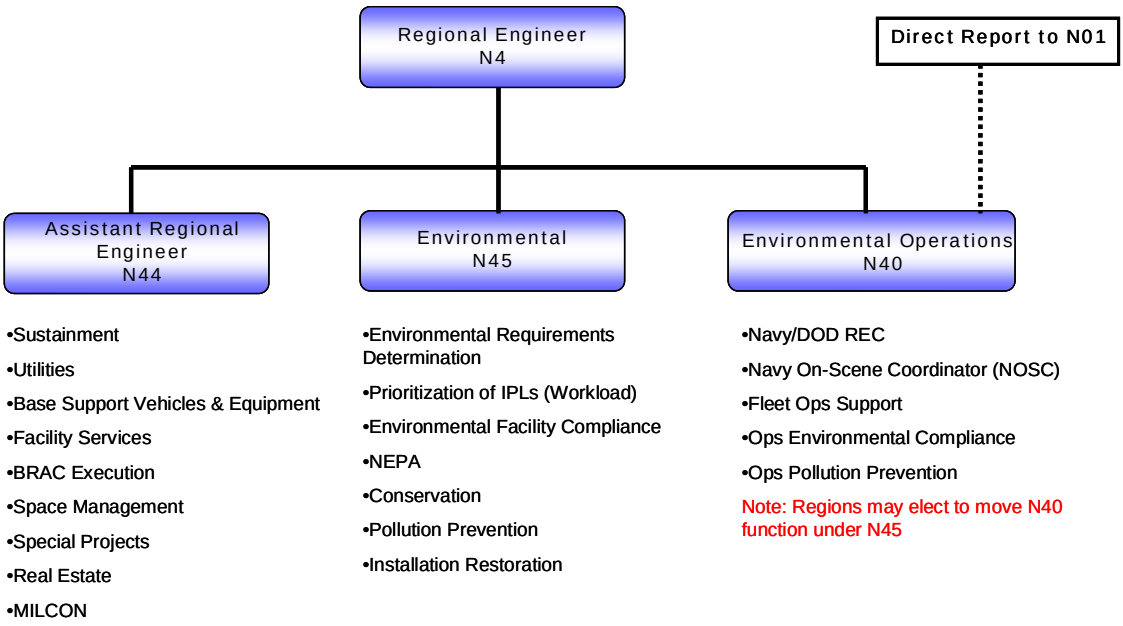

Figure 6-2-2. Reporting Relationships for Regional Support

N45/BLC Environmental Program Manager has both NAVFAC and CNIC responsibilities. As the Environmental Program Manager the N45/BLC is responsible for the day to day management of the Region's shore installation environmental program, including planning, programming, and budgeting; requirements generation; environmental assessments; compliance oversight and conservation and pollution prevention program execution.

N40 Fleet Environmental Coordinator/Deputy Regional Environmental Coordinator (DREC) directly supports the Regional Commander in his roles and responsibilities as the NREC, DOD REC (where applicable), and NOSC, and in providing Fleet operational support. REC and NOSC assignments are established by the Fleets as Area Regional Coordinators. Support for N40 functional requirements may be accomplished through assets available within the N45 function where appropriate.

Note: On a regional basis, the Regional Commander may designate the N4 to perform both the N45 and N40 responsibilities.

SECTION 6-3. ENVIRONMENTAL MANAGEMENT SYSTEMS, PERMITTING AND NOTICES OF VIOLATIONS

Environmental Management Systems

An Environmental Management System (EMS) is a formal management framework that provides a systematic way to maintain compliance, review and improve operations, create awareness, and improve environmental performance. It integrates environmental considerations into day-to-day activities across all levels and functions of Navy enterprise. Executive Order 13423 *Strengthening Federal Environmental, Energy, and Transportation Management,* 24 January 2007 requires an EMS for most Navy shore installations within and outside the United States, its territories and possessions. CNO-N45 maintains the full list of Navy EMS facilities. Full conformance is required by 30 September 2009.

Systematic environmental management as an integral part of day-to-day decision making and long-term planning processes is an important step in supporting mission readiness and effective use of our resources. **The most significant resource for every organization is their senior leadership's commitment and visibility in EMS implementation and sustainability. A robust EMS is essential to sustaining compliance, reducing pollution and minimizing risk to mission.**

A Navy EMS conforms to the International Organization for Standardization (ISO) 14001:2004 Environmental Management System Standard. Major elements of an EMS are depicted in Figure 6-3-1.

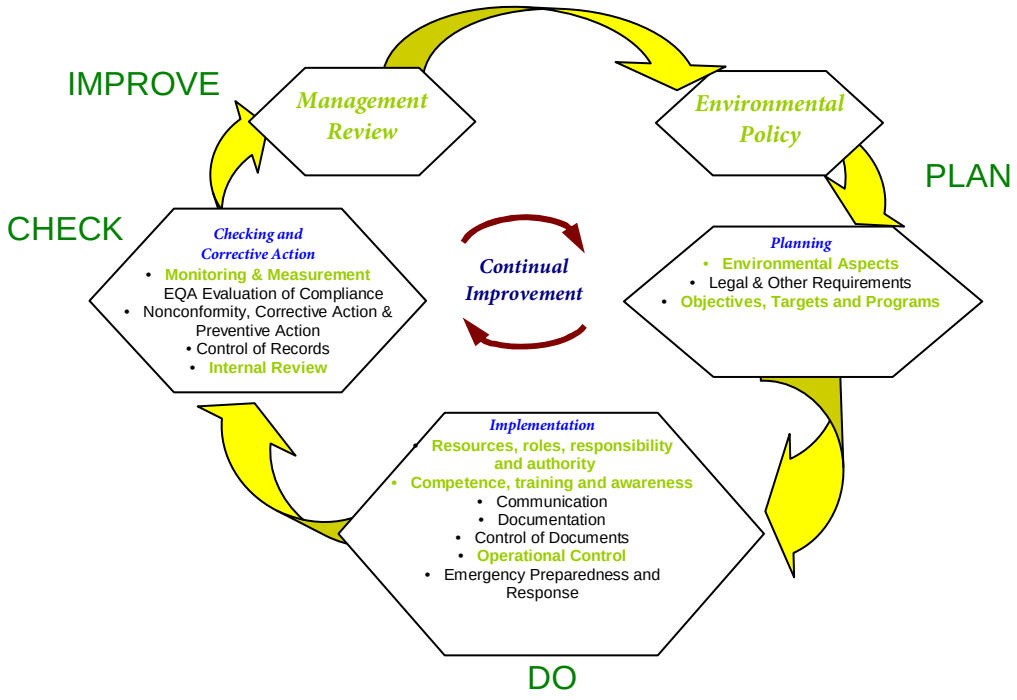

Figure 6-3-1. EMS Components and Elements

An installation's EMS incorporates virtually all functional areas of the PWD Environmental Division. The Navy's Environmental Quality Assessment (EQA) Program is an integral part of an EMS. It requires annual self evaluations and external NAVFAC audits every three years.

Installation Commanding Officers designate an EMS Management Representative to establish, implement, and maintain the EMS and report to senior management. The IEPM and PWO are potential EMS Management Representatives, as are more senior personnel in the installation's chain of command. Sometimes this function may originate at the Regional level.

For further details on Navy-specific EMS requirements, refer to OPNAVINST 5090.1C, Chapter 3.

Permits

Permits are part of the regulatory regime applicable to Navy installations. They typically define allowable limits for air or water pollutants, criteria for hazardous waste management, or other regulatory parameters, and have the force of law. They may be held by the shore installation Commanding Officer as the property "owner" or, where appropriate, the Regional Commander. Operators of regulated activities or processes

(tenant commands, the FEC, etc) may also be listed as the permit holders where allowed by the regulatory agency and where a legal, operational support, and cost analysis determines such a listing to be beneficial to installation or regional environmental program management.

The N4 and N45/BLC support the Regional Commander and shore installation Commanding Officers by informing them of all relevant permitting actions, coordinating the processing or renewal of permits, ensuring consistency of terms and conditions in permits, notifying him of any permit violations or NOVs, and interfacing with regulatory officials to resolve permit terms, conditions, or NOVs.

Typical permits associated with Navy installations include, but are not limited to:

- Air construction and 0perating permits,
- National Pollutant Discharge Elimination System (NPDES) permits
- Stormwater permits
- Resource Conservation and Recovery Act (RCRA) Part B permits
- Dredge and fill permits

Permit requirements may affect installation operations and vice versa. When changes to installation operations are anticipated, affected permits (if any) must be reviewed for any potential conflicts.

Notices of Violation (NOVs)

An NOV is a formal, written notification by the Environmental Protection Agency (EPA) or other federal, state, inter-state, regional or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement, to include permit violations. It should cite the relevant standard or criteria to be met and request the installation take corrective action.

Significant Non-Compliance (SNC) is an EPA term that describing facilities that have a violation of significant magnitude and/or duration warranting priority for review and/or response by an agency. Currently, EPA only tracks federal facilities that are identified as "major" under RCRA, the Clean Water Act (CWA), and the Clean Air Act (CAA). The definition of "major" and "significant non-compliance" varies by media. The clean air program uses the term High Priority Violation (HPV) instead of SNC.

Upon receipt of an NOV or SNC, the responsible Commanding Officer or his representative must inform CNO-N45, the chain of command, the Navy REC, Naval Facilities Engineering Service Center (NFESC), CA and the FEC and immediately via an initial message, conforming to a specific format. Additional quarterly reporting requirements also apply until the NOV or SNC is resolved. For complete information on reporting NOVs see 5090.1C Appendix B.

The Emergency Management System and/or other processes must be in place and operating effectively to prevent NOVs and SNCs. If an NOV/SNC does occur, appropriate PWD or Installation personnel (including legal counsel) will be engaged to address the issues leading to the violation and stay engaged until the NOV/SNC is resolved. The Environmental Division will continuously monitor the status of the NOV/SNC to ensure initial and subsequent reporting occurs in a timely manner.

SECTION 6-4. COMPLIANCE

Clean Air

The Clean Air Act Amendments of 1990 is the principal legislation governing clean air programs at installations.

If an installation is determined to be a major stationary source based on EPA's definitions, the installation will have a Title V Operating permit. This is a comprehensive permit that includes all stationary sources under one permit. There are at a minimum reporting requirements, possible annual testing on certain sources, and permit fees.

This permit requires specific record keeping on materials used on the installation, fuels dispensed and consumed by combustion sources, and operating hours. In addition to periodic reporting requirements to the regulatory agency, compliance certification statements must also be submitted.

If the installation is not a major source and does not have a Title V operating permit, it may have several single source permits. These typically require annual reporting and possible testing requirements. For these installations, new construction of additional emission sources may cause the base to exceed applicable major stationary source emission thresholds and become a Title V source, requiring a Title V permit.

If a new emission source or modification to an existing emission source is planned, (e.g., a boiler, a paint booth, portable generators, wood working facilities, industrial processes) a new source review permit as well as modification to the existing Title V permit may be required. The permit process can take several months but must be complete before construction begins.

The Clean Air Act has numerous other requirements including the General Conformity Rule that applies only to federal Agencies located in areas that do not meet the National Ambient Air Quality Standards. The Environmental Compliance Branch will know which CAA provisions apply. The CAA also regulates the use and handling of Ozone Depleting Substances, including those used in air conditioning and refrigeration units on a base. Regulations for handling and disposal of asbestos-containing materials are also found in the CAA. All asbestos abatement projects require notification to the local regulator.

For further details on Navy-specific clean air requirements, refer to OPNAVINST 5090.1C, Chapter 7.

Clean Water

The Federal Water Pollution Act, also known as the CWA is the principal legislation governing surface water quality at Navy installations.

Key clean water requirements at Navy installations include:

- NPDES permits for discharges into waters of the U.S. from a point source and pretreatment requirements. Installations that have a waste water treatment plant will have an NPDES permit. Many installations will have an NPDES permit for storm water collection systems as well.
- Dredge and Fill permits, from the Army Corps of Engineers, under Section 404 of the CWA for maintenance dredging of docks and piers and disturbance of any wetlands in a construction project.
- Storm water permits and management plans for construction projects that disturb 1 acre or more. Note that SECNAV policy requires the use of Low Impact Development designs as a means of reducing storm water discharge volumes and controlling pollutants as a source.

For further details on Navy-specific clean water requirements, refer to OPNAVINST 5090.1C, Chapter 9.

Drinking Water

The Safe Drinking Water Act (SDWA) is the key federal legislation governing drinking water requirements.

Most Navy installations get their water from local water authorities and must obtain an annual report on water quality. Those installations providing their own drinking water must monitor and meet primary or secondary water standards (Secondary is Navy policy). **Regardless of the source, if water standards are exceeded, a notice must go out to all residents on the base.**

Regardless of the source of the drinking water, all Navy installations have distribution systems that require various monitoring and sampling protocols as well as cross-connection control and backflow prevention programs. In addition all Navy drinking water systems serving more than 25 consumers must complete and periodically review and update Water System Vulnerability Assessments and Emergency Response Plans.

For further details on Navy-specific drinking water requirements, refer to OPNAVINST 5090.1C, Chapter 10.

Oil and Hazardous Substance Spill Preparedness and Response

The Oil Pollution Control Act (OPA) of 1990, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Emergency Planning and Community Right-to-Know Act, (EPCRA) comprise the principal federal legislation governing oil and hazardous substance spill preparedness and response requirements.

The OPA requires every installation to have a Spill Prevention, Control and Countermeasure (SPCC) Plan signed by a professional engineer. These plans detail how the installation will minimize spills from equipment and processes, clean up procedures, roles and responsibilities of personnel and training requirements. These plans must be updated on a regular basis. Actual spills are reported to the National Response Center (NRC) at US Coast Guard Headquarters in Washington, DC.

Under CERCLA, the federal government can compel clean up of Hazardous Substance releases, with responsible parties liable for the clean up costs. It also requires installations to report the release of any of more than 700 listed hazardous substances to the NRC.

EPCRA (by Executive Order) requires installations to report hazardous and toxic chemical releases to the public as well as data regarding chemicals used or stored at the installation to state and/or local authorities.

For further details on Navy-specific oil and hazardous substance spill prevention and response requirements, refer to OPNAVINST 5090.1C, Chapter 12.

Hazardous Waste (HW) Management

Resource Conservation and Recovery Act (RCRA) Part C is the key federal legislation governing hazardous waste management.

Installations are required to manage hazardous waste from "cradle to grave". Any installation that generates, transports, treats, stores, or disposes of hazardous waste or produces or burns hazardous waste-derived fuels must notify the EPA of their activities and obtain an EPA or state hazardous waste generator ID number and must comply with all applicable hazardous waste regulations. Installations are classified as large or small quantity generators depending on the amount of hazardous waste generated allowing hazardous waste storage for 90 or 180 days, respectively. Some large installations may have RCRA Part B permits allowing storage for up to one year.

Normally, hazardous waste is collected at satellite accumulation points near the point of generation, with strict limits on quantities. When a container at the satellite accumulation point is filled, it is moved to a 90-day or 180-day storage site. Generators are obligated to send their waste to Treatment, Storage, and Disposal (TSD) facilities that comply with RCRA regulations. Hazardous waste must be properly identified and a manifest must accompany it from the generator's facility to its ultimate disposal. The Environmental Services Branch is responsible for identification, collection and disposal functions; the Compliance Branch ensures regulatory requirements are met. There are significant record keeping and reporting requirements associated with hazardous waste management, including documentation of personnel training. For details on Navy-specific hazardous waste management requirements, refer to OPNAVINST 5090.1C, Chapter 15.

Solid Waste Management and Recycling

Resource Conservation and Recovery Act (RCRA) Part D is the governing federal legislation for solid waste management and recycling. 32 Code of Federal Regulations (CFR) Part 172 authorizes DOD installations to operate Qualified Recycling Programs (QRPs) to collect and sell scrap materials, the proceeds of which must first be used to offset the cost of operating the QRP itself. Proceeds in excess of costs can be used for pollution prevention and Morale Welfare and Recreation projects.

Most solid waste disposal regulations applicable to installations are issued at the state and local level. Installation (or Regional) Integrated Solid Waste Management Programs are executed by Facilities Services with environmental policy oversight provided by the Environmental Compliance Branch. Solid waste disposal/recycling may include disposal of certain munitions components and targets, provided they have been certified safe by the appropriate authority.

For further details on Navy-specific solid waste and recycling requirements, refer to OPNAVINST 5090.1C, Chapter 16.

Storage Tanks

The CWA, RCRA Part I and the Energy Policy Act of 2005 are the primary federal laws governing Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs). The CWA requirements apply principally to petroleum-containing ASTs.

Installations must report spills from storage tanks as discussed in the "Oil and Hazardous Substance Spill Preparedness and Response" section above. USTs are subject to corrosion protection requirements, periodic inspections, operator training and other related requirements. Some state and local jurisdictions have AST regulations that may or may not apply to the Navy. When a tank is taken out of service, specific closure requirements apply.

For further details on Navy-specific storage tank requirements, refer to OPNAVINST 5090.1C, Chapter 13.

Polychlorinated Biphenyl (PCB)

The key federal legislation governing PCBs is the Toxic Substances Control Act (TSCA).

TSCA bans the use, manufacture, processing, and sale of PCBs. Navy policy is to eliminate PCBs from legacy equipment to the maximum extent practicable. Installations must follow specific handling requirements for PCBs/PCB wastes and report spills and fire-related incidents involving PCBs. PCB-containing equipment must be inventoried annually and labeled appropriately.

For further details on Navy specific PCB requirements, refer to OPNAVINST 5090.1C, Chapter 14.

Pest Management

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates chemicals that can be applied at an installation for purposes of pest management. Each installation must have a Pest Management Plan. Daily records of ALL pest management operations, including non-appropriated fund activities, moral, welfare and recreation, privatization partners, tenants and PWD pest management must be maintained and submitted to the PWD pest management lead on a monthly basis.

For further details on Navy-specific pest management requirements, refer to OPNAVINST 5090.1C, Chapter 17.

Installation Restoration

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is the governing legislation for environmental cleanup/Installation Restoration of past releases of Hazardous Substances and may also apply to past releases of any pollutant and/or contaminant that endanger public health including petroleum, oil and lubricant products.

When a potentially contaminated site is discovered, CERCLA provides a framework for characterizing the nature and extent of contamination, identifying and selecting appropriate cleanup methods and standards, and execution of cleanup activities through site closure. The Installation Restoration Program is centrally funded by NAVFAC to implement cleanup via contract in accordance with CERCLA. Installation Restoration contracts are managed by the FEC. Installations and the FEC jointly select the remedy for installation restoration sites and sign the decision documents for all Installation Restoration Program sites.

For further, details on Navy-specific Installation Restoration requirements, refer to OPNAVINST 5090.1C, Chapter 18.

Overseas Compliance Requirements

Navy installations in foreign nations must comply with applicable Final Governing Standards (FGS). FGS are country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or specific management practices that must be followed. Where FGS have not been issued, installations must comply with the DoD Overseas Environmental Baseline Guidance Document (OEBGD), host nation substantive pollution control laws of general applicability, U.S. law with extraterritorial effect, and applicable treaties. For further details on overseas environmental compliance ashore, refer to OPNAVINST 5090.1C, Chapter 21.

SECTION 6-5. ENVIRONMENTAL PLANNING

The National Environmental Policy Act (NEPA) of 1969 is the principal federal environmental planning legislation in the US. NEPA encompasses virtually all environmental compliance areas discussed previously as well as natural and cultural resource issues.

The purpose of the NEPA process is to ensure that decision-makers within the federal government consider the environmental impacts of major proposed actions before such actions are undertaken. In the NEPA process, the proposed action, potential alternatives, and potential mitigation measures are studied. NEPA does not require the decision-maker to adopt the most environmentally benign alternative; it simply ensures that the decision-maker has examined other alternatives from an environmental perspective and documented the rationale for the selected alternative. The level of effort involved in the NEPA process varies depending on the action contemplated and its likely environmental impacts. The key to compliance with NEPA requirements is to begin early, apply the appropriate level of effort, properly document the results of the NEPA process, and clearly state the reasons for adopting the proposed action or alternative. NEPA Analysis and documentation should occur parallel to the permitting, consultation, consistency reviews, or other compliance processes. NEPA includes requirements for public participation that must be closely observed.

Installation environmental planners typically encounter NEPA requirements when they consider new construction, major renovations, and changes in land use, etc. Under NEPA, these actions can be challenged in the courts based on inadequate application of the NEPA process. Such challenges are expensive and time-consuming with the potential for serious delays to critical project schedules.

NEPA analysis begins with a review of a proposed action to see if a Categorical Exclusion (CATEX) applies.

Categorical Exclusions (CATEX)

Certain categories of routine, recurring actions are exempt from the most rigorous NEPA analyses. There are forty-five such CATEXs approved for use by the Navy, several of which are applicable to routine installation activities (every federal agency has its own set of CATEXs). Even when a CATEX generally applies to a particular action, there are circumstances in which a CATEX cannot be used. For example, a CATEX may not be used when the proposed action would adversely affect public health or safety; or involves effects on the human environment that are highly uncertain, involve unique or unknown risks, or which are scientifically controversial. See OPNAVINST 5090.1C, Chapter 5 for the full list.

CATEXs are the most frequent form of NEPA analysis conducted by installation environmental planners. Evaluation of a proposed action and documentation of the appropriate CATEX can take a few hours to a few weeks depending on the scope of the action. A brief record of CATEX is prepared describing the proposed action and identifying the specific CATEX that applies. Public participation is not required. Signature authority for a CATEX may be the Regional Environmental Coordinator, or may be delegated, possibly to the PWO.

Environmental Assessments (EAs)

If a CATEX does not apply, a potential for environmental impact exists and an Environmental Assessment (EA) is performed, typically taking six to eighteen months. If the EA finds that there are no significant environmental impacts, then the decision authority issues a Finding of No Significant Impact (FONSI). The EA process involves limited public participation requirements.

If the EA finds a potential for significant environmental impacts, an Environmental Impact Statement (EIS) is performed. (Note: the scope of a project frequently determines the need for an EIS without performing an EA first, saving both time and money).

Environmental Impact Statement (EIS)

When there is a clear impact indicated by the nature of the project or by the results of an EA, then the more intensive EIS is generated. An EIS usually takes one to two years to perform. A Record of Decision (ROD) is issued by the decision authority at the end of the EIS process to document the results of the studies and the Navy's decision regarding the proposed action and alternatives. The EIS process involves mandatory procedures for public participation.

Overseas Environmental Planning

Executive Order (EO) 12114 imposes NEPA-like requirements for proposed actions outside the U.S. It requires the preparation of a Record of Negative Decision (RoND), Environmental Review (ER), Environmental Study (ES), Overseas EA (OEA) and/or an Overseas EIS (OEIS) when major actions are contemplated. Public participation is not required.

Installation environmental planners will normally prepare CATEXs where applicable, and may occasionally prepare EAs, if in-house expertise exists in the appropriate disciplines associated with a particular action. In most cases where an EA is required and for all EISs, the EA and/or EIS will be prepared via contractor support with oversight and participation by environmental planning personnel. **Because of the potential for serious impacts to project schedules it is imperative that the NEPA process commence early in the planning stages of any proposed action to allow sufficient time for appropriate analysis and public participation.**

For further details on Navy-specific NEPA requirements, refer to OPNAVINST 5090.1C, Chapter 5 and Appendix E.

SECTION 6-6. NATURAL RESOURCE MANAGEMENT

Natural resource management is governed by a wide variety of legislation at the federal level:

- *Conservation Programs on Military Reservations (Sikes Act* requires preparation of Integrated Natural Resource Management Plans (INRMPs) for comprehensive natural resource management at military installations.
- *Coastal Zone Management Act (CZMA)* provides coastal states with funding for programs to protect and manage coastal zone resources.
- *Endangered Species Act (ESA) of 1973* protects listed species and their habitats and includes requirements to evaluate impacts of federal actions on listed species. The National Defense Authorization Act of 2004 amended the Endangered Species Act to preclude designation of critical habitat on many DOD lands subject to the Sikes Act: seventy-one installations have since been exempted from critical habitat designation.
- *Marine Mammal Protection Act (MMPA) of 1972* provides protection for marine mammals on land or at sea, to include requirements to obtain permits for federal actions impacting marine mammals.
- *Migratory Bird Treaty Act (MBTA)* provides protection for migratory birds, their habitats, and migratory flyways, to include a permitting process for actions that impact migratory birds.

- *CWA Section 404 (Wetlands)* prohibits discharge of dredge or fill material into wetlands or waterways without a permit from the Army Corps of Engineers. Wetlands are legally defined by the presence of specific soils, hydrology, and vegetation. Navy policy is to identify boundaries of all legally defined wetlands and ensure no net loss of wetlands.

The installation natural resource management programs ensure military readiness and sustainability while complying with natural resource protection laws, and conserving and managing natural resources in the US, its territories, and possessions for both appropriated and non-appropriated fund activities. This dual dynamic of Stewardship and Readiness is essential for the long-term maintenance of military readiness and natural resources sustainability.

Integrated Natural Resources Management Plans (INRMP)

The Integrated Natural Resources Management Plan (INRMP) is a long term planning document that addresses natural resource requirements applicable to the installation. It is a guide for management of natural resources in support of the installation's mission, while protecting and enhancing natural resources for multiple uses, sustainable yield, and biological integrity.

Installation Commanders having custody of Class I property (land and water) suitable for the conservation and management of natural resources must prepare and implement a comprehensive INRMP that fulfills the Sikes Act. INRMPs must be kept up to date, and the installation's mission requirements monitored so that there is no net loss in the capability of military lands to support the military mission of the installation. Each PWD will have procedures in place to continuously inform Navy decision makers of the conditions of natural resources, the objectives of the INRMPs, and potential or actual conflicts between Navy actions/management plans and the INRMP. NEPA documentation is required for all new and newly updated INRMPs. Installations must provide an opportunity for the public to submit comments on the INRMP.

Each installation has a Natural Resources Manager/Coordinator appointed by the installation Commanding Officer. INRMP development, fish, wildlife, and habitat conservation, and research projects will require the Natural Resources Manager to coordinate with the United States Fish and Wildlife Service (FWS) and, if applicable, National Marine Fisheries Service (NMFS). Early coordination is required to avoid delays. INRMPs, must be reviewed annually, and revised as necessary.

For further details on Navy-specific natural resource management refer to OPNAVINST 5090.1C, Chapter 24.

SECTION 6-7. CULTURAL RESOURCE MANAGEMENT

Cultural Resource Management

The cultural resources management program encompasses Navy historic buildings, landscapes, districts, and archeological sites and Native American/Alaskan/Hawaiian cultural and religious sites for the benefit of the US Navy and people of the United States. Historic properties should be reused or rehabbed to the maximum extent feasible and must be adequately maintained.

Cultural Resources Manager (CRM). Each installation has a designated Cultural Resources Manager (CRM), who is appropriately trained. The CRM is responsible for identifying, inventorying, evaluating, and protecting historic properties, including archeological and Native American sites. The manager is the POC for all questions on installation cultural resources and Section 106 compliance. Prior to site selection for a facility project or training/operation mission, the CRM must be consulted to ensure that any historic properties are taken into consideration in decision making and that efforts are made to minimize adverse impact on historic properties.

Key federal legislation/requirements governing cultural resources management includes:

- *National Historic Preservation Act (NHPA)* contains provisions regarding identification, management, and preservation of historic properties. Section 106 of the NHPA is of particular importance because it imposes planning requirements for projects with the potential to affect historic properties. The NHPA does not impose absolute requirements to preserve historic properties as long as appropriate procedures and documentation requirements are followed.
- *Native American Graves Protection and Repatriation Act (NAGPRA)* requires federal agencies to inventory their holdings and return Native American Cultural Items back to the appropriate tribe "with standing".
- *American Indian Religious Freedom Act* requires federal agencies to consult with the tribes about the effects their actions on the exercise of traditional religion.
- *Archaeological Historic Preservation Act (AHPA)* requires federal agencies to report their actions that might damage any archaeological sites to the Secretary of the Interior and conduct recovery of data from said site.
- *Archaeological Resources Protection Act (ARPA)* requires federal agencies to protect archaeological sites on their property.
- *Sunken Military Craft Act (SMCA)* protects US Military ships and aircraft as archaeological and grave sites.

The Navy must ensure military readiness and sustainability while complying with cultural resource protection laws, and conserving and managing cultural resources in the United States, its territories, and possessions and installations overseas for both appropriated and non-appropriated fund activities. The Stewardship and Readiness is essential for the long-term maintenance of military and cultural resources. The cultural resources management program encompasses Navy historic buildings, landscapes, districts, and archeological sites and Native American/Alaskan/Hawaiian cultural and religious sites for the benefit of the US Navy and people of the United States.

Integrated Cultural Resources Management Plans (ICRMP)

The ICRMP is a long term planning document that addresses cultural resource requirements applicable to the installation. It guides the Installation Commander in the management of cultural resources to support the installation mission, while protecting and enhancing cultural resources for multiple uses. Each installation having custody of Class I property (land and water) suitable for the conservation and management of cultural resources will prepare and implement a comprehensive ICRMP. The primary purpose of the ICRMP is to ensure that cultural resources conservation measures and military operations on the installation are integrated and consistent with stewardship and legal requirements. ICRMPs are reviewed annually, and revised as necessary. ICRMPs are renewed every 5 years, provided the resource sponsor funds the update.

Section 106 Process of the NHPA requires the Navy to consider the potential impact of its actions on historic properties. The installation's Cultural Resource Coordinator must consult with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) on any project that has the potential to effect historic and/or archeological resources. If significant historic properties will be affected, the consultation will include the Advisory Council on Historic Preservation (ACHP). Projects that require Section 106 consultation may not proceed beyond the planning stage until the consultation process has been completed. If historic/archeological resources are discovered after a project commences (inadvertent discovery), work must stop to allow for analysis of the discovery and consultation with the SHPO/THPO. **Because of the potential for serious impacts to project schedules it is imperative that the Section 106 Process commence early in the planning stages of any project, preferably in conjunction with development of NEPA documentation.**

For further details on Navy-specific cultural resource management, refer to OPNAVINST 5090.1C, Chapter 27.

SECTION 6-8. FUNDING ENVIRONMENTAL PROGRAMS

CNO-N45 is the resource sponsor for Environmental Quality (EQ) funding, including Environmental Compliance and Conservation, with different procedures than other CNIC resource sponsors. Navy policy is to fully fund compliance with all applicable federal, state, and local environmental laws. This includes funding the INITIAL acquisition or modification of real property necessary for environmental compliance. Environmental funding does NOT encompass routine maintenance and repair of environmental real property such as sewage treatment works, replacement of bag-house filters, or maintenance of continuous monitoring equipment. For the purposes of funding, Overseas Environmental Baseline Guidance Document (OEBGD) and the host nation laws that are contained in country specific FGS are given the same funding status as federal laws.

CNIC is the Budget Submitting Office (BSO) for shore installation environmental compliance, conservation and pollution prevention requirements, including NREC, DOD REC, and NOSC requirements. The N45/BLC serves as the PPBES process interface for regional environmental program requirements. This includes coordination, identification, validation, assessment and submission of environmental program requirements and legal support, and receipt, prioritization and management of environmental funding. All such requirements development, budget submission, and execution actions will be submitted by the N45/BLC via the N4 to the Region Deputy Comptroller (N8). The N45/BLC will use EPRWeb to develop and submit requirements and report execution for CNIC environmental requirements.

The N40 is responsible for identifying requirements to the N45/BLC for issues involving NREC, DOD REC, NOSC and Fleet Ops support programs, and for tracking program execution of these items.

Environmental Readiness Levels

Four levels of Navy environmental readiness (ERL1 through ERL4) have been established, along with the specific types and scope of the capabilities required to provide each level. These ERLs enable capability based programming and budgeting of environmental funding and facilitate required capability versus cost trade-off decisions. ERL4 is considered the absolute minimum level of environmental readiness capability required to maintain compliance with applicable legal requirements.

Cultural and Historic Preservation Funding

Cultural and historic preservation resources are not eligible to be funded using EQ resources but should be entered into EPRWeb for tracking. Requirements are to be resourced through appropriate BSO to the Chief of Naval Operations (CNO-N46). Bird Air Strike Hazard (BASH) program requirements are not eligible for conservation resources.

Military Construction (MILCON) Funding of Environmental Projects

For all projects that meet the applicable funding threshold for Military Construction (MILCON) the appropriate funding source is MILCON. These construction project requirements must be addressed through the MILCON programming process.

Working Capital Fund Operations

The cost of environmental, natural resources and cultural resources compliance shall be part of each installation's operating budget. Working Capital Fund activities shall build into their operating budgets and rates any costs associated with complying with applicable environmental laws and regulations.

Refer to OPNAVINST 5090.1C, Chapter 2 for more information on allowable budget items.

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Process Monitoring and Improvement

Chapter 7

NAVFAC has made significant strides in breaking down the cultural and systems barriers that hinder business agility. There is an increased need for tighter alignment of end-to-end business functions, better management visibility into operations, and a noticeable bias toward execution excellence. The current climate of making measurable business improvements tied to the NAVFAC Strategic Plan has succeeded in driving progress. Changing the cultural mindset has meant redefining defense business in terms of the customers it serves, rather than the functions it performs. Breaking down systems barriers has meant, among other things, using common standards to integrate the NAVFAC across business and support lines..

Continuous Process Improvement (CPI) is an endless effort to improve the way we do business. This is accomplished by making small-stepped improvements to existing or new processes rather than implementing one huge, potentially unmanageable improvement. The Japanese have a term for this called kaizen. Kaizen involves everyone at NAVFAC, from Headquarters all the way to the PWD. CPI also means making things better and not by eliminating work or positions. It is also not used to blame people for problems, inefficiencies, or failures. It is simply a way of looking at how we can do our work better with the limited resources we now have. CPIs goal is to learn what causes things to happen and using this knowledge work to:

- Reduce variation
- Remove waste
- Improve our supported clients satisfaction

The Naval leadership is challenged to execute two great tasks simultaneously: fighting today's war and positioning our force for an uncertain future. The department faces additional pressures that lead us to better stewardship of taxpayer dollars where greater efficiency leads to improved effectiveness. The mission is clear: creation of more readiness and assets within our budget through Lean Six Sigma (LSS).

Lean Six Sigma for services is a business improvement methodology that maximizes shareholder value by achieving the fastest rate of improvement in customer satisfaction, cost, quality, process speed, and invested capital.

"Lean" focuses on streamlining processes to achieve the maximum velocity of output with the least amount of waste while "Six Sigma" focuses on maximizing the quality and standardization of expected output. What sets Lean Six Sigma apart from its individual components is the recognition that you cannot do "just quality" or "just speed," you need a balanced process that can help an organization focus on improving service quality, as defined by the customer within a set time limit.

Outputs from Lean Six Sigma and other process improvement initiatives have resulted in the ability for NAVFAC to standardize a large number of its processes. Once "best practices" have been identified and documented, they are uploaded into the NAVFAC Business Management System (BMS). Once added, BMS allows controlled process changes, internal process audits, and management oversight to improve existing processes documented in BMS. It also provides a standardized method for introducing new, innovative business processes which increase efficiency and effectiveness.

NAVFAC employees shall use the business processes documented in BMS and are encouraged to pursue constant improvement and innovation.

Once standardized systems and processes have been adopted, a list of metrics should be developed and track to serve as indicators of performance in its key product and service areas. Effective performance metrics enable trend measurement and analysis and should be an early indication of processes requiring attention.

SECTION 7-1. BUSINESS MANAGEMENT SYSTEM (BMS)

The NAVFAC BMS provides a systematic method for the management of business processes, common practices, and process and quality improvement that produce and/or support production of command products and services. This provides best business processes documentation for use by all NAVFAC commands and links to applicable, appropriate, and up-to-date policies, guidance, forms, and information.

BMS Monitoring and Sustaining Business Process Goals

Background

While BMS describes "how" NAVFAC provides products and services, Oracle portal and workflow are the software application tools supporting the BMS. The intent of BMS is to provide easy access to key information within a workflow (process) context.

The business processes approved for use at NAVFAC commands are provided such that work will be conducted in a consistent manner among all NAVFAC commands. There will be local command process variations where law and regulation requires. In summary, the BMS provides a roadmap type service for those wanting to know how best to conduct business activities. See BMS Instruction (NAVFACINST 5200.38).

BMS Management

NAVFAC has deployed a significant number of standardized Business Processes encompassing all Business and Support Lines, which are then "employed" at the Echelon IV and PWD levels. As these processes are employed, corporate managers are interested in both gauging the degree of implementation, and sustaining conformance to the standard processes, over time. In addition, many processes are not perfected and a pro-active improvement or Corrective Action Request (CAR) procedure is necessary to keep processes at an optimum level. PWBL managers at the FEC and PWD level must periodically assess the degree of process adherence, sustain conformance to process standards, and be pro-active in achieving continual process improvement. The standard BMS process template is available at (https://portal.navfac.navy.mil/pls/portal.

Corrective Action Request

The Corrective Action Request (CAR) provides all in NAVFAC a way to submit corrections, suggestions, changes, etc. about the BMS processes. CAR submittals may include items such as ideas to correct potential problems, improve existing processes, revise processes, updates to points of contacts, references, links, or forms; recommendations for new processes, etc.

To submit a CAR, use the CAR form accessible from anywhere within the BMS, via the "CAR" link within the BMS portlet. The CAR is processed as follows

- Within 24 hours of when the CAR is submitted, the submitter receives a system-generated confirmation email message containing the CAR identification (ID) number that has been assigned to the CAR.
- In most cases, the CAR is assigned to the process owner team for review (or the process owner for new process requests). CARs of an administrative nature (such as fixing a broken link or correcting the spelling of an individual's name) may be completed by the BMS team, however, in all cases the process owner team and process owner receive notification of changes made to process or process-related content.
- A submitter may check the status of his/her CAR at any time via the "CAR display" link within the BMS portlet.
- After the process owner team has made a determination on the CAR and the applicable change has been implemented in the BMS, the submitter receives a system-generated email notification regarding the action taken on the CAR.

BMS Process Management Model

A total process assessment initiative is intended to ensure that those select processes, key to meeting NAVFAC focus area goals, are employed, resourced, evaluated, and adhered too by all NAVFAC components. A simple process management model is shown in Figure 7-1-1 and illustrates the key components.

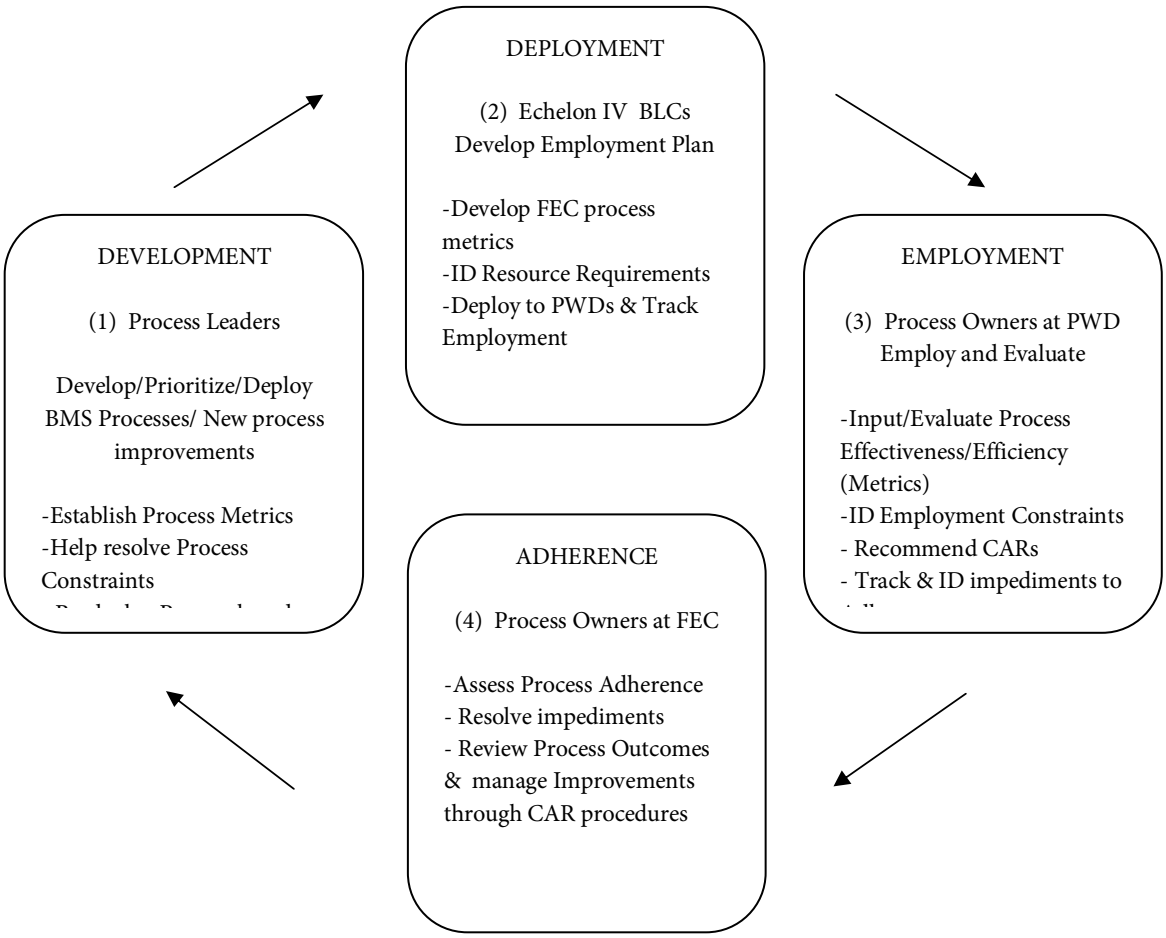

Figure 7-1-1. Process Management Model

1. Processes which are expected to have the greatest impact on desired outcomes/metrics of Key Focus Areas (KFAs) are selected by Business Line Leaders for standardization and development.
2. Process deployment plans are developed at the BLLs/FEC level and processes are deployed to PWDs.
3. PWD managers employ BMS processes and also evaluate them for their effectiveness and efficiency as determined by the associated process metrics and periodic audits. In addition, process constraints such as lack of resources or training, are identified. Impediments to employment are identified to the FEC BLCs.
4. Process owners at the FEC level periodically evaluate Adherence and help to resolve impediments. Process improvement actions are taken; such as, subject mater expert on-site assistance and lean six sigma analyses, if goals are not being achieved (employment of LLS should be coordinated by FEC PW BLC and BM so we can leverage efforts across the corporation). Process constraints are addressed and resolved or forwarded to higher authority if required.

5. Finally, the improved process is re-deployed based on CAR. Any process constraints not able to be resolved at the Echelon IV level are addressed by Business Line Leaders.

Process Assessment Guidance

Process assessment (including adherence concerns), is primarily an Echelon IV/PWD responsibility; however, process leaders and managers at the Echelon 3 and 2 levels must respond to that assessment and ensure adjustments are made and process constraints resolved. Table 7-1-1 shows examples of actions and responsibilities at all Echelon levels. Key points related to these action items are:

1. Process adherence will require a continuing dedicated effort on the part of both the FEC and PWD. With the multitude of processes in place, limited resources should be devoted to the most critical/priority processes as determined by process leaders.
2. In addition to criticality, some degree of flexibility may be necessary to suit local organization conditions. Personnel involved in evaluating process adherence need to be sensitive to the “must comply” components of each process and where some variation is acceptable. With the exception of regulatory requirements, it is a judgment call, requiring the evaluator to fully understand what elements of the standard process design make it most effective. Business Line and process owners can help with clarification.
3. BMS processes are assumed to support related process goals, although adhering to the process is not the only factor in achieving target process metrics. Nonetheless, tracking process metrics is one indicator of gauging the effectiveness of the process and should be used to identify the need for process corrective action, including use of Lean Six Sigma improvement teams.
4. BMS processes should not just be evaluated against average target goals. A primary concern should be whether the process is "in control" or not and the variation vs. requirement.
5. BMS processes found not in compliance may have a legitimate explanation such as lack of resources or need for training. These constraints need to identified and addressed at both the FEC and PWD levels with Headquarters support if required.

Responsibility			Actions	
Echelon II/III PWBLL	**FEC PWBLC/ PLCs**	**PWD Process Owner**	**Focus Area**	**Details**
X			Tie Process to Programs/ Key Focus Areas.	Validate the effectiveness/adequacy of the BMS Process to help achieve Program/KFA Goals
X			Focus Adherence concerns on most critical processes as a priority.	Categorize all processes into Low-Medium and High criticality with a commensurate effort to ensure Adherence.
	X	X	Establish Clear Process Roles & Responsibilities.	See item 6 below for suggested tool and process proposed.
	X		Conduct Independent Audits.	FEC Core or contract support personnel can perform random process audits as part of routine site visits.
	X			Incorporate check list of key processes elements for validation by core or separate contract support tasking.
	X	X		Validate the PWD capability in terms of resources and skills/training and required authorities to execute the process as defined.
	X	X	Link Metrics to Process Effectiveness.	Performance metrics trend analysis should be an early indication of processes requiring attention. -Define process problem statement -Coordinate with FEC PW BLC regarding potential problem root causes and if a Lean 6 sigma teams is necessary. Issue CAR
	X	X	Identify Resource Constraints/Root Cause problems.	Identify the reasons for non-adherence- lack of authority, training needed, poor communication, etc.
	X	X	Identify Process "Variation" Vs. Client and In-house Requirement.	Determine if each process is "in control" or not and why (i.e. analyze metrics to validate root causes and develop a CAR to recommend implementation of selected process improvement actions). Implement lean 6 sigma teams as necessary.
		X	Process Accountability.	Ensure each process has a process owner in the field with adherence performance objectives tied to the position.
X	X		Track Process Adherence.	Collect process Adherence data as part of the overall BMS Process Tracking System.

Table 7-1-1. Sample Actions and Responsibilities (Echelon Level) Matrix

Roles and Responsibilities

Process employment requires key players to understand their support or lead roles. Table 7-1-1 is a sample matrix that suggests a simple yet effective method for high-lighting key responsibilities by position which may support the adherence validation process:

- FEC Product line coordinators adherence check - Site visit BMS quick-check tool (allows site visit personnel to address questions to the appropriate individual within organization even if they are unfamiliar with the particular BMS or PL). One PLC could ask another to spot check employment on one of his/her visits using the below BMS Responsibility matrix. In addition to its use by the PLCs, this matrix focuses employee attention on processes that they have a role in (direct or contributory) rather than wading through entire BMS library. It allows employees to include BMS in position specific "desk guides". The process steps can be tied back to professional competencies during community management plan updates or position description development.
- Monitoring adherence - BMS process development and employment is currently tracked by all BLLs and PWBLCs.

BMS Processes by Functional Area

- Facilities Management Division
  - B-2 Base Development
  - B-4 Real Estate
  - B-11 MILCON
- Facilities Engineering and Acquisition Division
  - B-1 Design & Construction
  - S-17 Pre- & Post-Award of Contracts
  - S-18 Contract Support
- Production Division
  - B-5 Utilities/Energy Management
  - B-8 Base Support Vehicles & Equip.
  - B-14 FSC Mgmt & Facility Services
  - B-15 Facility Sustainment
  - B-24 Public Works Business Line

- Safety
  - F-12 Safety
- Environmental Division
  - B-3 Environmental Planning & NEPA
  - B-6 Cultural Resource Management
  - B-7 Natural Resources Management
  - B-9 Environmental Restoration
  - B-16 Environmental Compliance
  - B-17 Environmental Quality
  - B-18 Environmental Services
- Human Resources
  - F-1 Civilian Personnel Programs
  - F-2 Manpower
  - F-3 Reserve Programs
  - F-4 Diversity
  - F-5 Military Administration
- Public/Private Ventures
  - B-1 Design & Construction
  - S-17 Pre- & Post-Award of Contracts
  - S-18 Contract Support
- Total Force Directorate:
  - F-14 Special Venture Acquisition

Naval Engineering Training and Operating Procedure and Standard (NETOPS)

NAVFAC Headquarters Operations publishes NETOPS when issues arise in the field that the entire command needs to be aware of and take action. PWDs need to be aware of all NETOPS because they are field focused issues that impact PWD operations. They can be found in the Operations portlet (Current Operations) on the NAVFAC portal.

SECTION 7-2. METRICS

The purposes of our metrics are to: (1) report performance, (2) drive behaviors towards accomplishing the goals of the organization (3) assess of the performance and health of each business and support line, (4) assess future prospects and trends, in a timely manner that allows for corrective or proactive initiatives that will enhance the Command's contribution to Department of Navy or other clients and (5) report program execution with respect to established plans, encouraging optimized plans for the work and execution in accordance with the plans and providing business line and senior leadership an opportunity for corrective and follow-on actions to maximize the likelihood for planned end-of-year and long-term performances.

Metric indicators that are intended to illustrate performance for three interests groups. “upward” indicators deal with issues of interest to higher authority. “Outward” metric indicators report on issues that are of interest to the Supported Commands, either at the headquarters level or at the regions or individual stations and often at both. "Inward" metrics indicators display data that illuminates the health of the Command or the success of internal processes and initiatives. Metrics should measure efficiency, cycle time, and effectiveness.

- Efficiency - Indicators of whether successfully completed work is being performed for the lowest possible cost. A subset of efficiency is productivity, specifically defined as “output divided by cost of production”.
- Cycle Time - Indicators of whether phases of work are being performed with an optimum of elapsed time. In general, the category includes measurement of program execution against a plan for the funds obligation or award.
- Effectiveness - An indicator of whether completed work is resulting in the outcome desired or is displaying characteristics that are desired. The most pure definition of effectiveness is "outcome divided by output".

Sample metrics usually fall into the following categories:

Performance Elements and Metrics

- Benchmark for efforts
- Monthly snapshot of efforts
- Meeting award lock dates
- Tracking/attaining WIP projection
- Tracking/minimizing construction cost growth

- Meeting invoice processing timeline requirements
- Timeliness of processing modifications
- Contract closeout
- Service call execution rate
- Availability of designs ready to execute

Readiness and Continuity of Services

- Contract execution
- Establish/review acquisition plans and (remaining) capacity

Use of Best Business Practices

- Participation in Business Management System (BMS)
- Oversight of contractor's actions

Safety and Safety Culture

- Training
- Site inspections
- Documentation

Staffing and Employee Actions

- Training/development for new responsibilities
- Recognition of performance (awards programs)
- Planning ahead for vacancies/growth

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Public/Private Venture

Chapter 8

This topic will provide a brief overview of Public Private Venture (PPV) Program. It will discuss various PPV initiatives, explain the rules of PPV leasing, and discuss the roles and responsibilities of participants in the PPV initiatives being undertaken by the Department of the Navy (DoN).

SECTION 8-1. INTRODUCTION

The purpose of privatization is to allow the Defense Components to focus on core defense missions and functions by relieving them of those installation management activities that can be done more efficiently and effectively by others. Within the Department of the Navy, Special Ventures Acquisitions tend to fall into one of three categories: (1) Housing Privatization, (2) Utility Privatization (UP) and (3) Enhanced Use Leasing (EUL). Historically, military installations have been unable to fully upgrade and maintain many shore-based facilities due to inadequate funding and/or competing installation management priorities. Privatization allows military installations the opportunity to benefit from private sector financing and efficiencies to obtain improved systems and services. Privatization is not contracting out nor is it outsourcing. Unfortunately, many times these terms are used interchangeably, causing confusion.

Housing Privatization

The Military Housing Privatization Initiative (MHPI) was established in the National Defense Authorization Act of 1996 (10 USC 2871 et seq.). This statute significantly enhanced the ability of the Military Services to provide the quality and quantity of housing services needed by military families, through the privatization of housing assets. The MHPI authorizes an alternative to normal military construction procurement. It enables the Services to participate in private-sector real estate practices in the same manner as commercial developers, such as taking advantage of private capital to leverage resources, using industry business practices to optimize development and operating costs, relying on market standards for construction quality and amenities, and establishing a self-sustaining entity for long-term protection of housing assets.

The public interest and the needs of service members are best served by relying on the private sector to supply housing near military installations. Public funds should be programmed for building military family housing only when it is shown that private

housing available in the community cannot meet the service members' needs. This tenant was well established among the military services before the MHPI arrived; however, this authority has better enabled them to put the principle into practice. In effect, the statutory authority enables the Military Services to stimulate the supply of private housing available to military families, so that the private sector can better meet the Services' needs.

Policy documents articulate objectives that guide the Department of Defense's (DoD) privatized housing efforts, in general, and the Department of the Navy's (DoN) Privatized Housing Program, in particular. They also describe the general mechanisms that the DoN uses to achieve these goals. As of August 2008, DoN has entered into 32 housing privatization projects, privatizing a total of 65,957 family and bachelor homes.

Utility Privatization

Department of Defense utility systems consist of the equipment, fixtures, pipes, wires, and other structures used in the distribution of electric power and natural gas, the treatment and distribution of water, and the collection and treatment of wastewater. Basically, it involves the utility infrastructure that connects the base to the off-base commodity supplier and connects the various buildings on the installation. It does not include wiring and piping found inside buildings.

The DoD decided in 1997 that utility privatization was the preferred method for improving utility systems and services because privatization would allow installations to benefit from private sector financing and efficiencies. With private sector financing, installations could immediately obtain major upgrades to their utility systems and pay for these improvements over time. Thus, utility improvements could be achieved without going through the traditional military construction budget justification and funding process. Under DoD's program, utility privatization normally involves two transactions with the successful contractor - the conveyance of the utility system infrastructure and the acquisition of utility services for upgrades, operations, and maintenance under a long-term contract of up to 50 years.

Privatization of utilities allows installation commanders to focus on core defense missions and functions. Allocating all responsibilities to a private agency will allow the function to be accomplished more efficiently and effectively. Unless there are security concerns or it becomes economically unsound, defense components have been directed to privatize every government owned-electric, water, wastewater and natural gas utility system.

Enhanced Use Leasing

The goal of CNIC, Regions, and Installations is to eliminate excess capacity and underutilized land to resource the operation, sustainment and modernization of installation facilities. This will be accomplished by real estate outleases, where possible, to receive in-kind services in lieu of cash lease payments. Anticipated services include construction, small projects, repair and improvements to base appearance, and maintenance services. This excess is consuming the already limited facility resources. Enhanced Use Leasing (EUL) is a type of outlease that allows installations to leverage the private sector's expertise and financial resources to build or redevelop existing, non-excess land, buildings, and other real estate assets. EUL Authorities under 10 USC 2667 are summarized as follows:

- Service secretaries may outlease non-excess available land and facilities to a private or other public entity.
- Consideration may be in-kind services equal to no less than the fair market value of the property or cash.
- In-kind consideration can be applied to any installation within the service, not just the installation where the property is leased
- Cash payments must be deposited in a special Treasury account with 50% going back to the installation that generated the project and the remaining 50% going to the Service. In lieu of cash, in-kind consideration may be used to acquire and/or construct new facilities, including historic preservation
- Leasing of property must promote the national defense or be in the public interest
- Leases limited to 5 years, unless secretary determines otherwise.

<u>EUL Team Roles and Responsibilities</u>

The EUL Team is involved in the first phase of an EUL project. Based on the results of a market feasibility analysis and CNIC and DASN (I&F) approval, the Region and Installation will proceed to the second phase of the EUL project, selection of a developer and negotiation of the ground lease.

- CNIC/NAVFAC HQ Asset Management oversees project identification and Phase I market feasibility studies.
- Region supports CNIC and NAVFAC HQ in project identification and Phase I market feasibility studies.

- FEC Real Estate Contracting Officer (RECO) oversees Phase II activities, including marketing, proposal evaluation, business and lease plan negotiation, and transaction closing.
- Approved consultants advise the Asset Management Branch during Phase I and the RECO during Phase II in all aspects of EUL program, conducts Phase I market and economic feasibility study, and briefs NAVFAC HQ, CNIC, and Region/ICO.

EUL Process

Phase I

- Identify the available non-excess assets. Work with the Regions and Installations to identify potential underutilized assets for EUL opportunities. Conduct a site visit. Draft a preliminary assessment of potential assets.
- Perform an economic market analysis. Determine the highest and best use for potential sites. Measure tenant demand and profile the economic benefits of a proposed EUL project. The market analysis will cover economic and demographic factors, the real estate market, and sales comparables. The final step is to propose a EUL strategy and structure that complies with OMB guidance.

Phase II

The second phase consists of developing and marketing EUL projects to the private sector.

- Receive DASN (I&F) concept approval
- Incorporate EUL project concept into a solicitation and prioritize ranking factors
- Host an Industry Forum
- Use Navy website to disseminate information

SECTION 8-2. HOUSING PRIVATIZATION

The most established of the three privatization programs utilized by the DoN to date is housing privatization. The success of the DoN's housing privatization efforts are reflected in the growing number of new and renovated homes along with the private sector-based management programs in place to provide quality services and response to our military members. The housing privatization program is centered around goals and criteria that guide the establishment of business partnerships between the DoN and private sector entities, as well as portfolio management of privatized homes to ensure the government's interests are adequately managed.

Housing Privatization Goals and Criteria

Consistent with statutory authority and enunciated policy, the DoN instituted the privatized housing program to obtain an adequate supply of safe, contemporary and affordable homes to meet regional requirements, to leverage private capital and operating efficiencies, to minimize DoN financial exposure and liability, to establish a self-sustaining entity for long-term protection of housing assets and to maintain a consistent level of quality housing services across the DoN.

To accomplish these long-term goals, each privatization venture is structured to meet the following objectives and criteria:

<u>Flexibility</u>

The DoN can participate in key decisions, such as rent adjustments, the building of new units, the sale of units, demolition versus replacement, the scope and schedule of renovations, the scope of any new construction, the performance of the property manager, and the incorporation of changes in technology, materials, and management practices into the operation and maintenance of the housing.

<u>Management Rights</u>

The DoN can make "preferred referrals" of prospective residents to the property manager; has final decision authority concerning the use of recapitalization accounts; and can require the replacement of key subcontractors (such as the property manager) due to poor performance.

Minimized Liability

The DoN has sought to minimize the financial exposure and liability it incurs with respect to large housing projects. For the most part, the housing privatization program employs the mechanism of a limited liability company to transfer the lion's share of risk to the DoN's business partner. The DoN bears no liability for the obligations, debts or losses of the LLC beyond the amount of its initial capital contribution.

Lifecycle Cost Analysis

Lifecycle cost analysis demonstrates that privatization will be more cost-effective for the government over the life of the partnership.

Out-of-Pocket Expenses

Total housing costs (rent plus typical utilities) for military members shall not exceed the Basic Allowance for Housing (BAH).

Leverage

The scored investment should result in a 3-to-1 leverage ratio, compared with traditional military construction.

Quality Design

Housing quality will be comparable to what the private sector would build, renovate or operate for civilians in the same overall income ranges and meets DoD minimum adequacy standards. Privatization projects may include typical enhancements such as community centers, playgrounds, storage and other amenities.

Long-term Maintenance

Because service members and families are the end users of this housing, each project ensures that the housing will be properly operated, managed and maintained over the long term, typically 50 years.

Business Approach

To meet the above-stated goals and venture criteria, the DoN establishes partnerships through its Housing Privatization Program having the following major features:

- The structure of the business entity limits DoN liability but preserves significant participation in core business decisions and protects the stakeholder interests of the DoN and resident families.
- Key DoN entities provide systematic management of the program-wide housing portfolio.
- A comprehensive and flexible process identifies the prospective business partner offering the most advantageous partnership.

The oversight and management structure is organized to provide maximum support to the regional business entities established to directly operate the Department's housing portfolio.

For the majority of the deals, the DoN has chosen the limited liability company, or LLC, as the most suitable mechanism for assembling business deals and achieving its goals. The preferred business entity is structured so as to minimize the DoN's risk exposure, retain a voice for the DoN in the operation and management of the privatized housing, and provide a predictable measure of cash flow to sustain operations and maintenance at the necessary level.

Figure 8-2-1 illustrates the basic configuration of the business entity. As the figure shows, the primary partners, or stakeholders, forming the LLC and represented on its governing board are the private entity (Managing Member) and the DoN (member).

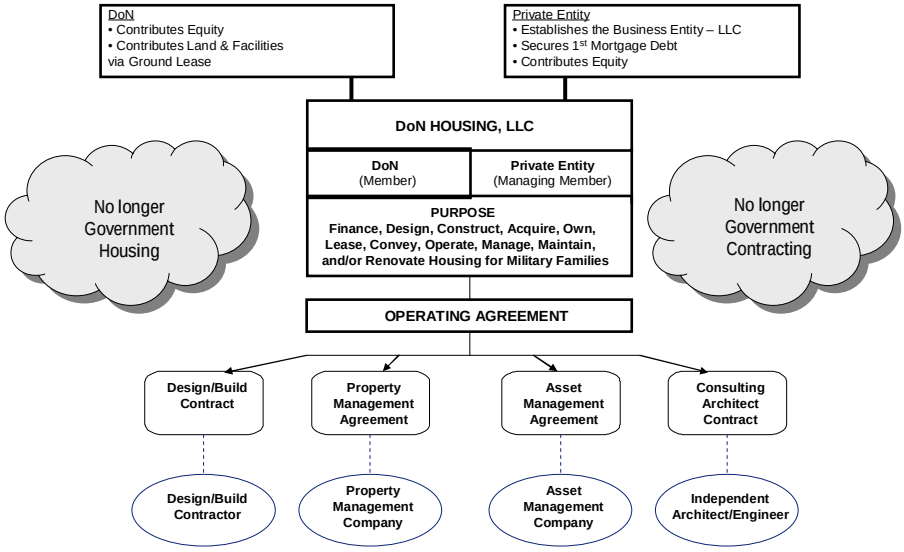

Figure 8-2-1. Structure of Preferred Business Entity

SECTION 8-3. ROLES AND RESPONSIBILITIES OF KEY PERSONS

Managing Member (MM)

The Managing Member has sole and exclusive management and control of the LLC. The Managing Member is charged with executing the business agreements necessary for achieving the goals of the business entity; taking responsibility for housing rentals and property management; preparing regular reports on the financial status of the enterprise; and establishing the annual budget. It carries a fiduciary responsibility for the security and disposition of all assets and for receipt and disbursement of LLC funds. In addition, its role includes setting up and staffing the necessary operational and administrative offices.

Member

The DoN, participating as the LLC Member, monitors the performance of its investment in the private housing portfolio. It makes and concurs with recommendations regarding the use of the Operating Reserve Account (ORA) and approves any ORA expenditures. (The ORA is a depository account for any cash flow or proceeds from the housing privatization partnership company for approved discretionary use, as specified in the legal documents of the project) For assistance the DoN draws on a "Business Agreements Manager" and a "DoN Representative" for each project. These individuals advise the DoN on business and asset management. In addition, the DoN monitors the performance of the property manager with respect to client satisfaction.

Business Agreements Manager (BAM)

The BAM is a critical component to the success of the privatization effort. As stated above, the business agreements are uniquely prepared for each privatization project and LLC establishment. Consequently, it is imperative that the BAM be intimately familiar with the individual agreements. The BAM provides technical support and guidance to the Project's DoN representatives The BAM is responsible for reviewing and assessing annual operating budgets, periodic fiscal reports, compliance with the business documents, and management of the ORA and coordinating key information with other stakeholders. In addition, the BAM serves as the DoN's point of contact or "Member" for the Managing Member in matters dealing with the business agreements proper, such as interpretation or application of clauses within the agreements. The individuals designated as BAMs are located at the Echelon III/IV/FEC responsible for PPV projects per specific authority provided by NAVFAC SVA.

DoN Representative

The DoN representative is the Navy Region representative or the Marine Corps installation representative to the LLC. Typically, the [regional] housing director or the local installation commander who is the designated housing authority will serve as the DoN representative to the LLC. There are several key areas that DoN representatives should be particularly concerned with: management of the preferred referral function; performance of the property management company; resident satisfaction issues; and the overall fiscal health of the LLC as reported by the partner and BAM.

SECTION 8-4. PRIMARY BUSINESS DOCUMENTS

Ground Lease

The ground lease is a legal instrument that allows the DoN to lease the ground underneath existing and/or planned improvements to another party (the LLC) for a defined period of time. The ownership of the land remains with the government (unless the land is conveyed via the ground lease). For housing privatization initiatives, the ground lease is typically for a term of 50 years and ownership of any existing and planned improvements (except utility systems in most cases), within the leased area are conveyed to the LLC for the term of the lease.

Operating Agreement

Although the business agreements are generally drawn from a template document, each is uniquely prepared to meet the requirements of the Managing Member, the lender, and the local circumstances inherent to the LLC. The operating agreement is the foundation document that legally establishes an LLC when it is formally filed with the appropriate state agency. It lays out the terms and conditions governing the operation and management of the LLC during its existence. In addition, the operating agreement describes the "mutual promises and obligations" expressed by the parties in the formation of the LLC. Setting up an LLC explicitly states the DoN's intention to be an active partner with defined consent and decision authorities in each privatization effort. The operating agreement establishes the LLC and specifically describes the roles and responsibilities of each of the parties - the DoN (the member) and our business partner (the Managing Member).

Municipal Services Agreements

The LLC has the ability to purchase certain services from the DoN as stipulated in the MHPI authorities. When the LLC purchases services, typically utilities and fire/police, a Municipal Services Agreement is signed between the DoN supplier and the Managing Member. These agreements lay out utility points of demarcation, rates, funding responsibility, and level of services.

SECTION 8-5. PWD/ROICC ROLES AND RESPONSIBILITIES FOR PPV CONSTRUCTION

Since the government is not the "Managing Member" of the LLC, PWD/ROICC responsibilities in support of PPV projects are intended primarily for logistics and consultation purposes, not enforcement, or oversight. Under the LLC structure, the DoN

is the "member" of the business entity. The operating agreements confers on the member the right of review and consent regarding several important decisions and activities of the LLC. In operational terms, however, the DoN is removed from and does not engage in directing or managing the daily operations of the LLC or the housing.

Pre-Award Responsibilities

The BAM shall provide FEC CI5s the projected housing construction or renovation workload (and proposed execution schedule) at their respective locations at the appropriate time during the Resource Allocation Plan (RAP) cycle. Local PWD/ROICC Capital Improvement (CI) leadership is to work with the BAM to identify resources each FY based on algorithms identified in the PPV PW policy. Resource requirements are generally based upon the number of housing or bachelor quarters (BQ) units, whether the work is renovation or new construction, and whether the work is located within the installation's fence line or outside the fence line. There will be no PWD/ROICC involvement (unless specifically requested and resourced by the BAM) for work whose scope is purely demolition, for ancillary facilities (such as community centers, playgrounds, swimming pools, etc.) that are not constructed concurrently with the housing units, nor for any construction that is not on government property.

Post-Award Responsibilities

The BAM shall provide week notice to the PWD/ROICC prior to preconstruction conference so that the PWD/ROICC personnel may attend. The PWD/ROICC personnel are not required to attend final inspections. The BAM shall provide the PWD/ROICC an overview of the project, typically at the monthly development meetings with the design build (DB), so that there is a general understanding of the scope of work. Should PWD/ROICC personnel have the need to review contract plans or specifications during site visits, the Managing Member/General Partner's (MM/GP) design build site supervisors shall make those items available. The BAM shall provide the PWD/ROICC with the monthly Consulting Architect/Construction Consultant (CA/CC) progress reports for awareness, typically at the monthly development meetings.

PWD/ROICC personnel shall act as a consultant/liaison for the MM/GP's design build site supervisor and the CA/CC by providing limited construction startup assistance (pre-conference information, installation procedures and points of contact, base access, outage requirements, hotwork permits, etc.) – information that typically would be used to indoctrinate new contractors working on base. The expectation is for the PWD/ROICC to make occasional (not recurring) site visits based upon the number of work hours funded by the BAM for their support (less the hours consumed during startup assistance and coordination efforts) and if the BAM specifically requests the PWD/ROICC to review

a particular quality or safety concern. During the site visit, the PWD/ROICC personnel shall check in with the DB site supervisor (or site manager) at the trailer as a courtesy and for safety hazard considerations prior to walking the site.

Quality control and quality assurance is the responsibility of the MM/GB's DB contractor and CA/CC. If during the site visits, the PWD/ROICC personnel notice a quality concern based upon their knowledge of standard construction practices and building codes, that concern shall be raised to the DB site supervisor for resolution. If the issue cannot be satisfactorily resolved, PWD/ROICC personnel shall bring that to the attention of the BAM for resolution. The PWD/ROICC shall not provide direction to the DB site supervisor or the CA/CC to make changes.

Safety oversight (OSHA standards apply to PPV construction, not the US Army Corps of Engineers EM-385-1-1 Safety and Health Requirements Manual) is the responsibility of the MM/GP's DB contractor and CA/CC. However, if during the site visits PWD/ROICC personnel notice life threatening or imminent danger conditions and behaviors, they have the authority to suspend work immediately. The PWD/ROICC shall notify the DB site supervisor and BAM immediately should this direction be provided. Work shall not recommence until all identified safety violations have been corrected to the satisfaction of the MM/GP and the PWD/ROICC has been informed of the actions taken. The MM/GP has the responsibility to notify the PWD/ROICC immediately of all recordable work-related injuries and illnesses, weight-handling mishaps, damage to government property, or damage to utilities. The PWD/ROICC shall notify the Installation Commanding Officer and NAVFAC chain of command (via NFECL Significant Incident Notification) upon receipt of information regarding a recordable work-related injury or illness. If the observed safety violation is not life-threatening or of a nature that qualifies as imminent danger, PWD/ROICC personnel shall notify the DB site supervisor for corrective action and report the violation or unsafe condition to the BAM. If the corrective action is not made in a timely manner or if a trend develops with respect to safety compliance, the PWD/ROICC shall bring that to the attention of the BAM for resolution (and consideration in the future award of incentive fees).

PPV Construction and Revitalization On Base

<u>PWD/ROICC Responsibilities</u>

- Safety consultation.
- Fire protection consultation provided by FEC Fire Protection Engineer when requested by the BAM (or their designated representative).

- Quality consultation addresses exceptions to normal industry construction standards with the MM senior on-site manager. If there are unsatisfactory results from that discussion, bring the issue to the attention of the BAM for resolution. Notify the BM of all significant issues.
- DB assistance that is limited to obtaining wage determinations as necessary when requested by the MM/GP (or their designated representative).

NOTE 1

The MM is responsible for Design/Build (DB) administration including:

- *Ensuring that certified payrolls are received and maintained.*
- *Oversight i.e., labor interview.*
- *Acting as the initial point for any inquiry.*
- *Serving as the first point of contact for enforcement.*

The MM is to resolve the DB issue, but shall advise the PWD/ROICC of any and all inquires or complaints regarding DBA compliance—The government will expect the MM to act promptly to resolve any problems with the government being informed of complaint and resolution and the government maintaining final authority on resolution.

The MM is to advise the PWD/ROICC of relevant information in order for the PWD/ROICC to obtain wage determinations on contract labor standards where the classification is unclear (i.e., which DB wage determination applies, conformances from contractors, etc.).

The PWD/ROICC and NAVFAC FEC Labor Specialists are responsible for obtaining from the Department of Labor the wage determinations when new classifications are required (SF 1444 submissions). Inform the BAM when the MM requests a wage determination.

- Provide coordination for interface with other government construction contractors.
- Initial PWD/ROICC liaison assistance to provide information on procedures.
- Personnel and vehicle passes:
  - Utility outages/tie-ins to station utilities.
  - Environmental issues.
  - Traffic control and haul routes.
  - Digging, hotwork, and other permits.

  - POC for emergencies and security issues.
  - Station regulations.
  - As-built.
- Provide support as an informed advisor to the MM/GP's CA/CC representative and construction contractor site supervisor. Provide construction coordination and liaison information about the installation's procedures and assistance to the MM/GP to enable their interface with other installation departments.

BAM Responsibilities

- Provide PWD/ROICC a copy of the monthly CA/CC (A-E) report.
- Keep PWD/ROICC appraised of periodic meetings and project status to assist them in carrying out their responsibilities.
- Provide primary onsite POC for MM/GP for reporting issues of quality or safety to the PWD/ROICC.
- Provide BAM's designated representative POC to PWD/ROICC for each project.
- Provide current and out-year workload and construction execution schedule (and proposed funded hours) by October of each year to PWD/ROICC and FEC CI5 G-Line PLC.
- Where the DON retains approval authority, obtain approvals for design submittals from NAVFAC subject matter experts (e.g., ATFP, fire protection).
- Ensure the following is MM responsibilities are addressed in the Operating Agreement/Limited Partnership Agreement (OA/LPA):
  - Quality Assurance, Safety (including requirements identified in enclosure 4 of the ROICC policy letter sent by NAVFAC on 4 June 2008) and certifications (Payment, final acceptance, tests, etc.) via CA/CC contract.
  - Immediately notify the Installation Commanding Officer, PWD/ROICC, and BAM of all recordable work-related injuries or illnesses. The BAM will notify the FEC CO and the Director, SVA.
  - Pre-construction conference. Provide notice to PWD/ROICC (minimum week notice and scheduled a minimum of two weeks prior to mobilization).
  - Construction management including (but not limited to):
    1. Utility outages/tie-ins to including independent verification of all underground utilities prior to excavation operations.
    2. Traffic control and haul routes.

3. Environmental permits (disposal/dump, etc.) and procedures (hazardous materials, surface rain runoff and sediment controls, etc.).
4. POC for emergencies and security issues.
5. Digging, hot work, and other permits.
6. Personnel and vehicle passes.
7. Station regulations (HURRCON, THREATCON, Environmental, Safety).

- DB administration. See Note 1 above.
- Design oversight, inspection and certification of requirements.
- Coordination of all permits (federal, state, local or station) and inspections required for construction completion and occupancy (fire protection/life safety, construction, demolition, dumping, etc.).
- Proper storage of materials on site.
- Coordination of occupant movement for revitalization.
- Client support/status updates (including informal communications with the PWD/ROICC, FEC CO and ICO).
- Invite PWD/ROICC, as requested by the BAM or as needed to various project coordination, QC or QA meetings.

PPV Construction/Revitalization Off Base on Government Property

PWD/ROICC Responsibilities

PWD/ROICC responsibilities for this scenario are the same as the responsibilities during on base construction less those functions that would not apply (Passes, utility tie-ins to public services, fire protection if service is being provided by the municipality) However, this would not preclude the PWD/ROICC from assisting with information given their experience and contacts.

BAM Responsibilities

- BAM responsibilities for this scenario are the same as the responsibilities during on base construction.
- In the OA/LPA, inform the Managing Member that they have the same responsibilities during on base construction, in accordance with the OA/LPA and jurisdictional requirements. All Construction Management responsibilities are vested with the Managing Member.

PPV Construction/Revitalization Off Base on Private Property

On a case-by-case basis and as funded by the BAM.

PWD/ROICC Responsibilities

Roles, responsibilities and level of effort will be determined on a project-by-project basis by the BAM. For each project, the BAM and PWD/ROICC will jointly ensure that parties understand the roles, responsibilities and level of effort required to meet the BAM's requirements.

DB assistance

See Note 1 above.

BAM Responsibilities

- BAM responsibilities for this scenario are the same as the responsibilities during on base construction.
- In the OA/LPA, inform the Managing Member that they have the same responsibilities during on base construction, in accordance with the OA/LPA and jurisdictional requirements. All Construction Management responsibilities are vested with the Managing Member.

Information Technology (IT) Systems

Chapter 9

A Public Works Department relies on a variety of Navy, NAVFAC and commercial IT systems to manage daily operations - each of which has been carefully chosen to support critical PWD execution processes. NAVFAC has adapted these tools to serve as efficiency enablers for our unique corporate processes as well as to establish common data links to reduce redundancies in the IT system. Over time and with your feedback, the current applications and systems will continue to evolve to better support and improve NAVFAC processes.

SECTION 9-1. INFORMATION TECHNOLOGY (IT) SYSTEMS OVERVIEW

PWD software applications have grown ever-larger and more complex as their objectives become more demanding and challenging. Along with the growth of the applications and their supporting infrastructure comes the growth in the number of users requiring support for these business-critical applications. This growth also offers opportunities since the PWDs at every Navy installation now use the same suite of software. This drives standardized (and optimized) business practices, data transparency, and lower operating costs. The applications chosen by NAVFAC as essential to the successful accomplishment of the facility mission must not only produce correct results, but must do so in a timely fashion that allows both internal and external clients to take appropriate action when needed.

Although IT systems are frequently sponsored by a single business or support line, their functionality typically crosses business, a trend that that will continue in the future. Ideally in the future, seamless data transmission will provide complete visibility to the entire facility lifecycle without specialized computer software knowledge. In the meantime a working knowledge of multiple systems is required to function within the PWD.

As NAVFAC works to refine processes and reduce variances across PWDs and Business and Support Lines, a significant effort will be put towards improve facilities management at the PWD through process and IT system standardization. In the near-term, this effort will reduce multiple data entry, improve report development and data mining across

multiple business lines and command levels and seeks to ease administrative burden at PWD/IPT. In the long term, IT systems will integrate facilities management and reporting by embedding standardized processes within IT systems – allowing the PWD to leverage full capability of IT systems.

SECTION 9-2. APPLICATIONS

The following graphic provides a snapshot of the more commonly used IT systems used by a Public Works Department (PWD). A short description of each system is included to provide familiarity of the purpose of each system. The majority of the IT systems used by PWD personnel are accessed through the NAVFAC portal.

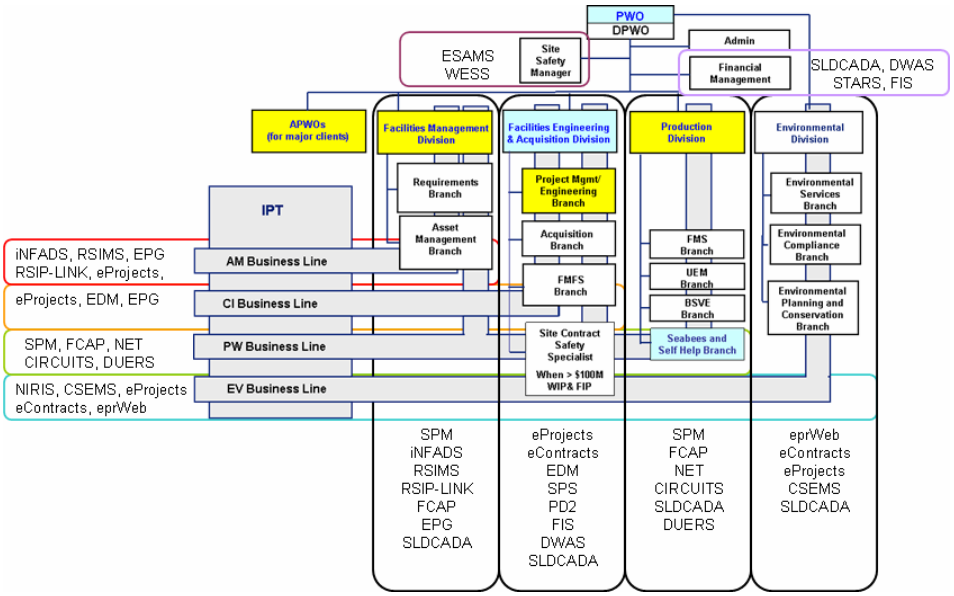

Figure 9-2-1. Snapshot of IT Tools Used by PWD

Work Induction System

As mentioned previously, a major step in this initiative has been the development and implementation of the NAVFAC Work Induction System (WIS). The WIS is a standard, electronic, work induction tool that automatically routes incoming work items for execution to the appropriate Responsible Team: PWD, IPT, FEC core, LANT/PAC Core, NFESC, or WIB regardless of Supported Command or funding source.

Any NAVFAC employee or contractor employee who is currently involved in bringing new items of work into their work group will use the WIS. NAVFAC Business Line

Leaders (BLLs) have developed WIS Business Line (BL) rules to identify where incoming work items, both Supported Command funded and mission funded, will automatically be routed for execution. These BLRs consist of three elements: the business line product or service; Categories of Work (COWs) for each product and service; and the appropriate execution team for each product or service.. These BL rules will institutionalize our structural and functional alignment and ensure that a standard work induction process is followed across NAVFAC.

WIS is directly supportive of NAVFAC processes and is integrated within Single Platform MAXIMO (SPM) and directly connected to eProjects for process and information management.

The benefits of the WIS include:

1. Improved execution tracking of all work items by business line;
2. Improved execution efficiency and effectiveness;
3. Increased accuracy of production data;
4. Increased ability to map work items to real property;
5. Increased strategic integration throughout NAVFAC; and
6. Improved ability to support NAVFAC Supported Command.

Certain aspects of NAVFAC which will not be routed in WIS:

- *Emergency Service Requests* will be managed directly by the Emergency Help Desk without having to first be routed by the WIS. These work items are captured in SPM through the WIS entry screens and follow typical existing SPM pathways.
- *Contingency Engineering Requests*.
- *Echelon IV Navy Working Capital Fund Transportation* products and services will continue to be managed through the transportation applications (TR) within SPM.

More in the Work Induction System can be found in NAVFAC INST 3354.1. Training guides and additional information on how to utilize WIS can be found on the NAVFAC Portal under the CIO page for Application Support.

https://portal.navfac.navy.mil/portal/page/portal/cio/cio_appssupport_pp/wis_support

Interoperable Enterprise Facilities Management (ieFACMAN)

ieFACMAN is a central login for NAVFAC enterprise software applications including ePeople, eContracts, eProjects and eClients that is to be employed across all NAVFAC commands and business lines. ieFACMAN is an integrated suite of "best of breed" commercial applications and existing NAVFAC corporate systems that is continuously improved to provide a solution which:

- Implements standard, corporate business practices across NAVFAC.
- Provides the functional tools needed to perform and manage NAVFAC's work.
- Captures information about all NAVFAC work in a common data environment.

ieFACMAN is comprised of four principle submodules that support NAVFAC.

- *ePeople* is the enterprise software application that serves as the NAVFAC personnel data base repository for civilian, military, and contractors. ePeople is designed to feed critical personnel information to other programs in ieFACMAN, eliminate system redundancies, improve data integrity, streamline maintenance, and reduce data calls to the field
- *eContracts* provides a solution which integrates NAVFAC procurement functions with those of work induction, project management, construction administration and financial management such as SPM, eProjects, and Facilities Information System (FIS) reducing redundant data entry for procurement personnel. The system is designed so that contract specialists, contracting officers and contracting officer authorized representatives can input and retrieve authoritative information about any given NAVFAC contract. eContracts will facilitate metric collection and satisfies client report requirements.
- *eProjects* is used to track all contracted projects and to provide flexible recording. It is used to create the Design-in-Place (DIP) metrics and it provides end-to-end project management by integrating schedule (MS Project), cost (Facilities Information System), maintenance (SPM), contract actions (Contracts module), and construction status using a shared database. The result is flexible data usage and reporting to all echelons simultaneously.
- *eClients* is a subset of eProjects for use by our clients. It provides our NAVFAC clients with appropriate views and reports of work performed at their specific locations.

The goal of ieFACMAN is to be a comprehensive data management system by which NAVFAC executes work and provides key information to NAVFAC and its many customers.

The link to ieFACMAN is: https://iefacman.navfac.navy.mil.

Single Platform MAXIMO (SPM)

Single Platform MAXIMO is a unified, end-to-end enterprise system which is the primary work input and management tool for the PWD. The PWD should manage all work in SPM, except MILCON and large special projects. Work can be entered and tracked by PWD personnel or directly by clients.

SPM is designed to create consistent processes and improve decision-making across NAVFAC, which helps to reduce operations and maintenance costs

MAXIMO is configured to specifically support the following functional areas:

- Work management and dispatching
- Asset and iNFADS management
- Emergency/service calls
- Minor/specific/work requests
- Preventive maintenance
- Projects (MILCON, special projects, regional authority, demolition)
- Inspection/Annual Inspection System
- Transportation
- Material inventory management
- Purchasing
- Worker automation through the use of Personal Digital Assistants (PDAs)
- Integration with other enterprise systems

Navy Enterprise Transportation (NET) System

Navy Enterprise Transportation (NET) is based on MAXIMO Transportation 5.2, which is a commercial-off-the-shelf (COTS) system with functionality built around industry best practices. NET has been configured based on input from Base Support Vehicles and Equipment (BSVE) product line personnel; so that it will support the specific business process needs of NAVFAC. NET supports the following functional areas:

- Dispatching
- Asset Management (vehicles and other BSVE equipment, including certified equipment, and iNFADS support)
- Work Management
- Emergency/service calls
- Minor/specifics/work requests
- Preventive maintenance
- Repair parts inventory management
- Fuel inventory management
- Fuel consumption and purchasing
- Purchasing
- Equipment inventory objective tracking
- Equipment billing
- Integration with other enterprise systems

Internet Navy Facility Assets Data Store (iNFADS)

The iNFADS system is the Real Property Inventory (RPI) for the DoN. This enterprise system includes all of the data necessary to support RPI, Planning, and Acquisition for the Navy and Marine Corps. iNFADS has been operational since 2001. iNFADS has four modules: installation, facilities, category code, and planning.

- The Facility module contains data on each existing facility (building, structure, utility and land) owned or leased by the Department of the Navy. Data is provided on facility location, acquisition, construction, size, cost, capacity, utilization, and condition. This is the official DoN real property database.
- The Activity module contains general information on Navy and Marine Corp activities including geographic, mailing, special area and command proponent data.

- The Category Code module is an automated file containing category codes, descriptions, and units of measure, as well as the corresponding DoD Facility Analysis Codes (FAC) and construction cost factors.
- The Planning module contains facility requirements and facility planning documents.

Facilities Condition Assessment Program (FCAP)

The FCAP tool is a decision support software application helps PWD managers make decisions for the investment of facility Sustainment, Restoration, and Modernization (SRM) funds. The software application is a customized version of the commercial off-the-shelf program Vertex®. It aggregates facility deficiencies (following inspections) entered at the facility component level, e.g. HVAC, roof, building envelope, etc. with basic information about the building, e.g. PRV, year of construction, type of construction (block, steel frame, etc.) to determine a Facility Condition Index. The system then recommends a facilities maintenance strategy to maintain or improve facility condition, as well as providing a quantitative tool for budget development.

Electronic Project Generator (EPG)

The EPG is a web-based software system that supports the development, review, and approval of all NAVFAC project proposals requiring the DD Form 1391. The DD 1391 is the programming document used by DoD to submit project requirements and justification in support of funding requests for military construction to Congress. EPG is the paperless vehicle by which DD 1391 supported projects are entered into the NAVFAC planning, programming, and budgeting process. It provides for cost estimating integration. This system can be used to view final DD 1391s at each installation, region, IMC, FEC, OPNAV, NAVFACHQ, NAVCOMPT, OSD, and Congressional level. Access can be obtained via the ieFACMAN application on https://portal.navfac.navy.mil.

Regional Shore Installation Management System (RSIMS3)

RSIMS3 is an internet-based decision support application that is a key piece of the Navy's geo-readiness program. RSIMS3 supports the Navy installation and environment (I&E) community by providing the capability to view, report, and analyze shore installation facility data via a map interface. In 2003, CNIC selected RSIMS as the future enterprise level facilities and installation decision support tool for the entire Navy I&E community. For Public Works personnel, RSIMS will:

- Provide a single, integrated source for information about the built environment, including facility information, utility connections, and existing projects.

- Provide access to facility information as well as planning constraints on both the natural and built environments.
- Display utilities by overlaying them on a digital base map.
- Locate equipment within building and recommend preventive maintenance management.
- Provide general building location and base maps.

Defense Readiness Reporting System-Navy (DRRS-N)

DoD Directive 7730.65 establishes a new Defense Readiness Reporting System to measure and report on the readiness of the military forces and supporting infrastructure. The directive stipulates that the basis of readiness assessment and reporting be centered on the ability to accomplish assigned missions, as described through the construct of Mission Essential Tasks (METs).

COMFLTFORCOM (FFC) acts as the executive agent on behalf of OPNAV for development and implementation of DRRS-N. FCC and CNIC have worked jointly to develop the DRRS-N installation application. This application allows commanders to make a subjective assessment of the ability of the installation to conduct it base/fleet support mission, as informed by performance measures, resource availability and military experience and judgment. The installation's ability to perform a MET or mission area is assessed as "Yes", "Qualified Yes", or "No".

The DRRS-N application records each commander's assessment of his or her organization's ability to conduct assigned mission, mission areas, and the essential tasks associated with those mission areas in accordance with established standards and conditions. Commanders will consider the resource information available (personnel, equipment, supply, training, ordnance, and facilities) that may influence the conduct of these missions and tasks, and their own experience when making assessments. DRRS-N links cost to readiness and facilities to operational unit's METs through command-linked tasks.

Regional Shore Infrastructure Plan Link (RSIPS-Link)

The RSIP-Link incorporates the regional and global sharing of information using commercial-off-the-shelf software and web-based tools. The goal of the RSIP-Link is to be an effective vehicle for managing and displaying planning data and supporting documentation generated as part of the RSIP process. The RSIP-Link provides the framework for this data in an efficient and manageable structure, affording decision-makers timely access to the accurate, up-to-date information they need to make informed decisions regarding current and future development strategies.

The RSIP-Link acts as a central access point for data pertaining to all the business lines and regional activities including but not limited to business, base development and planning, environmental, real estate, capital improvements and base operations support. Through the means of an interrelated computer network, the RSIP-Link becomes a shared resource with shared responsibilities, whereby all data is maintained at its source and integrated into the system. Managers, planners, decision-makers, and authorized users are able to interactively query and view critical enterprise

Facilities Information System (FIS)

The Facilities Information System (FIS) is a mainframe corporate database that provides Headquarters and the Facilities Engineering Centers (FECs) with the information they require to execute and monitor the Navy's Facilities Command (NFC) programs. This system integrates and encompasses all aspects of general fund facilities management including but not limited to: financial management, project management, and acquisition support. FIS processes acceptance of projects, project funding, establishment of execution plans, the accomplishment of work, and payment processing. FIS has widened visibility from NAVFACHQ to the PWD FEAD and ROICC level, from when a remote office identifies a need for funds to when the funding for a field modification has been provided. It has highly sophisticated interfaces with the Standard Accounting and Reporting System (STARS) financial system, one-pay invoicing system, and a recent interface with Wide Area Workflow (WWAF).

Standard Procurement System (SPS)

Standard Procurement System (SPS) is the automated procurement system for use by the DoD procurement community. It is the cornerstone of the Navy's paperless acquisition effort. Procurement Desktop-Defense (PD2) is a commercial-off-the-shelf software that serves as the architecture behind SPS. SPS standardizes procurement business processes and automates contract writing and administration actions. It is a feeder system for several Navy, DoD, and federal department-wide enterprise systems to provide better management, greater efficiency, accountability, and reliability of financial, business, and contracts data.

Standard Accounting and Reporting System (STARS) FL

Standard Accounting and Reporting System (STARS) FL, a defense finance accounting service (DFAS) system, is an interactive, real time accounting system which serves as the official General Fund accounting system for the Navy and other DoD agencies. It includes subsystems to handle departmental, client and field accounts, as well as accounts payable for payment of vendor invoices. STARS was created to improve the overall effectiveness of the Navy's management through the standardization of financial and accounting procedures and systems in response to various finance and accounting reform initiatives. Contract specialists use STARS to track contractor invoice actions at the PWD. This site shows payments made, interest accrued, and days late for each contract. NAVFAC pulls late interest payment information from this site. Most of the transactions in STARS are transparent because FIS transactions create STARS transactions which are uploaded daily. It is important to note that these are transactions into STARS and not merely an interface. From a STARS and DFAS standpoint it is as if individuals were entering transactions directly into STARS.

COGNOS™

COGNOS™ is a commercial-off-the-shelf application being utilized by FIS, iNFADS, and TOAARS (Table of Allowance Assessment Reporting System) as a business intelligence suite to support FIS reporting programs such as work-in-place/design-in-place, resource allocation plan, labor, funds, general ledger, and other financial-oriented projects, as well as a variety of non-FIS data. Three basic types of decision making formats are provided by COGNOS™ reports, ad hoc queries and cubes. A cube is a multi-dimensional data analysis tool that can be manipulated by a user with just-in-time information without changing the underlying data source.

Navy Electronic Commerce Online (NECO)

The Navy Electronic Commerce Online (NECO) is the internet repository where contractors are able to view NAVFAC contract solicitations. When contractors go to FEDBIZOPS for access to government solicitations, they will be directed to the NECO site for NAVFAC specific solicitations.

Defense Utility Energy Reporting System (DUERS)

DUERS is an application used to collect energy cost, consumption, and square footage data. Installations input the data on a monthly basis. Quarterly reports are generated. The DUERS data provides essential energy management information which is used to evaluate energy trends and to determine progress toward goals and targets. For more information refer to the user's manuals available at https://energy.navy.mil.

Environmental Readiness Program Requirements Database (EPRWeb)

EPRWeb is an online database used to define all programming for the Navy's Environmental Quality (EQ) program requirements. EPRWeb records data on project expenditures, and provides immediate, web-based access to requirements entered by the installation, region and Budget Submitting Office (BSO). The BSO is responsible for ensuring all EQ requirements are entered in EPRWeb. The database is the source document for determining all programming and budgeting requirements of the EQ program. EPRWeb is also the tool for providing the four Environmental Readiness Level (ERL) capabilities used in producing programming and budgeting requirements for various processes within the Planning, Programming, Budget, and Execution System (PPBES). At a minimum, CNO (N45) will support funding for all applicable federal, state, and local laws and regulations and international and overseas requirements.
The four Navy ERLs have been established. These levels enable capability based programming and budgeting of environmental funding and facilitate required environmental readiness capability required to maintain compliance with applicable legal requirements. ERL4 is considered the absolute minimum level of environmental readiness capability.

Hazardous Substance Management System (HSMS)

HSMS is an automated chemical tracking system providing "cradle-to-grave" tracking not only of the hazardous material used at a facility, but also the chemical constituents of those materials. The system facilitates Emergency Planning and Community Right-to-Know Act (EPCRA) reporting. The system also provides activities with a tool to analyze

the flow of hazardous material while developing sound management techniques that (1) reduce the amount of hazardous material procured and used and (2) reduce the amount that becomes waste. The HSMS is a similar system used at the Naval Air Depots. The Regional Hazardous Inventory Control System (RHICS) is replacing HSMS at shore facilities.

Enterprise Safety Application Management System (ESAMS)

NAVFAC has selected Enterprise Safety Application Management System (ESAMS) as their single Safety and Occupational Health (SOH) management system. ESAMS provides a secure NMCI compliant web-based means to manage all facets of the Navy's safety and health programs. ESAMS will enable CNIC to fully comply with all current OSHA and OSH standards, and provides real time data for headquarters and command level personnel allowing them to make informed decisions based on current data and metrics.

Web Enabled Safety System (WESS)

Web Enabled Safety System (WESS) is the Naval Safety Center's on-line reporting and data retrieval system. It allows users to submit initial mishap/hazard notifications, to submit mishap and hazard reports and route them through the releasing chain for validation by the Naval Safety Center, allows users to update investigation reports, and authorizes the release of canned or queried reports based on access rights.

Contractor Performance Assessment Reporting System (CPARS)

CPARS is a web-enabled application that collects and manages the library of automated CPARs. CPARS is for UNCLASSIFIED use only. Classified information is not to be entered into this system. A CPAR assesses a contractor's performance and provides a record, both positive and negative, on a given contractor during a specific period of time. Each assessment is based on objective facts and supported by program and contract management data, such as cost performance reports, client comments, quality reviews, technical interchange meetings, financial solvency assessments, construction/production management reviews, contractor operations reviews, functional performance evaluations, and earned contract incentives. CPARS is used to document contractor performance on systems and non-systems contracts including services, information technology, operations support, systems, and ship repair and overhaul.

Architect-Engineer Contract Administration Support System (ACASS)

ACASS is a web-enabled application that supports the completion, distribution, and retrieval of Architect-Engineer (A-E) contract performance evaluations (DD Form 2631). ACASS is for UNCLASSIFIED use only. An evaluation assesses a contractor's performance and provides a record, both positive and negative, on a given contract. Each evaluation is based on objective facts and supported by contract management data, such as quality of A-E services by discipline, and assessments of the attributes of the engineering services as to accuracy, thoroughness, schedules, cost constraints, technical capability, and other contract performance requirements.

Construction Contractor Appraisal Support System (CCASS)

CCASS is a web-enabled application that supports the completion, distribution, and retrieval of construction contract performance evaluations (DD Form 2626). CCASS is for UNCLASSIFIED use only. An evaluation assesses a contractor's performance and provides a record, both positive and negative, on a given contract. Each evaluation is based on objective facts and supported by contract management data, such as contract performance elements that evaluate quality, timely performance, effectiveness of management, and compliance with contract terms, labor standards, and safety requirements.

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Human Resources

Chapter 10

Our people are the foundation for all we do. All we acquire is of little worth without the people who give it value. Our policies and practices must enable us to attract, recruit, retain and fulfill the men and women of America, and our Navy must reflect the diversity of our Nation. The demographics, attitudes, and expectations of our population are changing and we must understand that dynamic. – ADM Gary Roughead, CNO

SECTION 10-1. PERFORMANCE MANAGEMENT

National Security Personnel System

The National Security Personnel System (NSPS) is a flexible civilian personnel management system that enables the Department of the Navy (DoN) to meet the national security demands of the twenty-first century. NSPS includes an enhanced human resources system, covering staffing, compensation (pay banding), and performance management (pay for performance) compared to earlier Title V personnel systems.

Key Terms

Performance Expectations are the duties responsibilities, and competencies required by, or objectives associated with, an employee's position and the contributions and demonstrated competencies that management expects.

Job Objectives are expressions of performance expectations in the performance plan that are linked to the organization's goals and missions. Job objectives are used to communicate major individual, team, and organizational responsibilities, contributions and the related outcomes expected during the appraisal period.

Contributing Factors are the attributes and behaviors that are significant to the accomplishment of the job objectives. There are seven contributing factors: communication, cooperation and teamwork, critical thinking, client focus, leadership, resource management, and technical proficiency.

Performance Indicators are general descriptions of levels or thresholds of performance used to measure, evaluate, and score the achievement of objectives. The performance indicators are provided at Level 3 and Level 5 for each pay schedule and pay band.

Performance Payout is comprised of a base salary increase, a bonus, or a combination of the two. An employee who receives a rating of record of Level 3 or higher is eligible for a performance payout.

Rating of Record is a score assigned to record the employee's overall performance. The rating of record is based on a scale of 1 to 5.

1 Unacceptable
2 Fair
3 Valued Performer
4 Exceeds Expectations
5 Role Model

Pay Pool is the organizational elements or units or other categories of employees that are combined for the purpose of determining performance payouts. An employee is only in one pay pool at a time. Pay pool also means the amount designated for performance payouts to employees covered by a pay pool.

Pay Pool Manager is the individual designated to manager the pay pool, resolve discrepancies, and ensure consistency.

Pay Pool Panel is usually senior management officials, including the pay pool manager, of the organizations or functions represented in the pay pool that assist the pay pool manager in the exercise of his or her responsibilities.

Exploring NSPS

The merit system safeguards, such as protection from discrimination and selections based on merit remain under NSPS. Veterans' preferences are preserved. There are no changes to employee benefits (leave accrual, insurance and retirement). Retirement calculations continue to be determined as they are today with any base salary increases counting toward an employee's "high three".

NSPS fulfills the merit principle that equal pay should be provided for work of equal value, with appropriate consideration of both national and local rates paid by employers in the private sector, and appropriate incentives and recognition should be provided for excellence in performance.

NSPS requires a significant time investment, particularly by the supervisor. Careful thought must be given to establishing employees' objectives, providing them performance feedback throughout the year, and rating them correctly at the completion of the cycle. Employees will focus on those items they are measured on, so correctly identifying them is essential. Likewise, your employees' pay is determined by their accomplishment of their objectives and your recording of that accomplishment, as validated by the designated Pay Pool Manger.

NSPS Organization

NSPS uses pay schedules, a set of related pay bands for a specified category of employees within a career group. A pay band or band is a work level and associated pay range within a pay schedule. Each pay schedule may include one or more pay bands. The pay bands within a pay schedule represent progressively higher levels of work with correspondingly higher pay ranges. NSPS uses a method for describing and documenting duties, responsibilities, and qualifications requirements for jobs (position descriptions). Within the four career groups: standard, scientific and engineering, investigative and protective services, and medical, typically there are four pay schedules, professional/analytical, technician/support, supervisor or manager and student. More pay schedules may be assigned depending on the career group requirements. Pay schedules define and categorize positions based on the nature of work performed, the career patterns, the mission, and job competencies. See Figure 10-1-1.

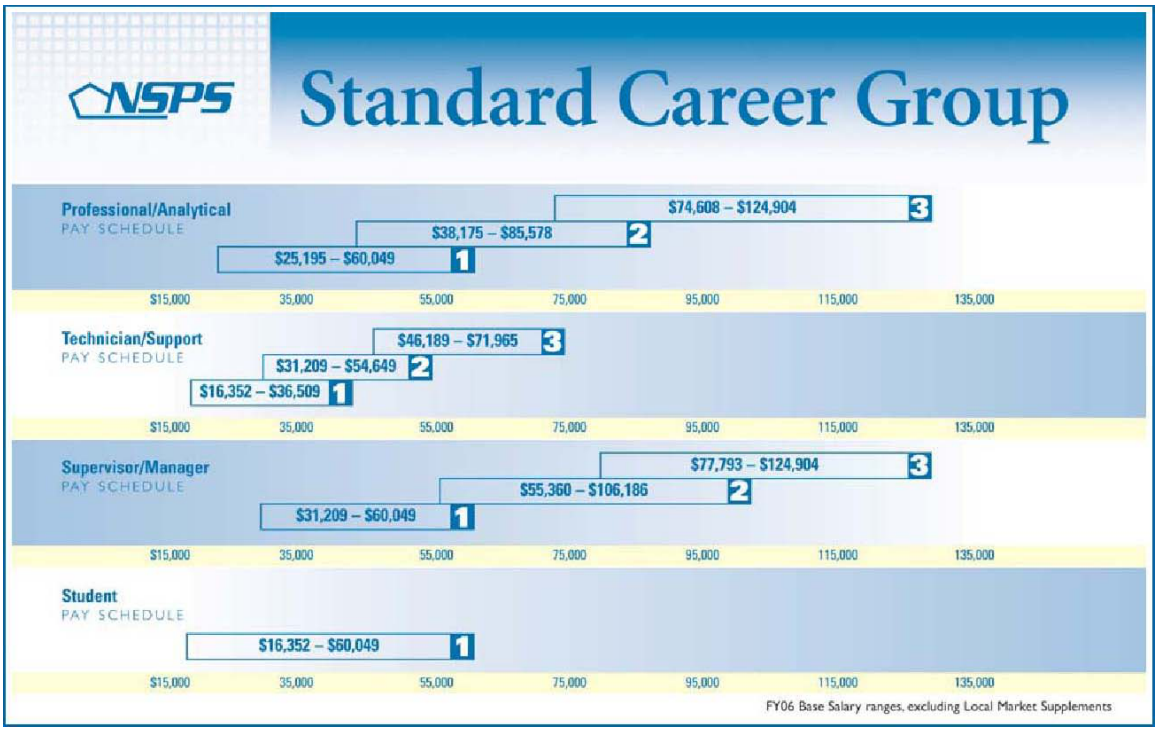

Figure 10-1-1 FY 2006 Pay Schedule

Measuring Performance

One of the cornerstones of the NSPS is the performance management system. This system establishes the rules to compensate and reward an employee based on performance and contribution to the mission. Understanding how performance and contribution link to achieving organizational goals and DoD's critical mission is important. When performance expectations and work are aligned with organizational goals and the DoD's mission, value to the organization and mission is enhanced.

Pay is directly affected by the employee's performance and contribution. Along with performance affecting the rate range and local market supplement adjustments; it also affects what the employee receives as a performance payout. Every year, the organization sets aside a pay pool fund using a prescribed calculation as directed by the Secretary of Defense. Performance is the key determinant of whether an employee qualifies for a performance payout. The performance payout can be in the form of a base salary increase, a bonus, or a combination of the two. The performance payout is based on the rating of record and current salary.

Performance Appraisal Review System (PARS) or Alternative Performance Appraisal System (APAS)

For non-NSPS employees, the Navy uses a two-level summary rating program, which appraises an employee's performance as being at either the "Acceptable" or at the "Unacceptable" level, often called Pass/Fail system.

The key elements of the system are the establishment of a performance plan, progress reviews to monitor performance, and a rating of record. The command will establish the annual appraisal period, which is normally the fiscal year once the organization is fully or partially converted to NSPS. An employee must serve for a minimum of 90 days under a performance plan under the same first level supervisor to be rated. The performance plan should be provided within 30 days after the appraisal period begins, and the rating of record completed no more than 30 days after the end.

Supervisors should develop a written performance plan for each covered employee based on work assignments and responsibilities. Performance plans must include all critical elements and related performance standards. Each performance plan must have at least one critical element that addresses individual performance. The use of non-critical elements is prohibited. The employee's participation in the development of the performance plan should be encouraged, but final responsibility for ensuring establishment of a plan rests with the first-level supervisor.

A documented progress review should be conducted midway through the appraisal period. Progress reviews should be informative and developmental in nature and include discussions between first and second level supervisors and team leaders. At a minimum, employees should be informed of their level of performance by comparison with the performance elements and standards established. Progress reviews do not require the assignment of a summary level; however, the first level supervisor and employee must sign and date the progress review.

Military Evaluations and Fitness Reports

Fitness reports (FITREPs) and evaluations (EVALS) serve three functions: they document performance, provide feedback, and serve as basis for decisions by selection boards and the advancement system. Poor inputs are the inevitable result of last minute recollections of the year's contributions written in haste. FITREPs and OSR/PSR breakouts are the single, most important element in promotion decisions made by boards.

The military evaluation and fitness report system is extensively documented elsewhere. The Public Works Departments will submit their reports to the FEC for review, ranking, and signature. Establishing continuity across the disparate PWD's and processing the large number of reports requiring the FEC CO's signature will be a protracted process, requiring early and complete submissions for the individual PWD's. Each FEC will establish its own requirements for supporting documentation and ranking boards.

The Public Works Officer is assigned additional duty to the installation and will receive a concurrent fitness report from the installation CO. This report is then submitted to the FEC CO for endorsement.

SECTION 10-2. PERSONNEL POLICIES

Standards of Conduct

The Navy and Marine Corps have a strong tradition that requires all of us to conduct ourselves in the highest ethical manner, to be honest and truthful in our dealings with each other and with those outside the Department of the Navy, and to act in the best interest of the Department of the Navy and the nation, without regard to personal consequences. There are rules and standards to help guide us when we encounter ethical issues in the performance of our official duties.

These standards include fourteen bedrock principles of ethical conduct outlined in Executive Order 12674, as well as specific rules for a wide range of activities, such as accepting gifts from outside sources, impartiality in performing our duties, and use of our official positions. Keep in mind, however, that ethical decision-making is not solely a function of whether a law or regulation permits us to do something. We must also consider whether the action sets the right example and is the honorable thing to do.

The Navy has developed a simple list to reinforce the tenants of the Executive Order along with a Core Values Charter that defines the heart of the Navy's commitment to ethical behavior:

Navy Core Values

- Honor: I am accountable for my professional and personal behavior. I will be mindful of the privilege I have to serve my fellow Americans.
- Courage: Courage is the value that gives me the moral and mental strength to do what is right, with confidence and resolution, even in the face of temptation or adversity.
- Commitment: The day-to-day duty of every man and woman in the Department of the Navy is to join together as a team to improve the quality of our work, our people and ourselves.

DoN Code of Ethics

DO

- Place loyalty to the Constitution, the laws, and ethical principles above private gain.
- Act impartially to all groups, persons, and organizations.
- Give an honest effort in the performance of your duties.
- Protect and conserve federal property.
- Disclose fraud, waste, and abuse, and corruption to appropriate authorities.
- Fulfill in good faith your obligations as citizens, and pay your federal, state, and local taxes.
- Comply with all laws providing equal opportunity to all persons, regardless of their race, color, religion, sex, national origin, age, or handicap.

DO NOT

- Use nonpublic information to benefit yourself or anyone else.
- Solicit or accept gifts from persons or parties that do business with or seek official action from DoD (unless permitted by an exception).

- Make unauthorized commitments or promises that bind the government.
- Use federal property for unauthorized purposes.
- Take jobs or hold financial interests that conflict with your government responsibilities.
- Take actions that give the appearance that they are illegal or unethical.

Equal Employment Opportunity (EEO)

It is the continuing policy of the Department of the Navy to ensure equality of opportunity and treatment of all individuals. It is necessary that we continue our commitment to the creation of an environment of full equality while accomplishing our basic mission through the dedicated efforts of our people. These responsibilities are inherent in every echelon of the supervisory and management chain, both military and civilian. All employees should be given the opportunity to perform and develop to their maximum potential.

Every military and civilian manager is expected and required to be knowledgeable of the meaning of equal opportunity and to pursue the objectives of the affirmative employment program. Supervisory personnel must recognize and execute their responsibility in regard to EEO matters. EEO is not preferential treatment or lowering standards for individuals, but is the standard operating procedure of conducting business in a manner, which precludes any form of discrimination. All supervisors and managers, military and civilian, will:

- Create and maintain an effective results-oriented EEO program within their organizational unit.
- Ensure that all employees are apprised of and guaranteed freedom from reprisal for use of the EEO complaint process.
- Support the implementation of an Affirmative Employment Program in accordance with the requirements outlined SECNAVINST 12720.5A.
- Reflect EEO achievements in annual performance appraisals or fitness reports.
- Educate employees on the Navy and the command's EEO Program.

Diversity

Diversity has made our Nation and Navy stronger. To derive the most from that diversity, every individual, military or civilian, must be encouraged and enabled to reach his or her full potential. They must be inspired and empowered to attain the most senior levels of

leadership. That empowerment is unleashed by involved, thoughtful, proactive, and enlightened leaders. Leaders are entrusted with the duty and responsibility to set and live the example by creating an environment where every individual's contribution is valued and respected. Future empowerment is cultivated by an active commitment to attracting and recruiting the very best. The Navy must foster an environment that respects the individual's worth based on his or her performance regardless of race, gender, or creed.

Leaders must anticipate and embrace the demographic changes of tomorrow and build a Navy that always reflects the Country's citizenry. Diversity of thoughts, ideas, and competencies, keeps our Navy strong, and empowers the protection of the freedoms and opportunities citizens enjoy each and every day. The vast talent, diversity, and experience of the Nation's citizens will continue to be the country's strength, and will ensure the Navy's relevance and the Nation's security and prosperity.

Sexual Harassment

Sexual harassment in any form will not be tolerated. NAVFAC must be composed of an optimally integrated group of men and women who are able to work together to accomplish the mission. Every employee is entitled to be treated fairly, with dignity and respect, and must be allowed to work in an environment free of unlawful discrimination.

The DoN is committed to maintaining a work environment free from unlawful discriminatory practices and inappropriate behavior. In support of this commitment, it is DoN policy that:

- Sexual harassment is prohibited. All DoN personnel, military and civilian, will be provided a work environment free from unlawful discrimination which includes sexual harassment. Off-duty or non-duty behaviors that affect the military workplace may also be considered to be sexual harassment.
- All DoN personnel will be educated and trained annually, in the areas of identification, prevention, resolution and elimination of sexual harassment. Annual training shall include the application of pertinent informal and formal complaint procedures.
- Individuals who believe they have been sexually harassed shall be provided the opportunity to seek resolution and redress. Commanders and those in supervisory positions shall ensure that notification of sexual harassment can be made in a command climate that does not tolerate acts of reprisal, intimidation, or further acts of harassment.
- All personnel shall be made aware of the avenues of resolution and redress that are available.

- Counseling support or referral services will be made available for all personnel involved in incidents of sexual harassment.

All reported incidents of sexual harassment shall be investigated and resolved at the lowest appropriate level. The nature of the investigation will depend upon the particular facts and circumstances and may consist of an informal inquiry where that action is sufficient to resolve factual issues. All incidents shall be resolved promptly and with sensitivity. Confidentiality will be maintained to the extent possible. For civilian employees, confidentiality is guaranteed during the informal stage of a discrimination complaint, if requested.

Drug Free Work Place

Illegal drug use is incompatible with the maintenance of high standards of conduct and performance. Moreover, illegal drug use could adversely affect personnel safety, risk damage to government and personal property, and significantly impair day-to-day operations.

The determination that an employee uses illegal drugs may be made on the basis of direct observation, a criminal conviction, the employee's own admission, or by a confirmed positive drug test. All civilian appropriated and non-appropriated fund employees may be subject to drug testing under the following conditions:

- When there is a reasonable suspicion that the employee uses illegal drugs.
- As part of an authorized examination regarding an accident or unsafe practice.
- As part of or as a follow-up to counseling or rehabilitation for illegal drug use.

If there is a reasonable suspicion that an employee uses illegal drugs or an accident or unsafe practice has occurred that warrants drug testing, the servicing Human Resources Office (HRO) should be contacted for local procedures to conduct a drug test. This will normally require the issuance of a letter to the employee describing the reason for the test, the procedures for the test, and the employee's rights. The employee will then be taken to the nearest medical treatment facility (MTF) for the test. Results will be returned to the HRO who will advise the supervisor of the findings.

Civilian Employee Assistance Program

The Civilian Employee Assistance Program (CEAP) provides confidential assistance to civilian employees who have problems involving the misuse of alcohol, drugs, job stress, or other mental health or personal problems which have or may have an adverse effect on job performance.

Programs are administered by the local HRO office and services are typically provided by contract counselors; depending on the contract, services are often available 24 hours a day, seven days a week. CEAP is an employee benefit and is strictly confidential. The assessment and evaluation by a CEAP counselor is free, counseling after the CEAP service is usually covered by an employee's health insurance.

The employee may contact the CEAP representative directly or supervisors may refer an employee because of a job performance issue.

SECTION 10-3. WORKPLACE POLICES

Timekeeping

Tracking time and attendance for employees is an essential portion of the PWD business. It is critical to have both the normally scheduled work period and the actual worked period accurately recorded and reported in order to compute pay, leave, and allowances. For NWCF personnel and those employees performing reimbursable work, client billing is also accomplished through the timekeeping system through data transfer to the financial system, making timekeeping a basic function of accomplishing the business of the PWD. A variety of work schedules exist that can be used to provide flexibility to the employee as well as coverage for operations. Informing or negotiating with bargaining units may be necessary before changing work schedules. Having an effective manner of collecting and recording time worked is necessary. This activity may be very simple for office employees who regularly work at a computer and only charge to a small number of Job Order Numbers (JONs). It becomes much more difficult to implement for NWCF blue collar employees in the field who may record time on a "dog" sheet that is then passed to the supervisor, then to a time keeper, who eventually enters hundreds of individual line items each week. Recording or clerical errors, or simply falling behind in the process, can have a negative effect on billing and financial statements, not to mention an employees' pay.

At most locations the web-based Standard Labor Data Collection and Distribution Application (SLDCADA) from Naval Sea Systems Command (NAVSEA) provides the time keeping system for PWDs. This web based application is used to record all civil

service time and attendance. Although not intuitive to use, it is a complete system that along with tracking individual's work also provides reporting options. For financial accounting SLDCADA uses job order numbers that are linked to funding.

Timekeeping may be performed by the individual employee, timekeeper, supervisor, or a combination of these individuals. The timekeeping function requires the accurate and timely recording of time and attendance data and the maintenance of related documentation. Timekeepers may be civilian, military, or contractor personnel. Timekeepers must follow policy and procedures promulgated by the Defense Finance and Accounting Service (DFAS) Payroll Customer Service Manual.

Alternative Work Schedules (AWS)

The basic work requirement is defined as the number of hours, excluding overtime hours, an employee is required to work or to account for by charging leave. Generally, a full-time employee's basic work requirement is 80 hours in a pay period. An approved work schedule shall be maintained showing the planned arrival and departure for each day to support the time and attendance report.

Flexible Work Schedule (FWS)

Under certain flexible schedules, civilian employees may work longer or shorter hours, including credit hours on any given workday, without taking leave or being paid overtime, so long as their basic biweekly work requirements are met. By electing to work hours in excess of their tour of duty, employees also may complete the biweekly basic work requirements in fewer than 10 workdays without being paid overtime or being charged leave for the non-workdays.

- Flextime is a flexible work schedule that splits the tour of duty into two kinds of time: core hours and flexible hours. Under any flextime schedule, an employee must be at work or on approved absence during core hours and must account for the total number of hours he or she is scheduled to work.
- Flexitour is a flexible work schedule in which an employee, once having selected starting and stopping times within the flexible hours, continues to adhere to these times. Further opportunities to select different starting and stopping times may be provided subsequently by the employing installation.
- Gliding schedule is a flexible work schedule in which an employee has a basic work requirement of 8 hours in each day and 40 hours in each week. Employees may select an arrival time each day and may change that arrival time daily as long as it is within the established flexible hours.

- Maxiflex is a flexible work schedule that contains core hours on fewer than 10 work days in the biweekly pay period and in which an employee has a basic work requirement of 80 hours for the biweekly pay period. The employee may vary the number of hours worked on a given workday or the number of hours each week within the limits established by the organization.

Compressed Work Schedule (CWS)

A compressed schedule is a fixed schedule which enables the full-time employee to complete 80 hours in fewer than 10 full workdays in each biweekly pay period by increasing the number of hours in the workday. There are no flexible times in a compressed schedule. Employees' times of arrival and departure from work are set, as are the days on which they are to complete the basic work requirement.

For employees working under compressed schedules, overtime pay continues to be paid for work outside the compressed schedule. The two most common compressed schedules are the 4-10 and the 5-4/9 schedules. On the 4-10 schedule, employees work 10 hours a day for 4 days each workweek. On the 5-4/9 schedule, employees work 9 hours a day for 8 days, 8 hours for 1 day, and get 1 day off each pay period. Compressed work schedules are determined either by management or through negotiations with exclusive employee representatives. Note, an employee on a CWS cannot work credit hours, as per NAVFAC Instruction 12620.1.

Overtime and Compensatory Time

An authorized official (preferably the official most knowledgeable of the time worked) approves any overtime, compensatory time, or holiday work. The approval, either documented in writing or electronically, shall be retained. Approval shall be granted before the hours are worked whenever feasible and, when not feasible, as soon as possible after the work has been performed. In granting such approval, care must be taken to distinguish between regular overtime and irregular or occasional overtime in order properly to determine an employee's overtime entitlement. Compensatory time earned may be granted for irregular and occasional overtime work only. It is not authorized for regularly scheduled overtime work.

Telework

NAVFAC is committed to improving workforce efficiency while promoting quality of life for its employees and/or members. The development, implementation, and active promotion of telework programs augment NAVFAC's commitment to workforce efficiency and quality of life.

Key Terms

Alternate Worksite - A place away from the traditional worksite that has been approved for the performance of assigned official duties. It may be an employee's home, a GSA telecenter, or other approved worksite including a facility established by state, local or county governments, or private concern.

Telework - An arrangement where an employee performs assigned official duties at an alternate worksite on a regular and recurring or on a situational basis (not including while on official travel).

Telework can be used to ensure continuity of operations during an emergency or crisis, is limited to the conduct of assigned official duties (including training), and may be appropriate for web-based distance and continuous learning. Telework is not a right and may be terminated at the discretion of the supervisor or in response to an employee's request.

Appropriate administrative, technical, and physical safeguards must be in place to ensure the security and confidentiality of records during the storage, transfer, or use of records at authorized alternative work sites. This includes acquisition sensitive and personally identifiable information. Teleworking shall create no adverse impact on the ability to expeditiously meet client, supervisor and colleague needs. Teleworking shall create no adverse impact on productivity, requirements for team collaboration and timely response to emergent tasking and queries. For additional information, see NAVFAC Instruction 12700.1.

The Department of the Navy has a system to account for time that employees are teleworking through the pay system as recorded in SLDCADA. These codes are entered in the EHz field:

- TM Telework Medical: Telework approved for an employee deemed necessary for a medical reason.
- TS Telework Ad Hoc/Situational: Approved telework performed on an occasional, one-time, irregular basis.
- TW Telework Core or Regular: Telework approved on a regular or reoccurring schedule.

Leave

There are three primary types of leave.

Annual Leave

An employee may use annual leave for vacations, rest and relaxation, and personal business or emergencies. An employee has a right to take annual leave, subject to the right of the supervisor to schedule the time at which annual leave may be taken. An employee will receive a lump-sum payment for accumulated and accrued annual leave when separated from federal service or enters active duty in the armed forces and elects to receive a lump-sum payment. A full-time employee will earn 4 hours for each pay period during the first 3 years; 6 hours for each pay period for years 3 to 15; and 8 hours per pay period for 15 or more years of service.

Sick Leave

An employee may use sick leave when incapacitated for the performance of duties by physical or mental illness, injury, pregnancy, or childbirth; receives medical, dental, or optical examination or treatment; or would jeopardize the health of others by his or her presence on the job because of exposure to a communicable disease. Employees may use a total of up to 104 hours (13 workdays) of sick leave each leave year to provide care for a family member who is incapacitated as a result of physical or mental illness, injury, pregnancy, or childbirth; provide care for a family member as a result of medical, dental, or optical examination or treatment; or make arrangements necessitated by the death of a family member or attend the funeral of a family member. Additionally, an employee may use a total of up to 12 workweeks of sick leave each leave year to care for a family member with a serious health condition. A full time employee earns 4 hours of sick leave each pay period.

Leave Without Pay

Leave without pay (LWOP) is a temporary nonpay status and absence from duty that, in most cases, is granted at the employee's request. In most instances, granting LWOP is a matter of supervisory discretion. Employees, however, have an entitlement to LWOP in the following situations:

- The Family and Medical Leave Act of 1993 (FMLA) provides covered employees with an entitlement to a total of up to 12 weeks of LWOP during any 12-month period for certain family and medical needs.
- The Uniformed Services Employment and Reemployment Rights Act of 1994 provides employees with an entitlement to LWOP when employment with an employer is interrupted by a period of service in the uniformed service.
- Executive Order 5396 provides that disabled veterans are entitled to LWOP for necessary medical treatment.
- Employees may not be in a pay status while receiving workers' compensation payments from the Department of Labor.

Other Leave

Leave of Absence

Supervisors may excuse tardiness and brief absences for up to one hour. Administrative dismissal is permitted for unanticipated situations. Administrative leave may be granted in connection with an adverse action. Official time may be granted for union and other representational duties. There is no provision in law or regulation for granting time off without leave charged, i.e. “59 minutes”, for instances such as a holiday. Follow OPM and DoD policy for “excused absence” at www.opm.gov or www.cps.osd.mil.

The Navy has a right to expect employees to regularly be at work, at their assigned work site, and during the assigned hours of work. A variety of patterns may indicate sick leave abuse. When this occurs the supervisor should confront the employee. There may be a legitimate reason that explains the pattern of absences. If not, the supervisor should counsel the employee, require the employee to call in to a designated official or supervisor, and possibly issue a letter of requirement. Careful monitoring of an employee’s leave pattern can uncover abuse. Absences which may indicate sick leave abuse include:

- Frequent, short, and intermittent
- Work day after pay day

- Before/after holiday
- Fridays and/or Mondays
- Same day of the week
- Before/after regular day off (RDO)
- During inclement weather
- Taken as soon as earned

SECTION 10-4. PERSONNEL DEVELOPMENT

Travel

Official travel, travel required and funded by the Navy, is a common occurrence in a Public Works Department. Employees travel for training, rotational assignments, conferences, and a host of other reasons. This temporary additional duty (TAD) is an expense borne by the organization or business line that will benefit from the travel. Before traveling an employee should receive orders. This document states the purpose for traveling, the dates of the trip, the funding source and amount, and logistics (e.g. hotel, airline, and rental car arrangements). Authorized costs are reimbursed by the Navy. Travel orders, termed "authorizations", are generated by the DoD-wide Defense Travel System (DTS). This is a web-based program that allows the traveler to make logistic arrangements, assigns funding, routes the orders for approval, and generates travel documents. To use DTS an employee must have a government sponsored travel credit card. Employees who travel three or more times a year are required to obtain the card. The government Travel Card Program is designed to improve the management and control of government travel and thereby promote the efficiency of the federal Service. The card is issued in the employee's name, and the employee is responsible for all debts incurred using the card. Misuse of the card may result in disciplinary action. Upon returning from travel the employee receives reimbursement for authorized costs via the DTS "voucher" process. Reimbursement funds are distributed directly to the travel card and to the traveler's bank account.

Training and Individual Development Plans

NAVFAC is committed to creating a culture that encourages, supports, and invests in the short- and long-term development of its employees. Employees' professional development should be an ongoing process to ensure employees are staying current in their fields and mission-critical competencies. Planning for continuous development must be anchored to the command's mission, goals, objectives, and needs, as well as be tied to the employee's work and career goals.

Individual development planning helps identify the employee's career development goals and the strategies for achieving them. Typically, the employee will complete an Individual Development Plan (IDP) on an annual basis. This plan is intended to:

- Encourage the employee to take ownership of his/her career development
- Provide an administrative mechanism for identifying and tracking development needs and plans
- Assist in planning for the agency's training and development requirements

Individual development planning benefits the organization by aligning employee training and development efforts with the mission, goals, and objectives of the agency. Supervisors develop a better understanding of their employees' professional goals, strengths, and development needs—which can result in more realistic staff and development planning. Employees take personal responsibility and accountability for their career development, acquiring or enhancing the skills they need to stay current. Supervisors and employees work together to complete the employee's development plan, but employees are ultimately responsible for taking the initiative for their professional development.

It is NAVFAC policy to prepare IDPs for all civilian employees. An automated template for preparing the IDP may be found at the NAVFAC portal or accessed via ePeople. IDPs are prepared in conjunction with published Community Management Plans for each of the major DoN communities that exist within NAVFAC plans normally contain the following:

- Career goals – short-term and long-term goals with estimated and actual completion dates
- Development objectives – linked to work unit mission/goals/objectives and employee's development needs and objectives
- Training and development opportunities – specific formal classroom training, workshops, rotational assignments, shadowing assignments, on-the-job training, self-study programs, professional conferences/seminars, etc., that employee will pursue with estimated and actual completion dates

NAVFAC and the Navy offer a wide variety of funding options to fulfill training requirements and the goals of individual employees. These range from complete travel and training funding of specific requirements of an employee's current position to flexible work schedules to allow an employee to attend school on his or her own. Application and reimbursement policies vary depending on the status of the employee, (e.g. active duty military, acquisition workforce member) as well as the type of course desired: certificate, credential, degree, required or developmental. There is probably a program for the individual's specific case.

One of the most popular is for civilian after-hours education and professional credentials and licenses tuition assistance. It is designed for employees participating in a planned, systematic, and coordinated professional development after-hours program. The program is for employees systematically developing work related skills to meet current and future staffing and expertise requirements to accomplish the NAVFAC mission. Participation must be pre-approved and is subject to a variety of limits and restrictions. Refer to the published NAVFAC Community Management Plan for further guidance.

SECTION 10-5. RECOGNITION

Awards

The awards program is intended to recognize and reward civilian and military personnel for significant contributions to the mission and to encourage creativity and high performance in the workplace by promptly recognizing and rewarding individual and group contributions.

- Specific achievement awards are given to personnel who are formally recognized for specific accomplishments they have accomplished for the Command.
- End of Tour award is presented to an individual at the completion of their tour of duty. This award encompasses all achievements made throughout their time at a Command.
- Cash awards are recognition in the form of a single monetary payment that may be for a special act or service in the public interest in connection with or related to official employment. Cash awards may be used to recognize a group or individual effort that goes beyond expected job performance.

Commands may develop cash awards programs that include Special Act or Service, On-the-Spot, Superior Accomplishment, Suggestion, Invention, or Performance Awards. Cash awards are granted commensurate with the value of the employee's contribution or accomplishment and the appropriate award amount is determined based on the tangible and intangible benefits. A FEC CO has authority to make awards up to $5000 and the Commander, NAVFAC to $10,000.

- Special Act Awards. May be used to recognize a group or individual effort that goes beyond expected job performance. Special Act Awards are used to recognize exceptional accomplishments, such as an outstanding achievement, and may be given at any time.
- On-the-Spot awards. These awards are made through streamlined procedures designed to quickly recognize and provide immediate reinforcement of one-time achievements by employees that have resulted in service of an exceptionally high quality or quantity. This award is particularly appropriate for rewarding employee efforts that might otherwise go unrecognized. On-the-Spot Awards range from $25 to $750.
- Performance awards. Recognition of outstanding employee performance achievements should be made as soon after the achievement as possible and not just at the end of the annual performance rating cycle. Note, NSPS covered employees are not eligible for the Performance Award.

Informal Recognition Awards

Informal recognition awards are intended to recognize contributions of lesser scope that might otherwise go unrecognized. In addition, informal recognition awards typically have more informal approval procedures and presentation settings than honorary awards. Given this combination of smaller scope contributions and informality, honorary/non-monetary items presented as informal recognition awards must be of nominal value and must take an appropriate form to be used in the public sector and be purchased with public funds.

Length of Service (LOS) Certificates

These awards recognize significant milestones in employees' careers and emphasize service to the government, rather than service to a particular department or agency. When eligibility for LOS recognition is computed, employees should receive credit for total federal service, including civilian and all honorable military service. The Office of Personnel Management (OPM) LOS certificates are available in five-year increments and recognize service from five to fifty years.

Honorary Awards

Honorary awards can be powerful tools to promote organizational and team goals and objectives. Often these forms of non-monetary recognition can be more effective than cash awards. When there is a mixed workforce including both military and civilian personnel there are different requirements for eligibility for cash awards; however, honorary awards programs may be created that allow recognition of the contributions of both.

There are numerous forms that an honorary award may take, e.g., a medal, letter of commendation, tie tack, pin, coffee mug, belt buckle or plaque. Supervisors are to use discretion on the value of this type of recognition, as these awards are to be modest in cost, usually less than $75, and are normally displayed rather than used.

Given their nature as symbolic formal recognition, items presented as honorary awards must meet all the following criteria:

- The item must be something that the recipient could reasonably be expected to value, but not something that conveys a sense of monetary value.
- The item must have a lasting trophy value. The item must clearly symbolize the employer-employee relationship in some fashion.
- The item must take an appropriate form to be used in the public sector and to be purchased with public funds.

There are three Department of the Navy (DoN) Honorary Awards that recognize outstanding contributions.

DoN Distinguished Civilian Service Award - This award is the highest honorary award the SECNAV can confer on a DoN civilian employee. The award is granted only to those employees who have given distinguished and/or extraordinary service to the Department. The achievements or service must be truly exceptional when measured against the position requirements of the individual, and should far exceed the contributions and service of others with comparable responsibilities. This award should be reserved for contributions that are so unusual and/or significant that recognition at the SECNAV level is deserved.

DoN Superior Civilian Service Award - This award is the second highest honorary award in the DON. The contribution must be of exceptional in value, having significant and far-reaching major Command-wide impact. Echelon 2 and above Commanders may approve this award.

DoN Meritorious Civilian Service Award - This award is the third highest honorary award in the DoN. The accomplishment should be significant and have far reaching impact, but less than the Superior Civilian Service Award. This award should not be used as a retirement award. However, if a significant accomplishment occurs close to retirement, it may be acceptable to present it at retirement. Echelon 2 and above Commanders may approve this award.

Quality Step Increase (QSI)

The purpose of a QSI is to provide appropriate incentives and recognition for excellence in performance by granting faster than normal step increases. A QSI is a permanent salary increase rather than a lump sum payment award. Therefore, careful consideration should be given before granting a QSI. Caution should be exercised when setting the effective date of the QSI when an employee is close to being eligible for steps 4 and 7 so the employee is not at a disadvantaged. As a QSI will be an award of significant magnitude over the length of the employee's service, specific conditions must be met:

- Consistently exceeded job responsibilities and expectations with demonstrated sustained performance of high quality significantly above that expected at the "Acceptable" level.
- Made a significant contribution to the organization's mission, achievements must be truly exceptional when measured against the position requirements of the individual.
- There must be an expectation that the high quality performance will continue in the future.
- Has not received a QSI in the past 52 weeks.

Note, NSPS covered employees are not eligible for QSIs.

Beneficial Suggestion Program

A Beneficial Suggestion Award recognizes individuals or groups for ideas that benefit the government. A beneficial suggestion is a constructive idea submitted in writing that proposes to improve the efficiency, economy or effectiveness of government operations, examples are simplify or improve operations; save time needed to complete a task; speed up production; increase output and enhance productivity; save material and property; save manpower and money; promote health; increase safety; improve morale through desirable and feasible personnel services that increase productivity; improve working conditions, procedures, operating methods or equipment or workspace layouts and organization.

SECTION 10-6. DISCIPLINE

"Managers are strongly encouraged to seek advisement from an experienced HRO Employee Relations practitioner before embarking on any form of discipline. The HRO expert will provide guidance on the formal process to be utilized as well as local guidance specific to the terms of any labor contracts which must be honored. The information contained in this section is provided to create a general understanding of the processes and terminology and should not be used as a resource for starting Disciplinary Action. A mis-step in this process can result in the entire action being overturned."

The first and foremost goal of the DoN disciplinary process is to correct undesirable behavior rather than being punitive in nature.

Unacceptable Performance

At any time during the appraisal period that performance is determined to be unacceptable in one or more critical elements, the employee will be formally notified in writing and given a reasonable opportunity to demonstrate acceptable performance. The objective of the opportunity period or PIP is to provide an opportunity to bring performance up to an acceptable level. Employees must be advised of the critical element(s) determined to be unacceptable and the performance requirement and acceptable standard.

Performance Improvement Plans

A supervisor must complete a Performance Improvement Plan for any employee whose performance in one or more critical job elements is at an unacceptable level. The goal of the PIP is to identify an employee's performance deficiencies and to assist in bringing the employee's performance to a fully acceptable level. If the employee's performance does not improve, the PIP and allied documents, serve as the foundation for determining and supporting the final action taken. The PIP pulls together into a single document the employee's history of unacceptable performance.

The PIP provides documentation that the supervisor has considered cause and effect, provided an opportunity to the employee to demonstrate acceptable performance, and is enforcing the reasonable requirements of the Navy. This logical framework is necessary since under due process the employee, the arbitrator, hearing officer, or judge will ask such questions as:

- Has the employee been clearly put on notice that their performance is unacceptable?

- Has such notice set forth, specific examples of poor performance?
- Has the employee been specifically told what they must do in order to meet the employer's standards?
- Has the employee been offered any assistance, such as training, counseling, or extra help from supervisors in order to overcome deficiencies?
- Has the employee been clearly warned of the consequences of failure to improve performance?
- Has the employee been given a fair opportunity to bring their job performance up to an acceptable level?

The PIP is not intended for use in disciplinary or adverse action cases; however, the PIP is an excellent device to coordinate and pull together documented counseling, training, and supervisory assistance records accumulated over a period of time. The following questions must be addressed in the Performance Improvement Plan:

- Why? The PIP should state why the employee received it. This consists of a general statement of purpose and reasons thereof.
- What has happened? This part of the memorandum consists of a listing of particular instances giving names, dates, or places that constitute unacceptable performance. If the specifics have been previously documented, copies of such documents should be attached. Great care must be taken to be specific and factual.
- What must be done? The employee must be specifically told what must be done in order to meet the supervisor's standards. This should consist of a specific list of things to do in order to improve performance. It should be a complete, but simple, detailed list. This part of the PIP will be written to answer the question, "What can the employee do in order to meet the job standards?" The plan must tell the employee in simple terms what must be done in order to save meet acceptable standards.
- What assistance is available? Management has an obligation to help employees meet job standards. Thus, the plan must set forth those things management is willing to do to assist the employee in improving unacceptable performance. Some common forms of assistance are:

    - Providing publications and books.
    - Providing opportunities to visit other locations to observe the work of others.
    - Providing counseling with a trained counselor.
    - Providing attendance at training programs.

- Have trained personnel work with and assist the employee. The employee's attitude and participation in programs of assistance must be documented.
- If you have reason to suspect (or discover during counseling) that the employee's poor performance is caused by personal or behavioral problems, encourage the employee to seek assistance from the Civilian Employee Assistance Program (CEAP).

- *How long?* The PIP should include the time span by which the employee is expected to meet job standards. This period should be a reasonable timeframe commensurate with the duties and responsibilities of the position but generally should be not less than 30 and not more than 90 calendar days. A specific date can be used instead of a specified number of days. The employee must know the cutoff date in advance.
- *What are the consequences?* The employee must know in advance the consequences of failure to improve and meet the job standards. The following or similar phrase should be used in the PIP:

  By (date), if you fail to make the necessary improvements in your work performance as outlined in this Performance Improvement Plan, I will have no other alternative but to recommend that your employment be terminated."

The PIP is used to clearly document that the employee knew why they were performing unacceptably, were told what to do, and were given a fair opportunity to correct the problem over a reasonable period of time, with management's help, prior to removal. Such documentation is extremely persuasive to arbitrators, hearing officers, and judges.

Adverse Actions

Although relatively few employees ever require disciplinary or adverse actions, a supervisor may need to employ such means to correct behavior and maintain discipline. Possible actions include admonishment, caution, reprimand, suspension, demotion, or removal. Such actions can be taken for a wide variety of reasons involving some form of improper conduct, on or off the job, or poor performance. When an employee's conduct or capabilities do not promote the efficiency of the Naval service, disciplinary or adverse actions are to be initiated promptly. Failing to take action will inevitably create a more difficult and time consuming situation.

Examples of unacceptable behavior or performance include attendance problems, work performance deficiencies, insubordination, safety violations, violations of established rules, or falsification of records. Disciplinary action is taken for the purpose of correcting employee behavior, and it is generally the policy to take the minimum action which can be expected to correct the behavior. It is highly recommended that the manager consult with a knowledgeable Employee Relations Specialist in the Human Resource Office before initiating any type of potential disciplinary or adverse action.

Unless a single action is egregious, the disciplinary action may be one of escalation, with first an oral admonishment, then a letter of caution before actual disciplinary action is taken. Neither an oral admonishment nor a letter of caution will be counted as a prior offense in determining a range of remedies; however, they may be considered in determining that the employee was clearly on notice that the behavior was inappropriate and in determining an appropriate remedy within the range for a subsequent offense should an offense later occur.

Employees may contest letters of reprimand and suspensions of 14 days or less under the Navy Administrative Grievance Procedure or, if represented by a union, under a negotiated grievance procedure. Adverse actions (removal, suspension of more than 14 days, indefinite suspension, reduction in grade, and furlough of 30 days or less) may be appealed to the Merit Systems Protection Board. Recipients of disciplinary or adverse actions will be notified in writing of their right to appeal or grieve and the time limits for doing so.

Roles and Responsibilities

The supervisor recommends disciplinary action.

The investigating official examines the facts and circumstances surrounding the incident(s) and draws conclusions and recommendations. The investigating official may also be the supervisor.

The deciding official issues a notice of final decision on an adverse or disciplinary action. Typically this is the next higher individual in the chain of command from the person recommending the disciplinary action (the supervisor).

It is the employee's responsibility to perform acceptably; to be at work regularly; and to conduct him or herself acceptably while on the job.

Investigations

An investigation will detail the facts pertaining to poor performance or unacceptable behavior. A carefully planned and executed investigation will make the disciplinary process flow smoothly. There are multiple steps in a well conducted investigation:

Plan the Investigation

- The situation involves a specific event.
- The situation involves physical evidence.
- The situation involves the pursuit of documents.
- The situation involves possible criminal charges.

Interview Subject and/or Witnesses

- Question witnesses separately.
- Start interviews with a general, open question.
- Follow up with specific questions to develop or confirm details.
- Use the 5 Ws as a guideline: who, what, where, when and why.
- Ask catch all questions.
- Identify potential sources of corroboration.
- Document interviews.

Obtain the evidence

- Physical evidence.
- Documentary evidence.
- Routine business records.
- External documents.
- Reference materials.
- Testimonial evidence.

Convert the evidence

- Get it in writing.
- Take a picture.
- Have it analyzed.

Evaluate the evidence

- Credibility factors.
- The character of the witness.
- The record of the witness.
- Demeanor and bearing.

- Reasons for bias.

Selecting the Penalty

There are many disciplinary situations and a wide variety of penalties. In deciding what action to take Subchapter 752 of the *Civilian Human Resources Manual* describes specific disciplinary actions and provides a schedule of offenses and recommended remedies. An installation may take an adverse action, including a performance-based adverse action, only for such cause as will promote the efficiency of the service. Local labor agreements might modify the standard disciplinary procedures, thresholds, or grievance procedures. The elements that affect the selection of the appropriate penalty are called the Douglas Factors:

- The employee's tenure, work history, previous offenses, contributions to the Department of Defense, the likelihood of recurrence of the offense, or an improvement in the employee's performance based on the employee's past record.
- The impact of the employee's action or performance on national security, on fellow employees' safety, morale, and efficiency, and on the integrity of the Department of Defense and the federal government.
- The effect of the offense on the employee's ability to perform at a satisfactory level and on the supervisor's confidence in the employee's ability.
- Mitigating circumstances, such as unusual personal problems that temporarily influence the employee's behavior or newness of the job and lack of knowledge of requirements.
- Whether a violation of law or regulation may have occurred.

The available remedies are

1. Preliminary Warnings or Informal Corrective Actions
    - Oral admonishment
    - Letter of Caution
    - Letter of Requirement
2. Formal Disciplinary Actions
    - Letter of Reprimand
    - Suspensions of 14 days or less
    - Suspensions of over 14 days
    - Reduction in grade and pay
    - Removal

Offenses and Penalties

Admonishments are informal actions that often serve as the first step in constructive discipline. An admonishment is an oral discussion between the supervisor and employee. It is used for an offense that does not, by itself, warrant a reprimand but that will, if repeated, warrant formal disciplinary action. The supervisor makes an informal record of the date of the discussion and the subjects covered. Reference to the admonishment shall be cited in any future action as evidence that the employee was informed of the seriousness of the offense and of possible future disciplinary action. The employee must be advised that an informal record is being kept and that the incident may be cited in future disciplinary action.

A letter of requirement prescribes procedures the employee must follow in the future. This requirement is based upon a failure by the employee to conform to expected norms. A letter of requirement may impose more stringent demands for a fixed period of time on the affected employee than is required of other employees. A letter of requirement is a grievable action, but is not made a matter of record in the employee's official personnel file nor is it counted as a prior offence when determining a range of remedies.

Formal disciplinary actions consist of official reprimands, suspensions, and removals. They are initiated by the immediate supervisor of the employee being disciplined. All formal disciplinary actions must be approved by the deciding official.

A reprimand is an official criticism given to an employee in a formal letter for a serious violation of a rule of conduct, law, regulation, official instruction, or particular responsibility. A reprimand also may be given for repeated minor offenses about which the employee has been counseled or for which the employee has been admonished orally. A letter of reprimand is the least serious formal disciplinary action that may be taken against an employee. A letter of reprimand is typically maintained in the employee's official personnel folder for 2 years, during which time it may serve as a basis for justifying more severe disciplinary action should a further infraction occur. A letter of reprimand is a grievable action.

When an employee is suspended, he or she is not allowed to work or earn pay for a specified number of days. Suspension for misconduct or delinquency and removal from duty are imposed when an employee fails to improve his or her conduct after being admonished and reprimanded. For a suspension for 14 calendar days or less an employee has the right to advance notice of the proposed action; a reasonable (not less than 24 hours) time to reply; representation; and a written agency decision. A suspension of more than 14 calendar days requires at least 30 days written notice, unless there is reasonable cause to believe the employee has committed a crime for which a sentence of imprisonment may be imposed. A suspension is a grievable action.

Trial and Probationary Employees

Disciplinary rules are significantly different for those employees still serving their probationary tour. The requirement that all career federal employees serve a probationary period for 1 year provides protection against the retention of any person who, in spite of having passed preliminary tests, is found lacking in fitness and capacity for permanent government service. When the employee's conduct, general character traits, or capacity does not fit him or her for government service, the supervisor must initiate action to separate the employee. When the removal action is based on deficiencies in performance or conduct after entrance on duty, the employee must be notified in writing of the reason why he or she is being terminated and the effective date of the action.

Timing of Actions

An employee may be reduced in grade or removed at any time during the performance appraisal cycle that performance in one or more critical elements of the job becomes unacceptable. As a prerequisite to the initial steps toward removal, the employee must be advised of his or her unsatisfactory performance, and supervisory assistance must be provided in correcting the identified deficiencies. The employee shall be advised of the work requirements he or she must satisfy and be given a reasonable opportunity to meet them. This reasonable opportunity to meet work requirements constitutes a "full and reasonable trial," and may not be less than 30 calendar days. If, after the full and reasonable trial, the employee fails to meet the minimal acceptable work standards established, action to remove or demote may then be initiated.

SECTION 10-7. WORKFORCE MANAGEMENT

Recruiting and Hiring

Filling vacancies successfully involves anticipating hiring actions and using all available flexibilities and strategies.

- Initiating the fill action
- Defining and capturing the need
- Ensuring there is an adequate position description (include job analysis, crediting plan, statement of service, etc.)
- Considering issues that may impact hiring, such as:
  - Installation requirements
  - Bargaining unit agreements
  - Funding
- Using mandatory placement programs
- Choosing the area of consideration
- Selecting the best qualified candidate
- Transitioning the selectee into the organization

Successful recruitment is a collaborative effort between the supervisor, the command, and the human resources recruitment partners (HRO and HRSC). Following these steps will make the process go smoothly.

<u>Step 1: Conduct Pre-Recruitment Workforce Planning</u>

Employee turnover can be unpredictable and may occur at the most inopportune times. To minimize its impact, plan ahead. Such planning may include:

- Regularly evaluating future workforce needs
- Considering recruitment needs
- Assessing the labor market
- Determining how to attract and retain talented people for continued employment

Step 2: Recruitment Strategy

Two critical determinants of new hire quality are job fit and organization fit. The job fit is determined by the extent to which the individual's skills and interests align with the daily activities and expectations of the job. The organization fit constitutes the extent to which the individual is in synchronization with the organization's environment and culture.

Most commonly a manager sends a recruitment request to the HRSC consultant who returns a certificate of candidates to choose from. However, there are other recruitment methods.

Internal candidates (current federal employees)

- Detail - Temporary assignment to a position, at the same, lower, or higher grade. No change in pay.
- Reassignment - Temporary or permanent. An assignment to a position at the same grade.
- Change to lower grade - An assignment to a position at a lower grade.
- Transfer - Movement from one agency to another. May or may not involve a grade change.
- Promotion - Temporary, term, or permanent. Some temporary promotions may be made without competition among applicants.
- Career ladder - Positions that are filled in a manner to allow an employee to develop, through training, into the journey level.
- Installation-wide - Some positions may be filled competitively without formal vacancy announcements. Supervisors may select a candidate for promotion without formal competition when the area of consideration is small enough that all potential applicants are known to the selecting official. If this method is used, the selecting official must evaluate each candidate equitably. Officials should identify on the Request for Personnel Action that this option was used and provide a copy of the evaluation documents. Documentation must include a list of all qualified candidates considered, the evaluation criteria upon which the candidates were evaluated and a brief justification of why the candidate was best qualified.

External candidates (the general public or a former federal employee)

- Reinstatement eligibles - Former federal employees who may be hired based on a previous permanent appointment.

- Delegated examining authority - Authority delegated to the HRSC to issue an announcement open to the general public
- OPM registers - Vacancy announcements issued by OPM that are open to the general public (OPM charges a fee for this service and the hiring installation provides the funding)
- Veterans' Employment Opportunities Act (VEOA) eligibles - federal or non-federal employees with qualified military service.
- Temporary appointment authority. Appointments made to fill short term position not expected to last more than one year. The appointment may be extended for a second year
- Term appointment - An appointment for up to four years.
- Former overseas employees - Appointments that can be made to eligible employees returning to CONUS.

If you are interested hiring from the private sector, then Delegated Examining (DE) is an option. This hiring authority allows you to fill vacancies where the source of applicants is non-federal or not appointable under any other appointing authority. General guidelines are:

- Area of consideration is open to any U.S. citizen
- Current permanent employees and others with status who apply are rated and considered the same as any other U.S. citizen
- An announcement is required for DE positions
- Must be advertised, at a minimum, through OPM's USAJOBS website
- There is a minimum public notice period
- Mandatory Placement Programs always apply
- Veteran's preference applies. Veterans eligible for preference have 5 or 10 points added to their eligible rating. Disabled (10 point) veterans who qualify automatically go to the top of the certificate for most jobs regardless of their score
- Selection must be made from among the top 3 eligibles on the certificate. Veterans cannot be passed over to select equal or lower rated non-veterans

In some instances, your vacancy may be filled through mandatory placement programs such as the Department of Defense (DoD) Priority Placement Program (PPP).

The Priority Placement Program (or Stopper List) is a Department of Defense placement program for employees adversely impacted by actions such as RIF, base closures, contracting out, and transfer of function. When a vacancy occurs, well-qualified personnel, who have pre-registered in the program, may be referred to fill the vacancy. PPP registrants must be considered before certain outside job applicants. The PPP is also used to place overseas returnees, employees on retained grade, and spouses of active duty military members.

Step 3: Recruitment Request

A Request for Personnel Action (RPA) sent to the HRSC initiates the hiring action. The following information must be included:

- Contact information (name, telephone number, and email address)
- Selecting official (the person authorized to approve the selection)
- An official (signed), up-to-date Position Description (PD) for the vacancy and a PD coversheet
- A brief description of the training, education, and/or experience that would indicate an applicant is best qualified for your vacancy.

Pay flexibilities allow supervisors to add incentives to the regular pay package where when there is difficulty in hiring (recruitment) or keeping qualified workers (retention). Each of these options has specific requirements and procedures that need to be followed.

- Recruitment bonus - A one-time payment to entice a candidate to accept an agency's offer of employment. This may be used for positions that are hard to fill, where the candidate is high quality and not a current federal employee.
- Superior qualifications appointment - Setting a new employee's pay higher than the minimum rate because of his/her superior qualifications or because the employee meets a special need of the agency. The possibility of using a recruitment bonus must be considered before using this appointment.
- Travel and transportation expenses - Payment for a candidate's travel expenses to a pre-employment interview, or payment of travel and transportation expenses for a new employee's move to his/her first federal position.
- Relocation bonus - A one-time payment to entice a current federal employee to accept a position in a different commuting area. This cannot be used with the Travel and transportation expenses mentioned above.
- Dual compensation waiver - This pay flexibility allows the re-employed annuitant to collect both full retirement pay and a full paycheck.

- Advance in pay - A payment of no more than two paychecks, advanced so that a new employee can meet living and other expenses.
- Special salary rate - A pay rate that is set higher than the minimum for all employees in a particular occupation, grade, agency, or geographic location because of existing or likely problems in the recruitment/retention of well-qualified personnel. Special salary rates require OPM approval.

Step 4: Selection

When selecting someone for a vacancy, the supervisor's task is to select the best individual for the job from among eligible candidates. Remember to:

- Compare all candidates on the same criteria
- Consider awards, training, and education
- Make your decision based upon job requirements
- The candidate's application
- Previous supervisor's recommendations
- Performance evaluations
- Candidate interviews

Inform the selectee of the contingent job selection. If the selectee declines the contingent job selection, either move on to your next selection or return the certificate to your HRSC consultant and request to be contacted to discuss your next recruitment options. If the selectee accepts the contingent job selection, send your selection certificate along with a copy of the selectee's pay. In addition, if your selectee already works for you or your department and the new position does not have any additional pre-employment requirements (e.g., physical, clearance, etc.), determine/negotiate the new position start date and send this information to your HRSC and HRO consultants.

Notifying applicants who were not selected sends a positive message about the command's professionalism, encouraging them to apply for future vacancies. Inform those non-selected applicants (who were previously contacted) of the selection decision. This may be accomplished via a short telephone call or email. If any applicant asks why they were not chosen, simply state that another applicant's skills and abilities were determined to be the best fit for the position.

Step 5: Assist in The Pre-Employment Screening and In-Processing

The most critical thing to do at this point is to keep regular contact with the selectee. Additionally, discuss the specifics of the pre-employment requirements with the HRO consultant and offering to help. Arrange to set up the selectee's work desk and other equipment, e.g., computer, telephone, etc. that they will need on their first day. Communicate the new hire's start date to other employees and appoint a sponsor for the new hire to help them acclimate to the organization.

Step 6: Integrate Your New Hire Into Your Organization

What happens during the first few months is critical to integrating the new hire into the organization and maximizing their productivity. Within the first 30 days ensure the new employee clearly understands what their performance objectives are, how they link to the mission of the organization, and how they will be measured. Provide early, informal reviews to ensure that the employee is on track and giving actionable feedback on what they can do to maximize performance. Give the employee the opportunity to participate in such programs as the Thrift Savings Plan (TSP), medical insurance, savings bonds, etc. Keep copies of recruitment-related documents, e.g., interview notes, for a minimum of two years from the new hire's start date in case of a third-party review.

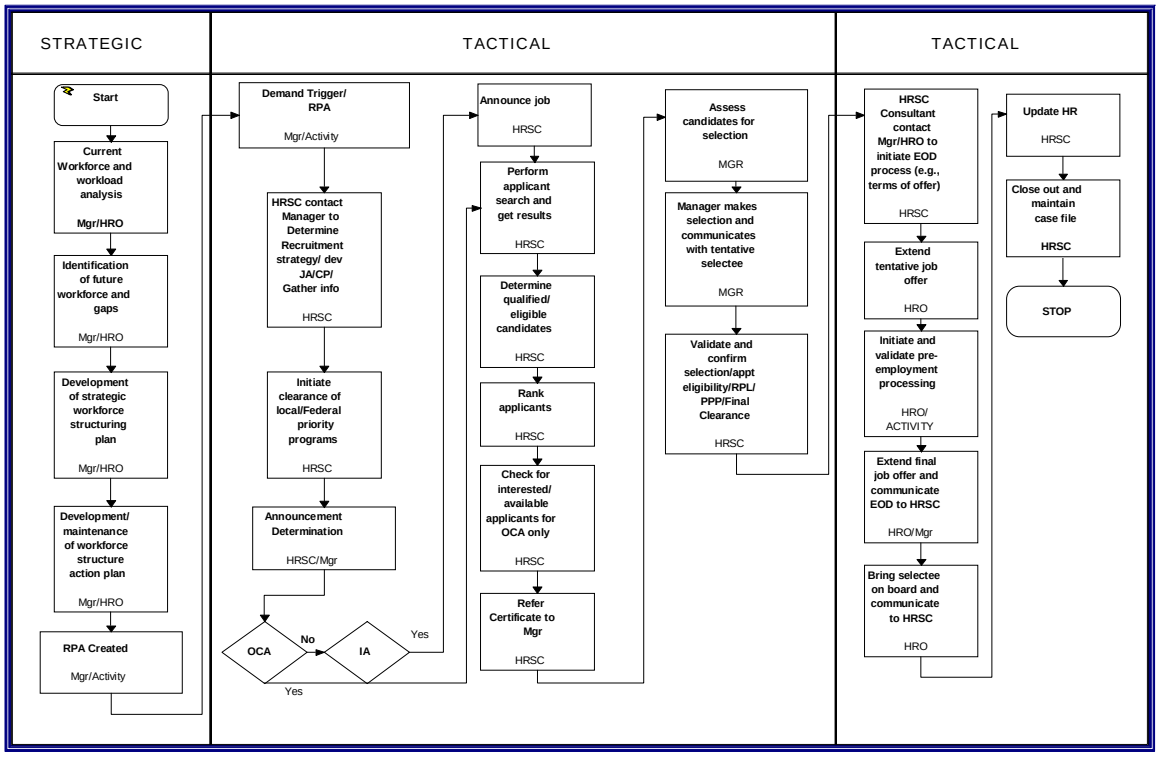

Figure 10-7-1. Hiring Process Labor-Management Relations

Navy civilian employees are permitted to organize, bargain collectively, and to participate through labor organizations of their choice in decisions affecting their working lives under the Federal Service Labor-Management Relations Statute (FSLMRS), which is administered by the Federal Labor Relations Authority (FLRA).

Labor-management relations must be focused on supporting and enhancing the DON mission. Strong, positive labor-management relationships help create and maintain a high performance workplace that delivers the highest quality products and services at the lowest possible cost. Such relationships help managers and employees pursue solutions that promote increased quality and productivity, client service, mission accomplishment, efficiency, quality of work life, and mission readiness.

When a union petitions to represent a group of employees, the FLRA determines the appropriateness of the requested unit. If the unit is appropriate, the affected employees will be given the opportunity to vote on whether or not they choose to be represented. Elections are supervised by the FLRA. After a union is certified by the FLRA as the exclusive representative of the bargaining unit, union and management will negotiate a collective bargaining agreement (CBA) covering conditions of employment for bargaining unit employees. Since federal employees can not negotiate on pay, working conditions are typically the major item of interest. A CBA must contain a grievance procedure that provides for binding arbitration as final step in the grievance process. The specifics of CBAs differ and a manager must be familiar with the conditions of their own agreement, e.g. when must an employee call in on sick leave.

The FSMRS creates rights and obligations on the part of unions, management and employees. When a party feels that their rights under the FSLMRS have been violated, they may file a unfair labor practice (ULP) charge with the FLRA Regional Office; however, it is generally advisable to settle the dispute at a lower level. Each FEC has a procedure for reviewing, negotiating, and settling grievances that normally involves escalation through the chain of command. The causes of a ULP typically arise because of a bargaining obligation or negotiability dispute.

Bargaining obligation disputes generally occur when a union or agency claims that, under the circumstances, it does not have an obligation to bargain with the other party, even though the proposal may be one that it is legal for unions and federal government agencies to negotiate about. If the refusal to bargain is not justified under the law, it may be a ULP, and the party seeking to bargain may file a ULP. Examples of this kind of dispute are an agency's claim that it is not obligated to bargain over a change in employee working conditions because the change is not significant or because it already has an agreement with the union that covers this subject.

Negotiability disputes occur where unions and agencies disagree over the legality of specific contract proposals or provisions. These disputes involve agency claims that a contract proposal made during bargaining involves a subject that is outside the duty to bargain under all circumstances. They also occur where an agency head disapproves negotiated contract language on the ground that it is contrary to law. Examples of these disputes include whether a proposal is contrary to a government wide regulation or whether it affects management rights set out in the FSLMRS.

A labor organization which has been accorded exclusive recognition must be given the opportunity to represent an employee in the bargaining unit at an examination by a representative of management in connection with an investigation if the employee reasonably believes that the examination may result in disciplinary action against the employee, and the employee requests representation.

It is generally advisable to keep the exclusive representative of the bargaining unit informed and involved in decisions and actions that will affect the working conditions of employees. Under most circumstances and collective bargaining agreements, management has a duty to provide prior notice of changes in working conditions. Formal notification and negotiations over changes can frequently be avoided if union representatives are involved and contribute to the change. Examples include development of a telework program; renovations to the PWD building; or requirements to wear safety equipment. The servicing HRO has a labor relations specialist who can assist in negotiations with the bargaining unit.

Competitive Sourcing and Most Efficient Organizations

Most Efficient Organizations (MEOs) are the separate organizations within an agency that the agency is required to establish when it wins a competition with the private sector to perform a function the agency was previously doing. This bidding process is called competitive sourcing and it is conducted in accordance with Circular A-76 issued by the U.S. Office of Management and Budget and in accordance with the Federal Activities Inventory Reform Act. Under the President's Management Agenda, proportions of federal employees in most agencies are subject to this process—on the order of 50-75 percent of all the employees in many agencies. The MEO is performance-based. That is it must perform the work promised in the agency's winning bid and achieve the specific levels of service for the price (cost) it committed to in its competitive bid. Most of the bids are based on administrative consolidations, process reengineering, and new degrees of automation; they promise substantial savings, particularly in personnel reduction.

The MEO results from an acquisition process that is conducted under the Federal Acquisition Regulations (FAR), and it is governed and its success is tracked under the terms of a Letter of Obligation (LOO) that is similar to a contract. Any deviation from the LOO is allowed only in accordance with official modifications of the LOO approved by the contracting officer (CO) responsible for the individual LOO. And, the LOO modification is roughly equivalent to a contract modification.

Navy Enterprise and Supported Commands

Appendix

A

The sole reason NAVFAC exists is to provide the Supported Commands with the equipment, facilities, tools, and expertise needed to accomplish the mission.

NAVY ENTERPRISES

The NAVY Enterprise is an initiative designed to improve the understanding of the Navy's business practices so it can remain the most effective and efficient Navy in the world. The Navy's resources - people, time, and money - are precious and the Navy must ensure that it maximizes its Return on Investment (ROI) in everything it does. The Navy's workforce - active duty, reservist, and civilian - is its most valuable resource. They are improving the way the Navy conducts business every day by focusing on the warfighter and promoting an open and collaborative culture committed to delivering current readiness and future capability requirements needed to accomplish the mission.
Two key methods to improve ROI are:

- Improving the output/cost ratio associated with all major processes
- Aligning and resourcing our lines of business to achieve the intended outcome in the most effective and efficient manner

Enterprise Management is the processes, forums, and enabling tools used by Navy senior leadership to manage the efficient and effective production of current readiness and future capability. By ensuring the perspective of others are considered and/or evaluated prior to implementing major business area process improvements, it strengthens the decision making process substantially and fosters an environment of collaboration and transparency. Responsibilities of Enterprise management include:

- Setting enterprise objectives
- Assessing progress
- Removing barriers
- Making decisions (per vested authorities)

- Communicating enterprise-wide successes

The Navy Enterprise Organizational Construct is designed to foster collaboration and tighten cross-organizational linkages necessary to deliver warfighting readiness and capability effectively and efficiently both today and tomorrow.

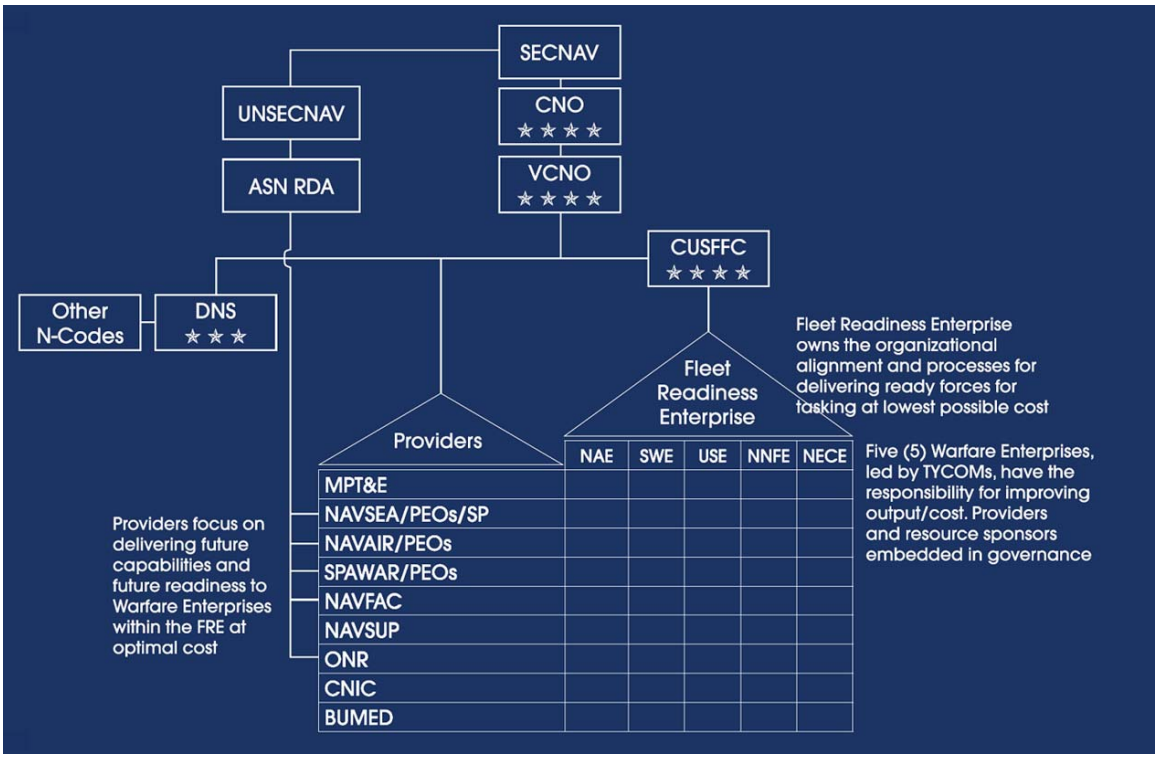

Figure 1. Navy Enterprise Organization Construct

The Fleet Readiness Enterprise (FRE), led by Commander, US Fleet Forces Command (CUSFFC), integrates activities of the five (5) Warfare Enterprises with the fleet training domain, supporting Providers, and resource sponsors to optimize cost-effective delivery of operational forces Ready for Tasking by Combatant Commanders.

The Providers—composed of nine (9) Providers and associated Program Executive Offices (PEOs)—work together to deliver future capabilities and support current readiness to the Warfare Enterprises at the best cost. Providers supply manpower, assets, parts, supplies, research and development, health care, and supporting infrastructure to the FRE and other Providers.

NAVFAC is instrumental part of the Navy Enterprise through its management of the facilities engineering lifecycle that leads to the delivery of future capabilities and support of current readiness to the Warfare Enterprises.

WARFARE ENTERPRISES

Naval Aviation Enterprise (NAE)

The Naval Aviation Enterprise is a warfighting partnership where interdependent issues affecting multiple commands are resolved on an enterprise-wide basis. The NAE enables communication across all elements of the enterprise, fosters organizational alignment, encourages inter-agency and inter-service integration, stimulates a culture of productivity, and facilitates change when change is needed to advance and improve. Working together optimizes the use of existing resources, manages the costs associated with generating readiness, and harnesses change as a positive force within our Navy and Marine Corps.

The Naval Air Systems Command (NAVAIR) is the principal provider for NAE and contributes to every warfare enterprise in the interest of national security. NAVAIR provides acquisition, research, development, test and evaluation, and in-service support capabilities for airborne weapons systems.

Surface Warfare Enterprise (SWE)

The Surface Warfare Enterprise (SWE) develops sailors and warships to produce an adaptable, dominant, lethal, surface force ready to meet warfighting requirements across all mission areas. This is accomplished by producing "Warships Ready for Tasking", the apex of a pyramid. The base of the pyramid consists of the core strengths, maintenance and modernization, logistics, and manning. The next level, training, is essential to transform the people and the technologically advanced ships into "Warships Ready for Tasking". This enterprise will transform personnel, training, sustainment, and modernization strategies to ensure surface warriors continue to own the battlespace.

Undersea Enterprise (USE)

The Undersea Enterprise is composed of all stakeholders and resources supporting or operating SSNs, SSGNs, SSBNs, fixed surveillance, or mobile surveillance forces. The primary elements of the enterprise and its resource sponsors include dollars and manpower for current and future platform and crew readiness. Commander Naval Submarine Forces (CSF), the head of the Undersea Enterprise, sets the strategy, priorities, requirements, and overarching direction for suppliers, resource sponsors, and producers to ensure a quality product for the enterprise clients.

Naval NETWAR FORCEnet Enterprise (NNFE)

The Naval NETWAR FORCEnet Enterprise is an enterprise-wide approach to understanding the business of Command, Control, Communications, Computers, Combat Systems and Intelligence (C5I) and Information Operations (IO). This is a collaborative effort between NETWARCOM, SPAWAR, PEO, C4I and Space, NAVSEA, OPNAV, and other commands that provide C5I and IO support to the fleet. The goal is to collectively develop processes, collaboration, and metrics across the enterprise to align the traditional functional commands and better understand the costs of conducting business and how it relates to readiness. This will in turn allow the enterprise to make better decisions when applying critical resources, dollars and manpower, and provide the right products and services to the warfighter faster and more efficiently.

Navy Expeditionary Combat Enterprise (NECE)

The Navy Expeditionary Combat Enterprise (NECE) is comprised of the NECC staff, all subordinate commands and all other commands that influence and support the warfighting capability of the NECC Force. NECC is responsible for manning, training, equipping and providing combat ready forces. NECE is responsible for the different supporting processes (funding, acquisition, individual training, etc.) essential to sustain the force. NAVFAC provides a critical role to NECC and the NECE by serving as its lead systems command.

PRINCIPLE SUPPORTED COMMANDS

The sole reason NAVFAC exist is to provide the Supported Commands with the equipment, facilities, tools, and expertise needed to accomplish the mission.

DoN Supported Commands

NAVFAC is the Department of the Navy's facilities engineering systems command. In this role, NAVFAC provides facilities engineering and acquisition support to the Navy and Marine Corps.

Navy

Commander Navy Installations Command (CNIC) is a provider in the Navy Enterprise that has shore installation management responsibility and authority as the Budget Submitting Office for installation support for the Navy. As a result of this responsibility, NAVFAC is a critical enabler for CNIC in executing its responsibilities and achieving its mission through NAVFAC's facilities engineering and acquisition support.

CNIC's mission is to provide consistent effective and efficient shore installation services and support to sustain and improve current and future Fleet readiness and mission execution. They accomplish their goals by providing unified and consistent procedures, standards of service, practices, and funding to manage and oversee shore installation support to the Fleet. CNIC executes delivery of installation services through its regions and installations. This mission involves the coordination of policy, planning, budgeting, and reporting for all regions and shore installations.

Civil Engineer Corps Officers are assigned to the staffs of CNIC and its regional commands. These assignments leverage the facilities engineering and acquisition support expertise of NAVFAC.

NAVFAC further supports CNIC and the Navy's installations with its numerous Public Works Departments throughout the world that serve as the forward deployed delivery point for facilities engineering and acquisition support.

US Marine Corps

The Headquarters, US Marine Corps consists of the Commandant of the Marine Corp and staff agencies that advise and assist. The Deputy Commandant, Installations and Logistics (DC I&L) acts on behalf of the Commandant in designated matters of logistics policy and management, and coordinates logistics actions with other agencies.

The Marine Corps installations are regionalized into three major and two minor installation regions known as Marine Corps Installations (MCI) commands. The major installation groupings are aligned with the Marine Expeditionary Force commanders and include MCI East (Lejeune) and MCI West (Pendleton).

The Navy supports the Marine Corps in shore installation management through the assignment of Civil Engineer Corps Officers on the staff of MCI commands, as Public Works Officers, and as members of the Public Works organization at Marine Corps installations. These assignments leverage the facilities engineering and acquisition support expertise of NAVFAC.

The Facilities and Services Division of the Installations and Logistics Department is responsible for shore installation management. A Navy Civil Engineer Corps (CEC) Officer serves as the Facilities Branch Head.
NAVFAC supports Marine Corps installations with numerous Resident Officer in Charge of Construction (ROICC) offices throughout the world that are responsible for administering and executing construction contracts on behalf of the Marine Corps.

OTHER SUPPORTED COMMANDS

NAVFAC and the U.S. Army Corps of Engineers are the designated construction agents for the Department of Defense (DoD). A DoD construction agent is assigned the design and/or construction execution responsibilities associated with the military construction program. DoD Directive 4270.5, Military Construction, assigns NAVFAC and the U.S. Army Corps of Engineers as DoD construction agents. This directive directs Defense Agencies and DoD Field Activities to use the U.S. Army Corps of Engineers or NAVFAC for the maintenance, repair, design, construction, rehabilitation, alteration, addition and/or expansion of a real property facility. The directive also directs the Department of the Air Force to use the U.S. Army Corps of Engineers or NAVFAC for the design and construction of their annual military construction program.

As a DoD construction agent, NAVFAC provides varying levels of facilities engineering and acquisition support to the other military services and defense agencies. In general, this support is primarily focused at the award and administration of construction contracts.

In addition to supporting DoD, NAVFAC on occasion provides similar services to other government agencies when determined to be in the interest of efficiency, cost effectiveness, or otherwise considered appropriate.

Navy Ashore Capabilities

Appendix

B

Shore facilities represent an important investment and should be managed with a similar degree of commitment, concern, and support, as are ships, aircraft and weapons systems. They should be constructed to satisfy specific mission requirements, kept ready through planned maintenance programs, and considered for modernization, replacement or demolition when obsolete and uneconomical to maintain and operate. The following provides a broad overview of goals, expectations, and the relative areas of emphasis for the various types of facilities found at the Navy's major shore installations.

The Navy Ashore is integral and vital to future Navy mission success because it is a delivery mechanism for those capabilities that directly impact Warfighter readiness. It is more than "brick & mortar" infrastructure, rather it is inclusive of all the Navy's component activities that take place on, launch from, or are controlled by land-based operations. These include a multitude of logistics, training and personnel support programs as well as the Total Force that executes these programs, our Sailors, their families and the civilian workforce.

The Navy Ashore vision guides Navy long range planning ashore, linking its global operational strategy with the basing and forward presence strategy. It helps insure that the Navy's strategic ashore plans are fully integrated world-wide and directly support the priorities of the Warfare Enterprises.

GOALS AND GUIDING PRINCIPLES FROM NAV 2035

The goals and guiding principles of the Navy Ashore Vision frame the requirements analysis throughout the planning process and will help maintain a constancy of purpose. These goals and guiding principles will drive the facilities engineering and acquisition support that NAVFAC provides to its Supported Commands.

Goal 1: Right Size and Place (locate, size, and configure shore assets and services to support the Maritime Forces)

Goal 2: Right Quality (assess and deliver installation capabilities needed to provide effective, safe, and environmentally sound living and working places in support of Navy and joint missions)

Goal 3: Right Risk (protect personnel, property, and mission capabilities through informed risk decisions at the appropriate level of leadership)

Goal 4: Right Resource (balance resources and risks to provide high quality installation capabilities, and to optimize life-cycle investment to support readiness)

Goal 5: Right Management Practices (continuously improve installation planning and operations by embracing best business practices and modern asset management techniques)

Goal 6: Right Workforce (develop a high performing, agile, and competent Total Force)

SHORE CAPABILITIES

The shore capabilities support the *Fleet, Fighter, and Family* in diverse functional areas that enable the Navy to fully execute its tasked and implied mission areas. The shore capabilities of the Navy are diverse. The capabilities include Waterfront Operations, Airfield Operations, C5ISR Operations, Expeditionary Operations, Intermediate/ Depot Level, Maintenance Support, Ordnance/Weapons Support, Training Support, Supply & Storage Support, Sailor and Family Support, Medical Support, Base Support, and RDAT&E. A short description of the shore capabilities is provided

Waterfront Operations

Waterfront Operations provide capability ashore to support the Navy's current and future surface, submarine, and CVN force requirements. Services include at berth support; harbor master services; port piloting services; magnetic silencing services; harbor defense and port security; and small craft support services.

Airfield Operations

Air Operations enables readiness, operations, and training; aircraft maintenance and protection; and movement of personnel and material. Airfield Operations supports safe and effective aircraft operation through air traffic control services, airfield services; passenger and cargo terminal services; aircraft servicing support; airfield ground electronics support, and aircraft hanger support.

Command, Control, Communications, Computers, Combat Systems, Intelligence, Surveillance, and Reconnaissance (C5ISR) Operations

C5ISR Operations ensure Navy warfighters have the systems, processes, and knowledge required to make rapid and well-informed effects-based decisions, to degrade our enemies' decision capabilities, and to influence the decision-making of others in all phases of operations. Continuity of C5ISR Operations is achieved by delivering and operating reliable, secure, global network that fully meets warfighter and enabler requirements for information operations, space, and net-centric missions.

Expeditionary Operations

Expeditionary Operations provide adaptive force packages of Naval Expeditionary capabilities to warfighting commanders for integrated maritime expeditionary missions that extend the maritime operating environment. These operations help maintain a core expeditionary force that provides effective waterborne and ashore anti-terrorism, force protection, theater security cooperation and engagement, and humanitarian assistance and disaster relief contingencies.

Intermediate and Depot Level Maintenance Support

Intermediate and Depot Level Maintenance Support provide depot, intermediate, operations level required operational availability for all platforms; weapons and weapons systems; and the essential ability to reprioritize work without contractual impediment. This support provides a mobile, ready workforce that can support voyage repairs wherever ships and airplanes are located, including combat zones, while offering full range of shore based ship, submarine, aircraft, network and expeditionary maintenance capability (land, facilities and people-Total Force). Services include aircraft, aircraft engine, ship, missile, and other equipment repair, maintenance, and modification services.

Ordnance and Weapons Operations Support

Ordnance and Weapons Operations Support maintains a strategically located, optimally stocked ordnance inventory that is well protected and maintained and meets the maritime weapons requirements of globally distributed forces. To maintain fleet and troop readiness this support offers loading; offloading; ordnance and munitions storage; armament; munitions and ordnance repair, maintenance and modification services; and weapons cleaning.

Training Support

Training Support sustains a Navy Manpower, Personnel, Training, and Education (MPTE) system that targets and attracts the right group of personnel to train, develop, equip, and motivate throughout Navy service. Support infrastructure includes academic facilities, applied institution and lab facilities, simulator facilities, indoor and outdoor training, ranges, and ordnance handling areas. Services include enlisted and officer accessions training, specialized and multiple category training, flight, vessel, expeditions training, professional education opportunities and training equipment and application support.

Supply and Storage Support

Supply and Storage Support sustains and operates an on-time material, ordnance and fuel delivery logistic network to the Navy's globally distributed forces. It supplies the capability and capacity at locations that directly support training, readiness, and operational requirements

Sailor and Family Support

Sailor and Family Support enables a ready Navy force through programs such as housing, morale, welfare, and recreation; child development and youth; galley; fleet and family support program; and personnel support. This type of support benefits the sailor and his family. Services include bachelor housing services; temporary lodging services; child development services; dependent school services; retail exchange services; family housing services; family support services; food services; morale, welfare, and recreation services; postal services; religious and spiritual support.

Medical Support

Medical Support protects the warfighter and deter medical threats; provides flexible medical support overseas and emergency response at home; and provide economically, incomparable health services. Medical Support provides capability for provision of the finest, cost-effective medical and dental health services to military personnel and their families. Veterinary services are also provided.

Base Support

Base Support provides and protects shore network and facility infrastructure that promote quality of life and service and a safe place for the fleet, fighter, family and civilians. Base Support provides, protects, configures, and modernizes utilities, transportation, facility maintenance, and management networks that together provide the delivery framework through which services, goods, and capabilities flow.

Research, Development, Acquisition, Testing and Evaluation (RDAT&E)

RDAT&E is used by the Navy for state-of-the-art RDAT&E at all levels of research, with flexibility to adapt to Navy transformational mission changes and joint operations. Services include R&D support services for current and identifiable future Naval capabilities technologies and the provision and operation of test range services (land, air, sea, and subsurface).

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Naval Facilities Engineering Command

Appendix

C

NAVFAC is a global military command with a headquarters element and component commands that works together as one team to provide facilities engineering support to the Navy, Marine Corps, federal agencies and other Department of Defense clients. The success of NAVFAC in achieving its mission relies heavily on the PWO. The PWO is the driving force of NAVFAC and must recognize the importance of this position within the organization.

NAVFAC MISSION AND CORE RESPONSIBILITIES

NAVFAC's mission is to strengthen the Navy and Marine Corps combat readiness worldwide by providing facilities lifecycle support that focuses on the fleet, sailor, and family. The commands of NAVFAC deliver sustainable, adaptable facilities; expeditionary capabilities; and contingency response to the Navy Expeditionary Combat Enterprise, all other Warfare and provider enterprises, the Marine Corps, Unified Commanders, and Department of Defense (DoD) agencies.

A core responsibility of NAVFAC is to deliver best value facilities engineering and acquisition for the Navy and Marine Corps, Unified Commanders, and DoD agencies. This core responsibility requires expertise in the entire facilities engineering lifecycle which includes planning, construction, sustainment, recapitalization, and disposal. Each step in the lifecycle requires a wide range of highly specialized technical expertise that NAVFAC delivers to its Supported Commands throughout the world. Figure 1 shows a graphical summary of the facilities engineering lifecycle and some of the technical expertise required for each step.

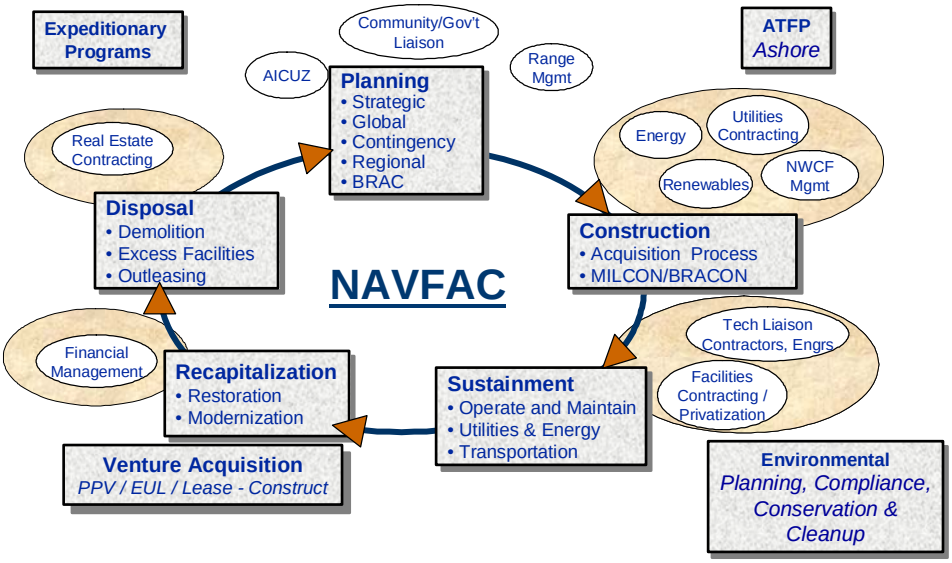

Figure 1. Facilities Engineering Lifecycle

NAVFAC STRUCTURAL AND FUNCTIONAL ALIGNMENT

NAVFAC Headquarters is an Echelon II Systems Command (SYSCOM) reporting to the Chief of Naval Operations (CNO) through the Vice CNO. **The *Concept of Operations* (CONOPS) publication serves as NAVFAC's official guidance for its structural and functional alignment. It is a tool to provide the framework of how NAVFAC operates.** This section summarizes the structural and functional alignment of NAVFAC.

NAVFAC receives acquisition authority from the Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN RD&A) and real estate authority from the Assistant Secretary of the Navy for Installations and Environment (ASN I&E). These relationships are shown in Figure 2.

Figure 2. NAVFAC Acquisition Authority

NAVFAC is comprised of a Headquarters, 6 Echelon III, and 10 Echelon IV commands. The hierarchical structure of the commands within NAVFAC is shown in Figure 3.

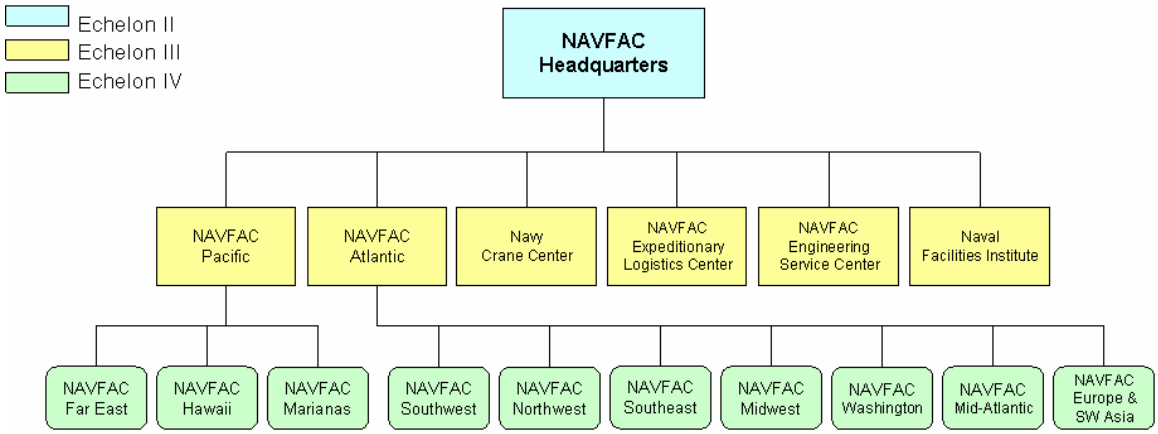

Figure 3. NAVFAC Command Hierarchy

- NAVFAC Atlantic (LANT), NAVFAC Pacific (PAC), the NAVFAC Expeditionary Logistics Center (ELC), the NAVFAC Engineering Service Center (ESC), and the Navy Crane Center (NCC) are Echelon III Commands and report to NAVFAC Headquarters.
- The Naval Facilities Institute (NFI) is an Echelon III Command that is Operational Control (OPCON) to NAVFAC Headquarters and Administrative Control (ADCON) to the Civil Engineer Corps Officer School (CECOS) Commanding Officer.

- The ten Echelon IV commands are referred to as Facilities Engineering Commands (FECs). Seven of the Echelon IV commands report to NAVFAC LANT and three of the Echelon IV commands report to NAVFAC PAC.

- Public Works Departments (PWDs) are the service delivery platform of the FECs.

FECs are the primary point for delivery of products and services, reaching back to Echelon III(s) for surge and specialty support, as needed.

The location and geographical dispersion has evolved over time to ensure proper alignment with the Navy regions.

The entire organization of NAVFAC is aligned with the Navy. This alignment is shown in Figure 4.

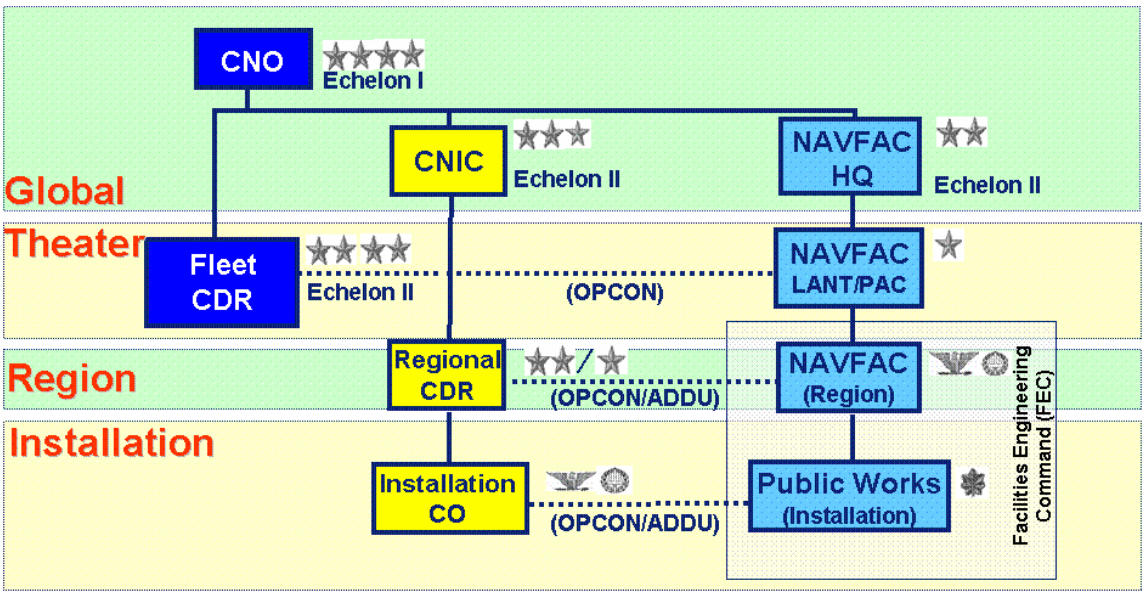

Figure 4. NAVFAC Alignment

NAVFAC HQ in partnership with CNIC ensures that the Navy's shore installations enable and sustain Fleet, Fighter and Family readiness. The organizational structure of NAVFAC has been developed overtime to facilitate this strategic partnership through alignment at the global, theater, region, and installation levels.

As the shore installation budget submitting office for the Navy, CNIC is responsible for requirements generation, requirements assessment, resource allocation, and regional coordination. As the DoN's Facilities Systems Command, NAVFAC is responsible for engineering and design, technical authority, facilities acquisition, management, and execution, project management, and title 10 responsibilities for real estate and military construction acquisition.

The partnership and alignment of NAVFAC and CNIC allows the best value delivery of facilities engineering products and services which leads to shore installations that enable and sustain Fleet, Fighter, and Family readiness for the Navy.

The alignment of NAVFAC with the Navy continues with NAVFAC LANT and NAVFAC PAC which are operationally aligned with the Fleet.

The Echelon IV commands of NAVFAC which are referred to as Facilities Engineering Commands (FECs) are operationally aligned with the Navy's Regional Commands. The alignment is achieved through the assignment of operational control of NAVFAC's subordinate commands to the corresponding region or installation and maintaining administrative control within NAVFAC. The FECs are OPCON/Additional Duty (ADDU) to the Navy Regional Commander and ADCON/Primary Duty (PRIDU) to NAVFAC LANT or PAC.

Finally, the alignment continues to the Public Works Departments (PWDs) which are operationally aligned with the Installations. PWDs are OPCON/Additional Duty (ADDU) to the Installation CO and ADCON/Primary Duty (PRIDU) to the FEC.

As a global engineering and acquisition command, NAVFAC is a geographically diverse command that focus on a forward delivery model of products and services through its Public Works Departments found its Echelon IV commands. The geographical dispersion and general location of the commands are shown in Figure 5, which are aligned with the Navy's Regional Commands.

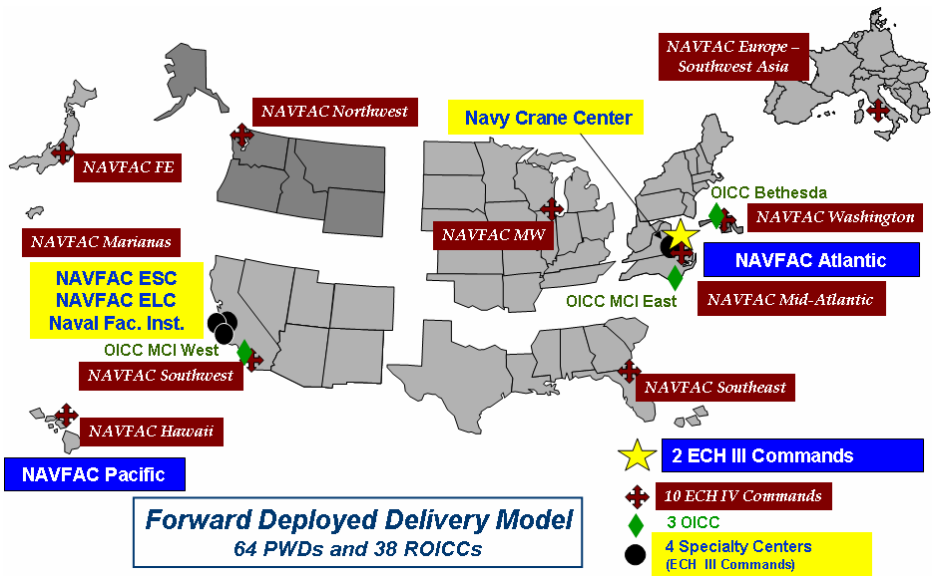

Figure 5. Geographic Placement of NAVFAC Commands

NAVFAC HEADQUARTERS

NAVFAC Headquarters (HQ) is comprised of the command staff, business lines, and support lines. NAVFAC HQ has primary responsibility for the following functions:

1. NAVFAC policy and guidance
2. Strategic leadership, planning, and management
3. Process improvement and management
4. SECNAV, CNO, HQMC, CNIC interface and liaison
5. SYSCOM support to Warfare and Provider Enterprise
6. Expeditionary, Ocean Engineering, and Sealift Support Program Management
7. Safety Leadership
8. Overall financial management, resource allocation, and resource management
9. Program management
10. Business/Support Line management
11. Total Force management
12. Overall IG management

The NAVFAC HQ organizational chart is shown in Figure 6.

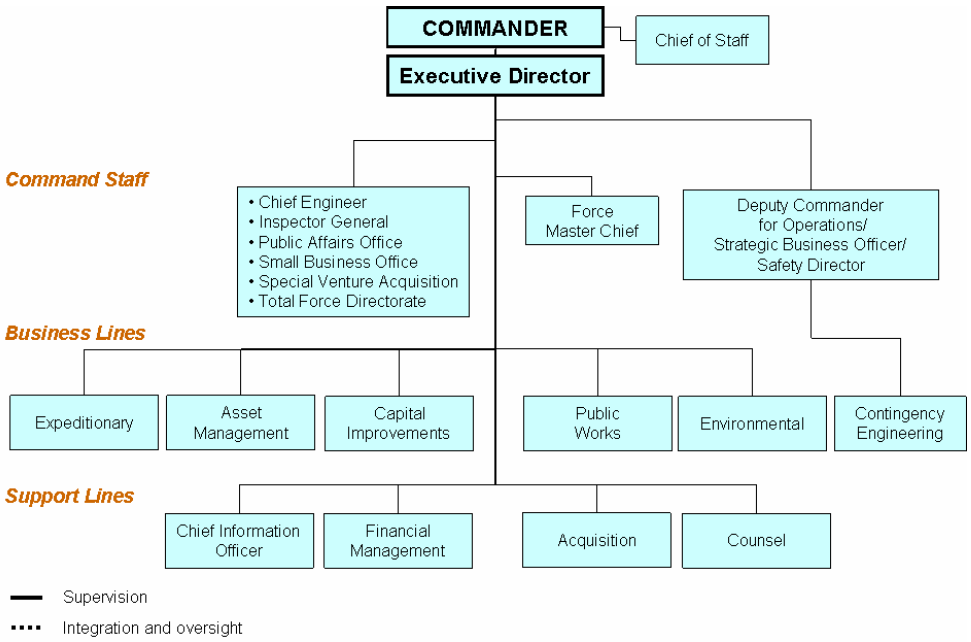

Figure 6. NAVFAC Organizational Chart

NAVFAC operates as a matrix organization tying the vertical execution elements together with the horizontal "business lines" to force multiply and fully leverage the capabilities of the command's people and resources.

The vertical portion of the organization is primarily focused on command and execution while the horizontal portion of the organization is focused on business and support line management and community management of the personnel that support the lines. Vertical areas of responsibility include leadership, mission accountability, client interface, project management and execution, and execution metrics. Horizontal areas of responsibility include business processes, resource allocation, community management, program management, and program metrics.

The success of the organization relies on the integration of the horizontal and vertical roles of the organization. Integration is achieved when the organization's business officers and managers ensure that horizontal functions support short and long term execution goals and operation officers ensure vertical execution follows horizontal processes and resource guidance. Overall integration and organizational success is the responsibility of command leadership. The horizontal and vertical roles of the organization are summarized in Figure 7.

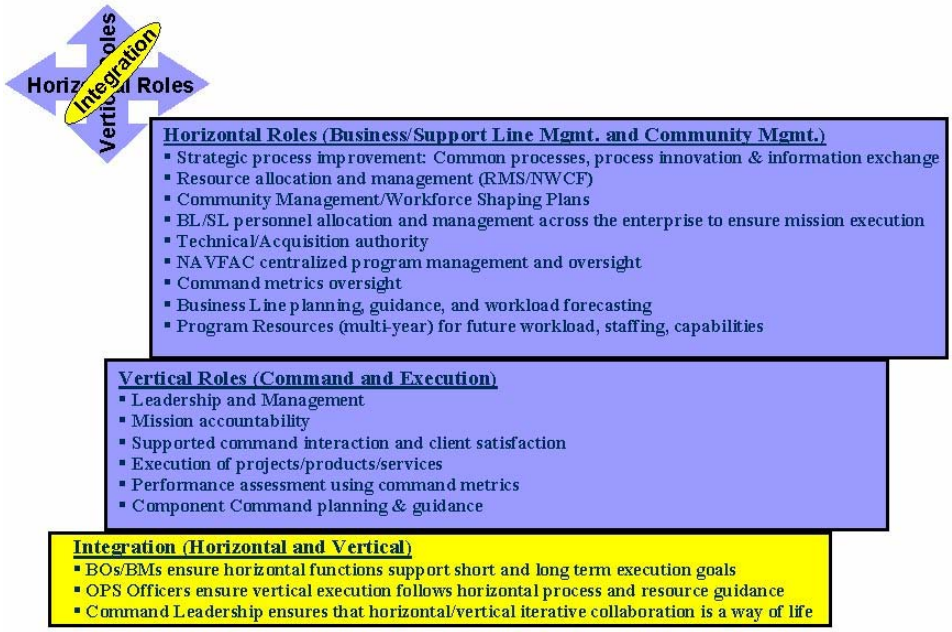

Figure 7. Horizontal and Vertical Roles

This structure has facilitated the elimination of gaps, commonly referred to as white space, among commands, allowed for the establishment of common business processes across the global organization, and eliminated duplication and unnecessary redundancy.

Organizational Roles and Responsibilities

With regard to vertical roles, NAVFAC Atlantic and Pacific (Echelon III) are the Immediate Superior in Command (ISIC) for the FECs (Echelon IV) within their area of responsibility (AOR). NAVFAC Atlantic and Pacific, and the Specialty Centers (Echelon III) report to NAVFAC Headquarters (Echelon II). NAVFAC Atlantic and Pacific coordinate our external focus on Fleet and Commander, Navy Installations Command (CNIC) priorities among the FECs in their AOR. Figure 8 shows how the FECs (Echelon IV) commands are the primary point for delivery of client products and services.

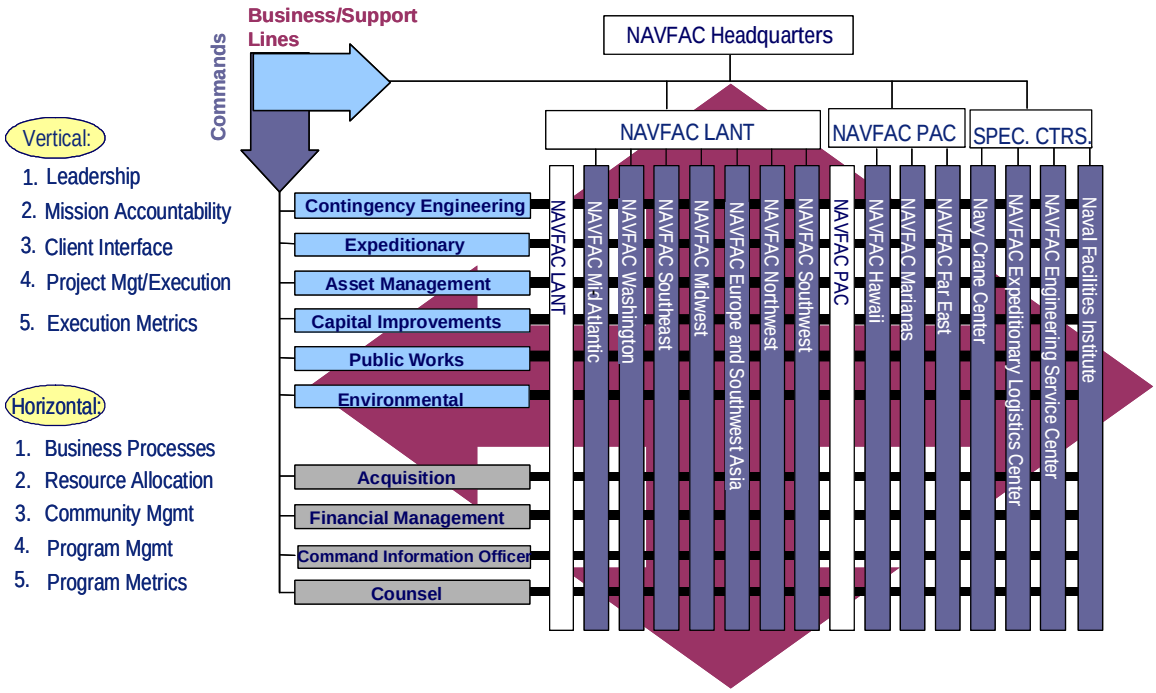

Figure 8. FEC Commands Matrix for Products and Services Delivery

With regard to horizontal roles, NAVFAC Headquarters (Echelon II) is the primary manager and NAVFAC Atlantic and Pacific (Echelon III) coordinate responsibilities among the FECs (Echelon IV) within their AOR. The NAVFAC Specialty Centers (NFESC, NFELC, NCC) provide support (coordinated with Business and Support Lines) to NAVFAC commands and to Clients. The NAVFAC programming and budgeting are fully coordinated at Echelon II. NAVFAC LANT and PAC perform both budget formulation and budget execution within their AOR. Echelon IV commands submit General Fund requirements and Navy Working Capital Fund (NWCF) budget formulations through their respective Echelon III commands. Budget issues are worked as a team through all Echelons.

The integrated NAVFAC enterprise, consisting of Echelon II, III, and IV commands as outlined in Figure 9, forms a powerful facilities support "machine" fully responsive to workload and execution demands. The matrix organization enables NAVFAC to create a corporate enterprise commitment and ownership for the delivery of products and services much more efficiently and effectively throughout the world.

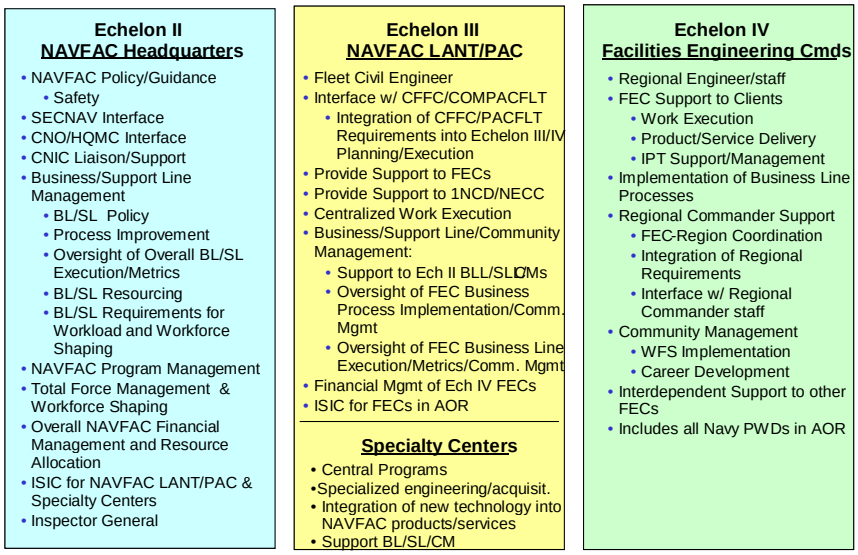

Figure 9. Echelon Responsibilities

The keys to making this global engineering and acquisition organization work is ensuring transparent functional (horizontal) management throughout the enterprise, and ensuring collaborative structural (vertical) leadership at all levels. These keys to success require open and frequent communication and iterative collaboration horizontally and vertically.

NAVFAC BUSINESS LINES AND SUPPORT LINES

NAVFAC business lines and support lines are the drivers of the horizontal part of the organization. Focus is on business processes and community management.

NAVFAC has six Business Lines which include Contingency Engineering (CE), Expeditionary (EX), Asset Management (AM), Capital Improvements (CI), Public Works (PW), and Environmental (EV). A Business Line has at least one Product Line, consisting of a group of products and services. NAVFAC also has four Support Lines which includes Acquisition (ACQ), Financial Management (FM), Command Information Officer (CIO), and Counsel. A Support Line may have one or more Service Lines, consisting of services that are provided across NAVFAC.

NAVFAC Instruction 7040.5C, NAVFAC Product and Service Matrix, identifies all NAVFAC deliverables by Product Line, outlines the corresponding Mission/Reimbursable funding rules for both General Fund (GF) and Navy Working Capital Fund (NWCF) and sets forth policy for standard business practices and charging for services. The Product and Service Matrix maps these functions to the corresponding Business and Support Lines. Product and service delivery is forward-deployed to the maximum extent that resourcing permits. A short description of the areas of responsibility for each business and support line is provided.

Business Lines

Contingency Engineering (CE)

The CE business line exists to prepare for and support an engineering contingency response and expedient provision of NAVFAC products and services. The Contingency Engineering Business Line (CEBL) is responsible for providing support to Navy military and civilian engineers who deliver engineer services in forward environments. Across the spectrum of contingencies ranging from natural disasters to civil unrest to armed conflict, engineer services in support of Department of the Navy requirements remain in high demand.

Expeditionary (EX)

The expeditionary business line is managed at NAVFAC HQ by the NAVFAC Expeditionary Programs Office (NEPO). NEPO overseas the ocean facilities program, the sealift support program office, and the TOA management program office which provides development, outfitting, and sustainment for the Navy Expeditionary forces. The NAVFAC Expeditionary Business Line products and services address the generation and documentation of warfighter requirements, subsequent fulfillment of those requirements, delivery of TOA materiel, and sustainment of pre-positioned and fielded materiel.

Asset Management (AM)

The AM business line offers a wide range of military facilities and land use planning services, as well as providing a variety of real estate services to NAVFAC clients. The Asset Management Business Line is responsible for all aspects of land use planning and development from real estate actions involving acquisition, real property management, disposal, leasing, and licensing to providing technical advice and assistance in land-use planning, special studies, and facilities development.

Capital Improvements (CI)

The Capital Improvements Business Line's (CIBL) mission is to provide engineering design, construction management, and specialty technical services in support of facilities engineering for the Navy, Marine Corps, and other DoD and federal agency clients. The areas of expertise include design, construction, engineering services, ocean facilities, and specialty engineering.

Public Works (PW)

The PW Business Lines provides facilities engineering and management, utilities engineering and acquisition, technical support for service contracts, and transportation equipment management. The PW business line products and services include:

- Facility Management and Sustainment (**FMS**)
- Utilities and Energy Management (**UEM**)
- Base Support Vehicles and Equipment (**BSVE**)
- Facilities Support Contract Management and Facility Services (**FMFS**)

Environmental (EV)

The Environmental (ENV) Business line provides products and services (P&S) to the Navy and Marine Corps in support of the Department of Navy's (DON) mission. These P&S include management of the DON Installation Restoration (IR) program, and a full range of P&S provided under the Environmental Quality (EQ) program, which includes Environmental Compliance, Environmental Planning, Natural Resources, and Cultural Resources programs. Management of the DON IR program is part of NAVFAC's mission. ENV also provides support to other NAVFAC business lines such as Base Development with environmental planning; Capital Improvements with environmental compliance and environmental planning; Real Estate with environmental compliance and planning; and PW with environmental compliance and management

Support Lines

Acquisition (ACQ)

The Acquisition (ACQ) support line Acquisition establishes contractual practices and policies for all contracts awarded within the NAVFAC organization. ACQ is the contracting center of the command, providing horizontal support to NAVFAC's Echelon III/IV Commands and their operations. ACQ manages the contracting community

management functions of the command. ACQ also serves as a single point of contact for contracting during unusual events such as natural disasters, critical events and operations requiring special attention. In addition, ACQ provides acquisition oversight and support to critical flag level issues. ACQ performs a critical role in Military Construction, Environmental Restoration, Base Realignment and Closure, Navy Housing, Contingency Engineering, Seabee Readiness, Base Operations Support, and Public Private Ventures worldwide.

Financial Management (FM)

The Financial Management support line provides comprehensive resources planning including long range forecasting (POM); budgeting, allocation and control of fiscal resources requiring the full spectrum of financial management responsibilities and fiscal policy advice for thirteen appropriations.

Command Information Officer (CIO)

The Command Information Officer (CIO) support line provides IT solutions that are easy to use, reduce workload, provide essential information, and remain interoperable in the Department of the Navy (DON) IT framework by complying with Senior Navy and DoD IT initiatives.

ECHELON III COMMANDS: NAVFAC ATLANTIC AND PACIFIC

As Echelon III commands, NAVFAC LANT and NAVFAC PAC report to NAVFAC HQ. These commands have primary responsibility for the following functions in their AOR:

1. Supported Command Interface
2. Fleet Civil Engineer
3. Warfare Enterprise support utilizing Enterprise Operations Officers
4. Business/Support Line management and process implementation
5. Product and service delivery, including determination of appropriate reach back capabilities/locations
6. Total Force management oversight
7. Execution oversight and support to Echelon IVs
8. Centralized execution of assigned products and services
9. Financial management oversight and support to FECs
10. Workload shaping across FECs

The NAVFAC LANT and NAVFAC PAC organization chart is shown in Figure 10.

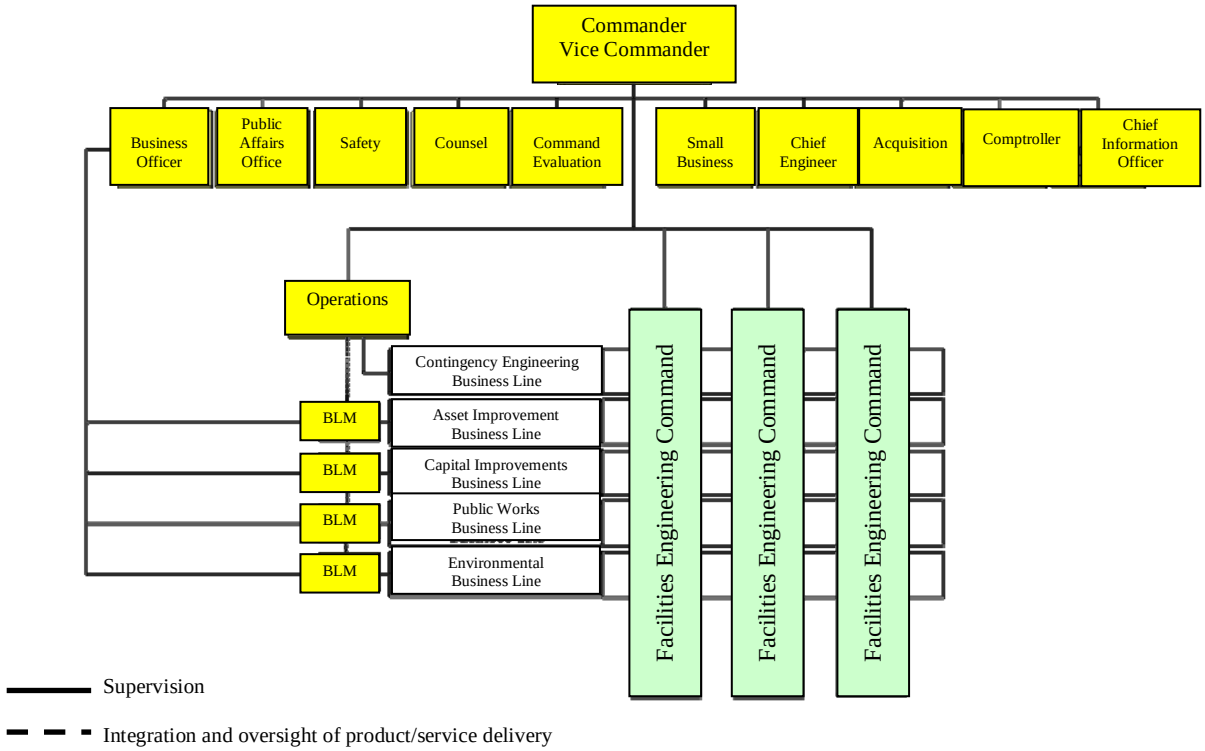

Figure 10. NAVFAC LANT AND PAC Organization Chart

ECHELON IV: FACILITIES ENGINEERING COMMAND

Facilities Engineering Commands (FECs) are Echelon IV Component Commands that are subordinate to NAVFAC LANT and PAC. FECs integrate the planning, programming, and execution of facilities engineering and environmental services to Navy installations, and deliver products and services to Supported Commands. FECs have primary responsibility for the following functions within their AOR:

- Product and Service delivery to Supported Commands
- Regional Commander support/coordination and Installation interface/liaison
- Implementation and employment of Business/Support Line processes
- NWCF NOR management and GF resource management
- Program management of Navy Region Sustainment, Restoration, Modernization (SRM) Base Operations Support (BOS), and Environmental requirements/funding
- Workload/workforce shaping
- Total Force management
- Execution support to other FECs, as assigned.

A typical FEC organizational template is shown in Figure 11. The key element to the delivery of products and services by a FEC is its integrated product teams (IPT). The IPT serves as the primary execution platform.

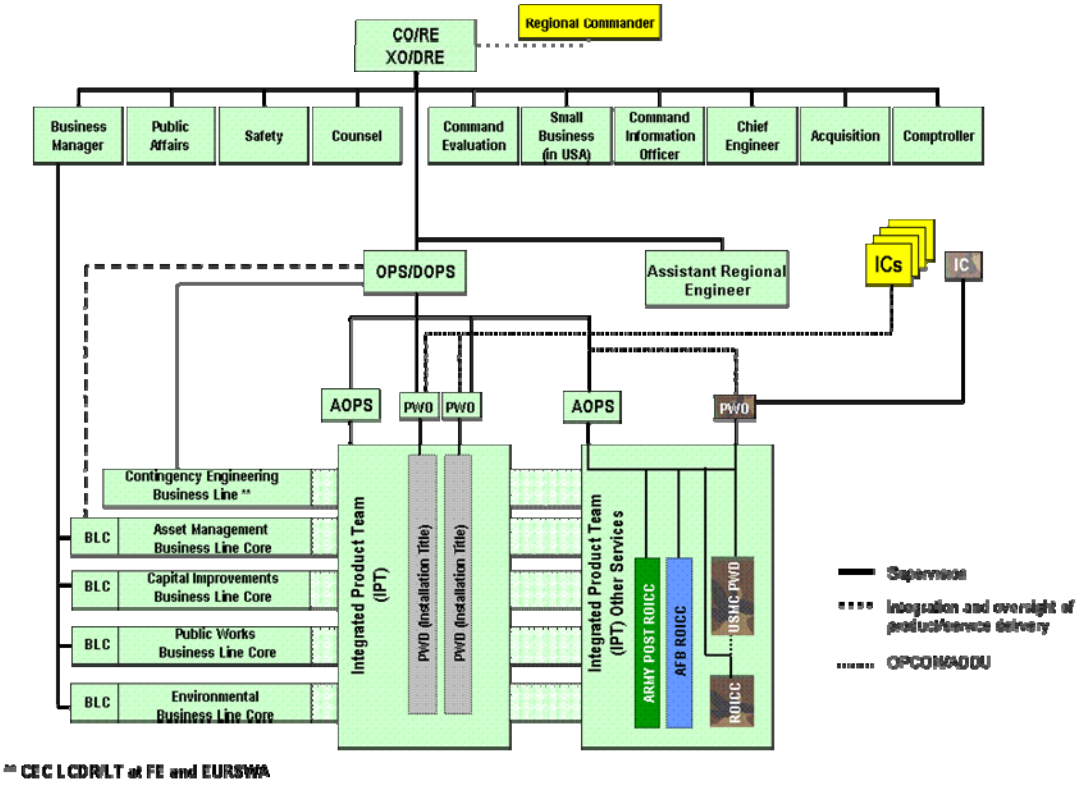

Figure 11. Typical FEC Organization Template

Alternate Resources

Appendix

D

Within the world NAVFAC organization, several specialty centers and resources exists to accomplish non-traditional tasks or to bring expertise to specific situation.

NAVAL FACILITIES ENGINEERING SERVICE CENTER

The Naval Facilities Engineering Service Center (NFESC) provides worldwide support to the Navy, Marine Corps, and other DoD agencies. They provide solutions to technical problems through engineering, design, construction, consultation, test and evaluation, technology demonstration and implementation, and program management support.

NFESC is the Navy's specialized facilities engineering and technology service center and is headquartered at Naval Base Ventura. Through its five major areas of expertise it identifies and applies emerging engineering solutions to extend the life of waterfront facilities, improve the operation and safety of ship support systems, and work within environmental constraints while saving time, money, and energy. NFESC's consultation and expertise is available on a fee for service basis. NFESC also implements centrally funded projects, including demonstration projects that may provide a no-cost improvement to an installation if a PWD is willing to host the project.

NFESC Business and Product Lines

<u>Energy and Utilities</u>

The program focus is to achieve maximum practical energy conservation and to develop reliable, cost-effective alternate or renewable energy sources to replace petroleum and natural gas through the development of new technologies encompassing all facets of energy supply, distribution, and consumption. Specific areas of expertise include energy efficiency systems, energy data management, energy technology transfer, energy and utilities management, control systems, utility systems, and communication facilities for utilities.

Environmental Engineering

The program's goal is to facilitate compliance with new and more stringent environmental legislation and regulations in a cost-effective manner by customizing technology to meet the shore establishment's needs. Efforts concentrate on environmental restoration, waste management, environmental compliance, environmental data management, environmental technology transfer, pollution prevention, indoor air management, and oil spill prevention and cleanup.

Shore Facilities

The program focuses on new concepts and systems in waterfront facilities, physical security, ordnance facilities, aviation facilities, base survivability, and engineering technology applications. NFESC serves as the Navy's lead developing new security and engineering concepts and technology to enable the Navy to better protect its personnel and assets from vandalism, sabotage, theft, terrorism, and other unlawful acts.

Ocean Facilities

The area of interest includes all seafloor environments in water depths up to 20,000 feet. Technologies and services include marine geotechniques, ocean structures, undersea warfare, underwater cable facilities, hyperbaric facilities, mooring systems, magnetic silencing facilities, underwater inspection programs, ocean construction equipment inventories, pipeline integrity assessments, and coastal facilities.

Amphibious and Expeditionary

Supplying a variety of technologies and products, the program supports and enhances construction capabilities, maintenance, and war-damage restoration at advanced bases. Technologies for high mobility forces in combat support and combat service support roles have also been developed

NAVY CRANE CENTER

The Navy Crane Center (NCC) leads the Navy's shore installation weight handling program by establishing policy and providing engineering, acquisition, technical support, training, and evaluation services. The command is charged with achieving safe and reliable weight handling programs throughout the Navy. SECNAVINST 11260.2 established the Navy Crane Center as the installation responsible for standardizing and improving weight handling programs at Navy shore activities. NCC employs 80 civilians and provides engineering expertise, technical support, acquisition services, technical training, and auditing services throughout the world.

NCC procures all Navy shore-based weight handling equipment with a capacity of 20,000 pounds or greater, all weight handling equipment (WHE) for special applications, and provides procurement assistance of smaller capacity WHE. NCC establishes criteria for design, management, maintenance, inspection, testing, certification, alteration, repair, operation, and rigging for WHE as well as training and qualification requirements for WHE personnel

NCC is responsible for crane audits, overseeing corrective action, validating certifications for cranes in special programs, and certifying WHE and related equipment when required by OSHA standards. NCC provides a wide range of technical support to assist PWDs improve their crane program. Services include engineering investigation, consultation, and solutions; crane alterations and configuration control; and accident investigation, review, and analysis. NCC will issue crane safety advisories and equipment deficiency memorandums when issues are identified in the field or by manufacturers.

NAVAL FACILITIES EXPEDITIONARY LOGISTICS CENTER

The Naval Facilities Expeditionary Logistics Center (NFELC) provides expeditionary forces Table of Allowance (TOA) generation, fulfillment, delivery, and sustainment. NFELC performs acquisition, registration, and licensing of Civil Engineer Support Equipment (CESE) and Civil Engineer End Items (CEEI) for shore activities and expeditionary forces. From its location on Naval Base Ventura County, it provides direct support to bases and deployed forces with mobile, contingency utility generation and distribution.

NFELC's Mobile Utilities Support Equipment (MUSE) provides specialized, easily transportable utility equipment for temporary support of shore utility systems. MUSE includes electric power plants, substations, and steam generation plants to meet emergency and unforeseen utility requirements.

MUSE is staffed by highly trained Seabees that provide portable diesel engine driven generators, substations and switchgear, and low nitrogen oxide boilers to meet utility shortcomings. Targeted clients are U.S. Navy and Marine Corps activities, but services can be provided to other DoD activities and non-DoD clients. Equipment includes 200 kW (kilowatts) to 2500 kW diesel driven electrical generators, 1500 kVA (kilovolt amps) to 5000 kVA electrical substations, and 12 kPPH (kilo-pascals per hour) to 20 kPPH low nitrogen oxide boilers plants.

MUSE Mission Areas

- Cold Iron Support – Services that allow ships and submarines in port to shutdown engineering spaces.
- Emergency Response – Utilities following a storm, earthquake, or unplanned utility shutdown at a DoD installation.
- MILCON Support – Interim utility support while new facilities are being constructed or old facilities modernized.
- Peak Shaving – Electrical power during peak demand periods, reducing the demand on local utilities and reducing the prime power rate charged to a DoD installation.
- Expeditionary Requirements – Contingency support to Joint Task Force, Naval Construction Force, or Marine Corps operations.
- Interruptible Power – Allows activities to become an interruptible load for utility companies. This capability allows a utility to load shed the client during periods of high use, resulting in lower utility rates.

MUSE actively discusses requested deployments with local personnel and seeks their input, especially if the local command has experience with a certain type of equipment or has a specific need. Support can only be provided for validated requirements, not desired, but unprogrammed growth. Ongoing operations, future scheduled operations, and equipment availability are significant factors in the sourcing process; however, MUSE has the final decision on the type of equipment deployed.

MUSE pays for shipping by the most economical means. Dedicated trucks or air shipment is paid for by the requesting installation. MUSE is not responsible for cranes, trucks, rigging crews, rigging, or any other items required to offload the equipment upon arrival. The installation must provide qualified operators, operations, and maintenance of equipment and MUSE equipment can not be moved by the installation once installed. Client commands are responsible for all operations and maintenance costs. All MUSE equipment is subject to redeployment on short notice if a more urgent requirement develops.

The installation covers costs of installation, any specially requested technical assistance trips, and termination visits. MUSE pays for pre-site visits and annual inspections. MUSE provides a basic spare parts kit for long lead items. This kit is the financial responsibility of the client command; the client command must provide funding to cover the cost of any discrepancies in the spare parts kit at the end of the deployment.

NAVAL FACILITIES INSTITUTE (NFI)

Located at Naval Base Ventura County, the Naval Facilities Institute (NFI) serves as NAVFAC's source for acquisition policy and implementing guidance; acquisition training; acquisition professional development; and curriculum development for the acquisition workforce and the Naval Construction Force. With its skilled and experienced personnel, the NFI provides a resource for Public Works Departments with questions concerning acquisition policy and implementation. Courses offered by the Institute will be beneficial throughout an individual's career for both technical and contracting development.

The Acquisition Business Management Group (ABMG) manages the identification, development, and delivery of facilities-related acquisition training; oversees the standardization and documentation of contracting processes in the NAVFAC Business Management System (BMS); participates in the development of contracting policy and guidance; and provides community management support to NAVFAC's acquisition workforce. The Naval Facilities Acquisition Center for Training is a component of ABMG and provides specialized courses tailored to architects-engineers, construction, and facilities support services, as well as environmental contracting.

The Performance Management Programs Group (PMPG) oversees NAVFAC's Process Management and Audit Program (PMAP) and the Facilities Team Survey (FacTS). The PMAP assess the effectiveness of NAVFAC's acquisition processes through on-site assist visits, to ensure adherence to acquisition regulations and policies, to uncover best practices, and to support acquisition community management. The FacTS group develops and deploys NAVFAC-wide employee and client surveys to gather data to support decisions across NAVFAC. The data collected by the surveys enables NAVFAC leadership to understand key issues related to workforce and client satisfaction.

The Community Management and Training Group (CMTG) serves as the centralized office within NAVFAC for implementing programs required by the Defense Acquisition Workforce Improvement Act (DAWIA). This group oversees the day-to-day management of the Continuous Learning Program, Acquisition Workforce Tuition Assistance, Professional Development Center program, Defense Acquisition University

quotas and courses, DAWIA certification, and other miscellaneous aspects of DAWIA. Additionally, the group handles details related to the NAVFAC Professional Development Center (PDC) Intern Program and the Navy Acquisition Intern Program (NAIP) for NAVFAC.

The Training Standards Group is the training support agency for the Naval Construction Force (NCF), Naval Beach Groups (NBGs) and the Seabee Readiness Groups (SRGs). It provides training support for new equipment and material introduced into these groups and maintains course curriculum and training materials.

NAVAL CONSTRUCTION FORCE (NCF)

The Naval Construction Force (NCF) is available for planned and contingency construction at Navy and Marine Corps activities worldwide. The call for work is the Naval Construction Force's primary method for requesting services in support of Fleet and Combatant Commander requirements and to provide CNIC with an avenue to execute its construction program. Activities use the call for work to request NCF support, and the NCF chain of command prioritizes work and assigns appropriate and available forces for execution. Projects that support CNIC are funded centrally at no cost to the requesting command. Oversight of NCF work should be similar to that of contractor performed construction. Typically NAVFAC Pacific is assigned design responsibility for all NCF work, but PWD produced designs can also be used. During construction, frequent interaction and oversight of work will improve the quality of performance and the training value to the Seabees. The call for work results in an annual integrated project list; Figure 1 summarizes this process.

The call for work process:

- Call for work sent (via Navy message) to Echelon II commands & CNIC regional coordinators in September of the fiscal year prior to execution.
- Client commands send project nominations to FIRST Naval Construction Division (1NCD) by December of the fiscal year prior to execution.
- The operational Naval Construction Regiment (NCR's) prioritize and select projects for the Integrated Priority List (IPL) based on value to Combatant and Fleet Commanders, construction feasibility, and training value.
- 1 NCD finalizes and publishes the integrated priority list.
- NAVFAC Pacific is tasked (and funded) to produce designs.
- Designs are reviewed by the PWD and the tasked NCF unit performs planning and estimating.

- CNIC provides funding, and materials are purchased by the NCF, based on their bill of materials.
- Assigned NCF unit performs construction with PWD oversight.
- The PWD accepts the project.

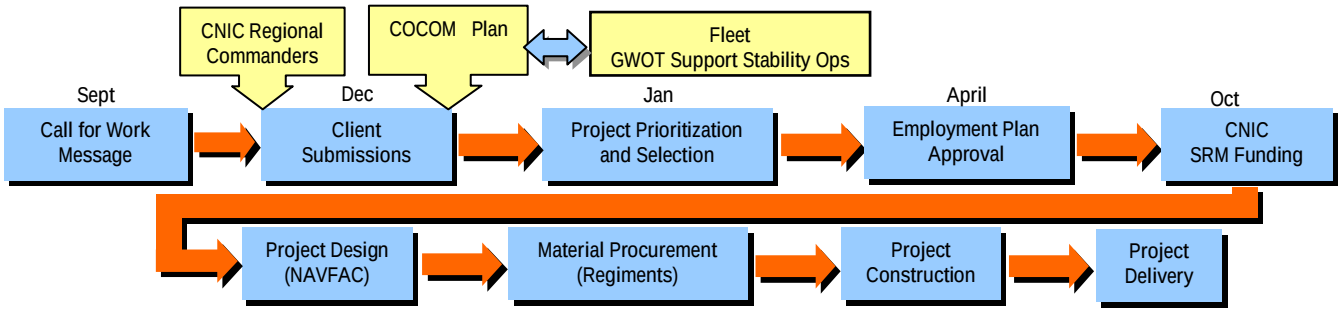

Figure 1. Annual Integrated Project List

RESERVE SUPPORT

Reserve officers and enlisted sailors can be recalled to active duty to support PWDs during periods of increased workload, decreased staffing, or to obtain specific expertise. Many reserve personnel have specialized experience and the flexibility to return to active duty. The two most common methods to obtain reserve support are Active Duty for Special Work (ADSW) and the one year recall (OYR) programs. These programs are intended to provide personnel augmentation to accomplish special projects, and to meet operational, administrative, and exercise support requirements of short-term duration.

The ADSW and OYR programs support short-term Navy mission requirements for which no permanent duty billet or position is programmed or where active duty personnel with the required skill(s) are unavailable. These programs provide the active forces with Naval Reserve support to facilitate emergent, unanticipated, unplanned or non-recurring short-term projects that cannot be accomplished with assigned personnel.

The ADSW and OYR programs are voluntary until the Reservist reports to active duty. Once the orders have been executed, the Reservist may not voluntarily terminate orders. Gaining commands should complete officer fitness reports and enlisted performance evaluations. Reservists recalled under ADSW and OYR are compared on fitness reports and performance evaluations only to other temporarily recalled Reservists with the same designator and under the same reporting senior.

Requests for reserve support are passed to the FEC and validated by NAVFAC Pacific and NAVFAC Atlantic. The CEC and Seabee detail shops will help source reservists to fill requirements, but advertising through alternate channels may be needed to find an interested and qualified individual. Funding for reservists may be centralized, or local funds can be used; this typically occurs if the reservist is to fill a vacant military or civilian billet.

Public Works Leader's Guide: "Questions To Ask"

Appendix

E

The following checklist is intended to assist the new Public Works Department (PWD) manager, or a supervisor who is taking on new responsibilities, focus on the most important aspects of the job. The checklist is intended to focus attention on the most important aspects in each division and those things that if left unsupervised could quickly cause the Department and the Installation significant problems.

These areas also offer great possibilities for improvement, standardization, and export to other PWDs when done well. The supervisor should be conversant in the details of these topics and may wish to make several of them areas of special interest and attention. The PWD portfolio is very broad and the various functions interact and are mutually supporting, so it is imperative that you understand not only your direct responsibilities, but also the products and services that the entire PWD team is providing our customers.

The list is not all inclusive. Each PWD has unique missions, situations, command relationships, and customer requirements that require local knowledge and tailoring. However, this list provides a good starting point for the typical PWD mission and explores the major issues that you will face.

Chapter 1. Public Works Department	
[ ]	Is there a Public Works Department organizational chart?
[ ]	Do we have a formal current fiscal year plan to execute our budget?
[ ]	Have controls been established as a means of preventing funds over-obligation or over expenditure?
[ ]	How are we compared to our target NOR for each commodity? Why are we ahead (or behind)? What is our plan to correct?
[ ]	When will we next set our rates? Have they been sufficient to cover required indirect and overhead costs like safety, training, tools, and maintenance on NWCF people and facilities?
[ ]	Are meetings held with the division heads to familiarize them with the financial reports?
[ ]	Are facilities related directives issued by the installation or FEC, are these instructions less than two years old? Do they need to be updated?
[ ]	What committees does the PWO serve on? Are there any other standing meetings?
[ ]	Have expectations been set for each division and critical area?
[ ]	Who are the key Supported Commanders?
[ ]	What capabilities are performed in-house at the PWD and what is contracted or performed at the FEC for each product and service?
[ ]	What are the key issues the PWD has historically faced? Major issues in the last year?
[ ]	Are any key civilian/military positions vacant? What is being done to fill them? Can someone come TAD from the FEC?
[ ]	How do internal communications flow throughout the PWD? How is correspondence routed to the FEC CO and ICO? What "by direction" authority does the PWD have?
[ ]	Are there SOPs for receiving important visitors? A standard PWD brief?
[ ]	What does this FY's budget look like? What audit/monitoring programs are in place?
[ ]	What regular reports are due? What were the last ones submitted?
[ ]	What is our funding from CNIC by SIC? Do we expect that to change next year?
[ ]	What portion of our business is reimbursable (non-CNIC)? Do the customers pay on time or is there significant unbilled WIP? What can we do to grow the reimbursable business?

[ ]	How is the CNIC Quarterly Performance Data Call (QPDC) completed? Who has authority to submit? What are the ICO's rules for briefing him on changes?
[ ]	What programs are not at COLS 3 on the QPDC? What is our plan to get them into compliance? What will that cost (or save)?
[ ]	How is the Defense Readiness Reporting System-Navy (DRRS-N) completed? What are we in (Yellow or Red), do we expect that to change? Does the FEC expect to be briefed on the monthly submits?
[ ]	What emergency response plans are in place? Who goes to the EOC during an emergency, where is it? Is there an After Action Report (AAR) for the last exercise/event?
Chapter 2. Facilites Management Division (FMD)	
REQUIREMENTS AND PLANNING	
[ ]	How current are our planning documents? Are they based on the current mission and base-loading and do they include consideration of actions by civilians on property just outside the base?
[ ]	Is there a plan of action for all of the facility deficiencies? *(MILCON/Special Project/local project identified for each deficiency.*
[ ]	What is the status of the FCAP? Is it current? Is it used to develop the Maintenance Action Plan?
[ ]	Who manages our MDI? When was it last validated?
[ ]	What is the annual budget for infrastructure maintenance? Is the budget, in relation to the Plant Replacement Value increasing or decreasing?
[ ]	What percent of the maintenance budget is spent on alterations and minor construction?
[ ]	What portion of the budget is used to fund the in-house (FEC NWCF) workforce or the BOS contractor? What is left over for project execution?
[ ]	What is our method of tracking space utilization and tenants assigned to each space? Is there an installation or Regional board for space assignment?
[ ]	Have we reviewed host-tenant agreements and Inter-Service Support Agreements (ISSA) for reimbursable works? Are these agreements with the FEC or through the Region?
[ ]	Does the iNFAD accurately reflect the extent and condition of all real property assets?
[ ]	When was the last time the facilities inventory was reviewed for accuracy? When were the BFRs last updated?
[ ]	Are customer priorities known and periodically reviewed?

[ ]	Are as-built drawings incorporated onto building and utility plans or is there a large backlog? How are changes found by the maintenance staff incorporated? If a large backlog exists, has funding been requested to accomplish this work by contract?
[ ]	What is the status of our GIS? Are we functioning on RSIMS? What layers are populated and how are they updated?
[ ]	Is there a design backlog? How will we reduce it?
[ ]	Is the Capital Improvements Plan (CIP) current? Is it being implemented?
[ ]	Is there a Base Exterior Architecture Plan (BEAP) or Installation Appearance Plan (IAP)?
[ ]	Is there a formal master color plan for facility exteriors and interiors?
[ ]	Are facility history records maintained? Do they list all projects accomplished?
[ ]	Are standing job orders reviewed and updated annually?
[ ]	Is there a joint meeting between FMD and Production to develop a mutually acceptable workload plan?
[ ]	What is the process for updating property record cards following new construction or demolition?
[ ]	How are project Integrated Priority Lists (IPLs) formulated? When is the Shore Facilities Programming Board meeting? Are there any new or revised requirements that should be submitted before the next meeting? What is the ICO's role?
[ ]	Who manages the various IPLs and what is on them: MILCON, Special Project, Specific Project, Major Utility Maintenance, GWOT, Demolition, Installation Appearance, CbtRIF, NWCF Facilities, etc.?
[ ]	Is there a station planning board to determine priorities of alterations and improvements?
[ ]	Has a Maintenance Action Plan been established? What projects will be funded this FY?
[ ]	What is the current plant replacement value of Class II property by Maintenance UIC?
[ ]	Is there a Specifics Project (projects above the minor threshold but below the Special Project threshold) program? How is it administered, does the Region control those funds?
[ ]	Does the PWD have an instruction detailing procedures for customers to submit work requests? Does it provide samples? Does it distinguish between fundable estimates and scoping estimates?

[ ]	Are project designs for highest priority projects kept ready for immediate availability of funding? How do we handle end of the FY projects, both customer funded and NWCF? What has been our history of getting an end of the year dump?
[ ]	Does the Installation advise clients when project status changes?
[ ]	How do we manage pre- and post-award contracted work? Who tracks and updates the status of these projects? Dow we use eProjects?
REAL ESTATE	
[ ]	Is the base's Land Utilization Plan current? Are there any encroachment issues?
[ ]	Are there any opportunities for Enhanced Use Leases (EUL)? What facilities or land could we outlease and what services would we want in return?
[ ]	Is any property on the base leased to private individuals or companies? What are the terms of the lease? Are there additional facilities or parcels that could be leased?
[ ]	Is there any property that we should seek to dispose?
[ ]	Who attends the city, county, or regional planning commission meetings for us? What is our interaction with the PAO?
[ ]	What are the local plans for areas around the base? Could the plans restrict future use of the base?
[ ]	What justifiable requirements does the installation have, and what assets do you control that might attract private sector participation?
[ ]	Are we responsible for any properties outside the primary fence line, including reserve centers? What is their status, what services to we provide?
[ ]	How old is the installation's AICUZ plan? When is it due to be updated? Does the plan reflect the current aircraft mix and/or tempo of air operations? What is being done to obtain a new one?
[ ]	Does the community know about the AICUZ plan? Does it have a copy of the plan?
[ ]	Are local zoning ordinances consistent with compatible land uses identified in the AICUZ plan?
[ ]	Has a Joint Land Use Study (JLUS) been done with the local community? Would one be beneficial?
[ ]	Can the installation or Region identify and commit a source of funding for any long-term costs incurred by an asset management project? Can you fund up-front costs to develop the project?

WORK INDUCTION SYSTEM	
[ ]	How do we monitor customer satisfaction? How do we keep customers advised of the status of their requests?
[ ]	Are customers surveyed for response problem areas?
[ ]	Does the PWD have a project status report for each customer? What is the procedure for submitting this report to the customer periodically? How do customers indicate their priority for each project?
[ ]	Is the PWD trouble desk in FMD or maintenance? Is it manned 24 hours a day and if so, by whom? What are the after hour procedures and capabilities? What do we tell the installation CDO our procedures are?
[ ]	Does the after work hours trouble desk receptionist have a desk guide which explains when work should be deferred to the next workday versus calling in workmen on overtime?
HOUSING	
[ ]	What is the inventory of Family and Bachelor Housing (BH) by room category? What is the utilization percentage? When was the utilization plan updated?
[ ]	When was the last facilities inspection conducted of housing? What are the plans to correct any problems?
[ ]	Is there a need to construct or modernize housing or BQs facilities? What is the status of the projects to meet these requirements?
[ ]	What is the status of BQ or family housing privatization? Are there any homes or BQs that will remain government property?
[ ]	What is our relationship with the housing partner? What is our responsibility, e.g. for utilities, safety, etc.?
[ ]	How many transient BH rooms are available for use?
[ ]	Is a Geographic Bachelor (GB) Review Board established and operational? How many GBs are served by the BH; what other housing alternatives are available to them?
Chapter 3. Facilities Engineering and Acquisition Division (FEAD)	
PROJECT MANAGEMENT & ENGINEERING	
[ ]	What projects are currently under design?
[ ]	What is the process for project approval for things like conformance to base and Region plans, NEPA, explosive safety, fire prevention, IH, HERP, etc? Who has to sign off on a project before it is contracted?

[ ]	What special approvals are required for projects in this area?
[ ]	Are we in compliance with the FSC QOL levels? What is being done to bring us into compliance?
[ ]	Are we staffed to perform a proper level of contract inspection, both at the formal and informal level? Are we properly trained?
[ ]	Who is responsible for ensuring that required maintenance services do not lapse?
[ ]	How do insure that after construction or renovation is complete that FSC services begin on time?
[ ]	Who has their PE, COTR authority, and FE Levels 1 & 2? What is being done to improve the credentialing?
[ ]	How does funding flow from the customer to the FEAD? Who has authority to accept funding documents and load them into FIS for the FEAD's use?
[ ]	Do we have the right mix of engineers to engineering technicians? Does every project have a unique project team assigned?
CONTRACTING	
[ ]	Who are our contracting officers? What is their warrant authority? Is it sufficient for our needs?
[ ]	How does the PWO get his/her warrant?
[ ]	Are our contract specialists and officers getting the contracting courses that they need?
[ ]	What is our suite of contracting options? Do we have Regional or local MACCs, a JOC contractor, what construction IDIQs are available, what FSC contracts are there, what is their IDIQ capacity, how is the 8(a) pool for sole source contracting, do we have AE IDIQs available?
[ ]	What emergency contracting procedures are available, who has the authority?
[ ]	What is our use of eContracts and SPS?
[ ]	What contracts are expiring soon and what is our acquisition plan to replace them? Are FSC contracts following the standard templates and are they using performance based specifications?
	Chapter 4. Production Division
[ ]	How is work divided between shops? Do we have separate minor and reoccurring shops, is work done by trade shops?

[ ]	Is work performed by the in-house workforce of acceptable quality? Is there a formalized system to measure quality?
[ ]	Is there an Operator Inspection Program?
[ ]	Are inspection reports reviewed to determine items to be programmed for accomplishment; to be included as an essential unfunded deficiency; or deferred as desirable, but not essential?
[ ]	Who administers the PMI system? Are Preventive Maintenance Inspections scheduled (PMI)? What is our rate of accomplishment of PMs? How is it tracked?
[ ]	Are facility tenants advised in advance of forthcoming inspections, and are they encouraged to provide lists of known discrepancies?
[ ]	Is turn around time measured for customer work, priority work, routine work?
[ ]	Is an installation directive in effect which specifies the personnel authorized to request services from the Public Works Department, and does it provide a procedure for submitting work requests?
[ ]	Are all known Minor Work and Specific Job Order work programmed on the shop load plans and/or job requirements and status chart?
[ ]	Is there a short-range shop load plan? (1-3 months)
[ ]	Is there a long-range shop load plan? (4-12 months)
[ ]	Is there a Workforce Availability/Work Plan Summary for a projected 3 month period?
[ ]	Is there a yearly Standing Job Order summary, which includes labor hour estimates by work center, and labor and material dollar cost estimates programmed? Is the information concerning action to be taken, and frequencies, sent to the shops?
[ ]	Does the Maintenance and the Utilities Division provide periodic input regarding jobs status, material availability, planned leave, etc?
[ ]	Is there a joint meeting between Facilities Management and Production Division personnel to prioritize work and obtain an acceptable and workable plan?
[ ]	Are only the jobs reflected on the short range (3 months) shop load plan released to the shops for accomplishment? (Exceptions include emergency-urgent jobs or jobs requiring long lead times for material procurement).
[ ]	How many jobs on last month's shop load plan were not started at all? Why? Are reasons documented when programmed jobs were not started?
[ ]	Is turnaround time measured (elapsed time from work receipt to work completion)? Does it appear reasonable?

[ ]	Is the maintenance scheduler provided a copy of the current personnel availability/work plan summary?
[ ]	Is each Work Center supervisor provided with a copy of the weekly schedule prior to the beginning of each new work week?
[ ]	Does the Work Center supervisor prepare an advance daily-work plan at the beginning of each week using the weekly schedule as a basis?
[ ]	Are all Work Center personnel scheduled and accounted for on work center schedules?
[ ]	Does the Work Center supervisor initiate action to obtain amendments before the job exceeds the estimated labor and material costs (oral approval acceptable on urgent jobs in process)?
[ ]	How is time recorded? What is the reject rate? Are PDAs used for job assignment and/or time keeping? Are there enough PDAs for everyone?
[ ]	How is material purchasing accomplished? Do we use FISC, a prime vendor, or credit cards? Are there special procedures for HazMat?
[ ]	How provides oversight on the credit card program? What have our problems been in the past? Who in PWD holds which credit cards, i.e. CNIC & FEC, what are their purchase thresholds?
[ ]	Are material staging or storage areas adequate?
[ ]	Are surplus materials returned promptly?
[ ]	Are on-hand supplies limited to 60 days?
UTILITIES AND ENERGY MANAGEMENT	
[ ]	Has our state deregulated electric utilities or does it plan to?
[ ]	What is the status of our utility privatization program?
[ ]	How recently has our FEC reviewed all of our utility service accounts to ensure that you are receiving service under the lowest possible tariff rate? Are we participating in either natural gas or electricity competitive procurement programs?
[ ]	Is accurate monthly energy consumption and cost information entered in the Defense Utilities and Energy Reporting System to help track progress toward the energy usage reduction goals? How well is our installation progressing toward the goals of 3% per year reduction in energy and 2% per year reduction is water use?
[ ]	What facilities have received energy audits? What are the ten biggest energy using facilities?

[ ]	What projects exists for energy programs, particularly those with 10-year or better paybacks? Are we making use of ECIP and financed projects?
[ ]	What is being done to engineer energy conservation into our normal design process? What is our compliance with LEED standards?
[ ]	What is the status of metering on the base? What facilities are metered, are the meters networked, what information do the meters provided?
[ ]	How is utility billing performed on the base? Do tenants know what they are being billed for? Do the bills represent actual usage or estimates?
[ ]	What building management (control) systems exist? Who runs them and who maintains the systems?
[ ]	Have installation and building energy managers been designated? Have they received adequate training for this position, funded through the DON Energy Program? What DSM programs are available for this installation?
[ ]	Do you sponsor an active Energy Awareness Program to enlist the support of all host and tenant organizations for cost effective activities to reduce energy consumption? Do you receive and use energy awareness materials provided by the DON Energy Program?
[ ]	Are there formal contingency plans for utility outages (water and power at least)?
[ ]	Are utility distribution plans current? Are they easily accessible to emergency work/shop crews?
[ ]	Are all emergency generators and UPS systems routinely tested? Is there a Command instruction to implement this?
[ ]	Does the Duty Section know who and how to contact the Utility Division personnel to secure or restore utilities? Is this procedure in writing and periodically updated?
[ ]	Do all emergency generators have an automatic startup? If not, have projects been submitted to provide this feature?
[ ]	What utility major maintenance projects are we doing this year? What is on the IPL for next year?
[ ]	What is the status of our plants' licensing and our operators' licenses? What continuing education do the operators require?
[ ]	Does the installation prepare a nomination and submit it for the annual OPNAV Energy Conservation Award? Did we receive any awards last year?

SELF HELP AND SEABEES	
[ ]	What NCF support do we get? What did we submit for last year's call for work? Who oversees and provides QA on the Seabee projects?
[ ]	Is there an active self-help program (either at the installation or in the area)? Are there CBMUs, 1st Lieutenant Divisions, Master-at-Arms, or other organizations doing self-help type work?
[ ]	What projects in our Backlog of Maintenance and Repair can be considered for self-help? Especially important is consideration of all safety, health, and quality of life deficiencies.
[ ]	How do the various self-help and PW organizations interact? Are the requirements of all of the tenants being considered?
[ ]	How do we prioritize self-help projects? Do the departments and tenants fund or are they centrally managed?
TRANSPORTATION	
[ ]	What is the percentage of equipment availability?
[ ]	Are equipment repair parts readily available? Can delivery be improved?
[ ]	What is the maintenance cost per mile for vehicles? How many vehicles do we have? How does this compare with our inventory objective? When was the last TRIO?
[ ]	What vehicles are CNIC owned, FEC owned, or GSA leased?
[ ]	What is the possibility of increasing the number of alternate fuel vehicles, including electric?
[ ]	What has been done to reduce the number of vehicles, miles driven, and fuel costs? Has the installation considered using government buses and taxis?
[ ]	Are all customers requested annually to revalidate previous requirements and provide justification for new transportation equipment?
[ ]	Is there a formal Command policy requiring drivers to perform daily vehicle checks using NAVFAC checklist cards? Are theses cards spot checked by transportation managers?
[ ]	Is there a current base instruction regarding the procedures and policies for using CESE? Does it cover such things as off base passes, use of vehicles while TAD, and use at command functions such as the Navy Ball?
[ ]	What percentage of the CESE is beyond the DOD specified economic life? What CESE is on the major procurement plan?
[ ]	Does our Weight Handling Equipment (WHE) Program follow the NAVFAC P-307?

[ ]	Are the certifying officers and test director designated in writing? Is all WHE inspected, tested, and certified? Are all WHE annual certifications complete?
[ ]	When is the next crane inspection? What were the results from the previous inspection?
[ ]	Do construction contracts that include crane service include the provisions of NAVFAC P307? Who inspects contractor cranes before they start work on the installation?
	Chapter 5. Safety
[ ]	How are responsibilities of the various safety programs distributed? Are the programs reviewed on a regular basis internally? When was the last external assessment, what were the findings?
[ ]	What safety support is provided by the FEC? What comes from the installation? Is this in keeping with the MOU?
[ ]	Who are the division safety representatives? When do they meet?
[ ]	Are Navy civilian, military and contractor accidents thoroughly investigated, root causes determined and corrective actions completed? Do you have a review for each significant accident?
[ ]	How pervasive is the use of ESAMS? Is it used for training, medical surveillance, mishap reporting, and reporting unsafe conditions? Who is the administrator? When are employees entered into the system? What is our ESAMS training compliance percentage?
[ ]	Are annual or more frequent safety inspections being conducted for all workplaces, reports written and abatements completed in a timely manner? Is bi-weekly safety being held?
[ ]	What is the status of stretch and flex implementation? Who are our trained leaders? When in the workday is stretch and flex conducted?
[ ]	Is adequate funding provided for technical skills training to avoid accidents? How is PPE funded? What equipment is on hand for confined space, fall protection, high voltage, and NFPA 70E electrical safety?
[ ]	Who are the qualified (or certified) appointed for the required programs, e.g. confined space, fall protection, trenching, etc.? What is their training, when do they require recertification?
[ ]	Are the hazards of confined spaces, falls from heights, toxic chemicals, back injuries, high voltage, construction, etc., understood and controlled? Do we have an inventory of all the confined spaces?
[ ]	Do we have an aggressive workers' compensation reduction program? How is light duty handled? Is it offered to the employee and the attending medical professional?

[ ]	Do work leaders spend at least half of their day checking jobsites for quality of workmanship and safety?
[ ]	How are we participating in the OSH Voluntary Protection Program (VPP)? What percentage complete are we with the action items? When do we expect to have our Star certification inspection?
[ ]	Who did we submit for last year's NAVFAC STAR awards? Who are our candidates for this year? What contractors have received STAR letters?
[ ]	Who enters contractor safety data into the FAIR database?
[ ]	What are the reporting requirements for mishaps? Have we historically met the time requirements?
[ ]	What outstanding safety deficiencies are there in the work spaces? What is the plan to correct them?
[ ]	Do shop areas present a well lit, clean, safe, and organized experience?
[ ]	Does the shop equipment layout afford optimal work flow?
	Chapter 6. Environmental Division
[ ]	Are assessments of the environmental effects of current and proposed actions under the criteria of OPNAVINST 5090.1C conducted and forwarded via the chain of command with sufficient time for review?
[ ]	What NEPA documents, particularly EIS and EAs, are ongoing? Who is performing the work? Are they sequenced correctly with the projects?
[ ]	Of the EAs and EISs we completed in the last five years, was mitigation of environmental impacts required? Were any ongoing mitigation actions specified? How do we ensure that ongoing mitigation is conducted in compliance with the agreements?
[ ]	Are we involved in the formulation and have continued commitment to FONSI/ROD conclusions and any mitigation and monitoring requirements that were established?
[ ]	Does the master plan identify wetlands, endangered species, migratory birds, marine mammals, and other natural resources at our base? Does it identify land use constraints in the vicinity of these natural resources?
[ ]	When was our last regulator inspection in air, water, hazardous waste, etc.? What were the results? Are any deficiencies outstanding?
[ ]	Do we have any outstanding Notices of Violation (NOVs)? What is being done to resolve them?

[ ]	What is the process for notifying the chain of command of NOVs? Who drafts and releases the message? What updates are required?
[ ]	Is environmental documentation for training exercises completed before the authorization of the exercise?
[ ]	Is there a good working relationship with regulatory and other officials from EPA, U.S. Fish and Wildlife, state and local agencies or groups?
[ ]	Who is our designated Cultural Resources Manager? Does he/she have appropriate training in National Historic Preservation Act compliance?
[ ]	Has our installation been professionally surveyed for archeological, Native American cultural resources, and historic buildings and structures?
[ ]	Do you have an up-to-date Integrated Cultural Resources Management Plan (ICRMP)? Is it being implemented? Does it work?
[ ]	Is there a cooperative relationship with off-base preservation organizations, especially the State Historic Preservation Officer and Tribal Governments?
[ ]	Does the installation have an Integrated Natural Resources Management Plan? Are the recommendations being implemented?
[ ]	Does the installation have a natural resources manager or a designated point of contact for natural resources issues?
[ ]	Is the installation properly programming and budgeting environmental funding to ensure natural resources compliance?
[ ]	Who places projects in EPRWeb? What is the status of our funding?
[ ]	Does the installation have an active Environmental Quality Control Committee (EQCC)? Are they fully versed on the current Navy and Regional environmental regulations?
[ ]	Are the tenant commands supportive and involved in the environmental program, and do they participate in the EQCC meetings?
[ ]	What environmental permits do we have? Are we in compliance with all conditions? If not, what are we doing to comply?
[ ]	How much hazardous waste does our base generate? Do we store, treat or dispose of hazardous waste on base? Who tracks hazardous waste manifests?
[ ]	Who is responsible for cleaning up spills of oil or hazardous substances? Have they received training? Do we have any contractual vehicles for emergency clean ups?
[ ]	Who has the lead in Hazardous Material control and management on base? What is the PWD's role?

[ ]	Do we have any agricultural outlease land? What are the terms and restrictions? Who performs the COTR for the farming?
[ ]	What natural resources projects have we done and are we doing? Have we been applying for agricultural outlease funds?
[ ]	What is the status of the Environmental Management System (EMS) for the base? Are there any areas of the base (Hospital or NADEP) excluded from our system? Who is the "top management" for the EMS? What are our goals and objectives for the year? What is the status of our ISO 14001 compliance?
Chapter 7. Process Monitoring and Improvement	
[ ]	What key metrics do we track?
[ ]	Are they in alignment with NAVFAC and Echelon II, III, and IV metrics and the NAVFAC Strategic Plan?
[ ]	What areas are we underperforming? How are we remedying deficiencies?
[ ]	How and when are metrics updated and discussed?
[ ]	How often do we brief the ICO on goals and achievements?
[ ]	Who is responsible for gathering and updating metrics?
[ ]	Do our metrics lead to realistic, achievable goals?
[ ]	How often is the BMS checked for updated processes? By whom?
[ ]	How are process improvements made? Are CARs submitted?
[ ]	Who is responsible for ensuring that BMS processes are implemented?
Chapter 8. Public/Private Ventures	
[ ]	Do you have an inventory, by pay grade composition and bedroom size, of the installation's housing units?
[ ]	How long is the waiting list to get into quarters – by pay grade and bedroom composition?
[ ]	Is there a need for additional housing acquisition? If so, what is the plan for acquisition? Does a recent family housing survey document this need? If not, what is the plan for divestiture?
[ ]	Are there current long and short range maintenance plans for housing? Are they being followed?

[ ]	What is the size and breakout of the current housing budget? Are all funds being obligated to get the best "bang for the buck"?
[ ]	Is maintenance of housing accomplished by contractor or station forces? Is a quality product being provided to the housing occupant?
[ ]	Is there an energy conservation program in place for housing? Are the occupants helping to save energy?
[ ]	Are smoke detectors and carbon monoxide alarms installed in the appropriate locations?
Chapter 9. Information Technology (IT) Systems	
[ ]	Who is our IT systems administrator?
[ ]	What IT systems are being utilized to plan, program and execute work?
[ ]	Are facility databases being regularly updated to reflect condition of facilities?
[ ]	What training does our staff need to ensure effective use of IT systems?
Chapter 10. Human Resources	
[ ]	Who are the key people at the PWD, FEC, HRO, and HRSC for personnel actions?
[ ]	What are the procedures for civilian and military awards? Where are the approval levels?
[ ]	What is the awards budget (by Business Line)? Have we historically used our allotment?
[ ]	When do we typically present awards? Who provides the certificates and length of service pins? What about flags and plaques for retirements?
[ ]	Where do we stand on having Position Descriptions (PD) consistent with our organizational chart, the NAVFAC template, and transformation?
[ ]	Does each PD specify a required a training plan? Does each individual have an individual development plan (IDP)? Are all training courses listed on the PD included in the IDP? Does the IDP show when training was completed and what is lacking or needs to be repeated?
[ ]	Are adequate funds available to execute the IDP?
[ ]	Who does the PWO write FITREPs, EVALs and performance appraisals for?
[ ]	Who falls under the NSPS system? What are their job objectives? Are our people on track to meet those objectives? Do interim reports need to be done?
[ ]	Where are military and civilian personnel records kept?
[ ]	Are there any vacant billets? How are responsibilities for filling vacancies divided between the PWD, BL/SL, and HRO? Who tracks our vacancies?

[ ]	How are disciplinary actions handled? Who has what authority?
[ ]	What is the policy for alternate work schedules? Is telework allowed and for whom?
[ ]	Who maintains recall rosters, organizational charts, ePeople, etc.? Are they current? How is the personnel information protected?
[ ]	Who is responsible for collateral duties such as CFC, Navy/Marine Corps Relief, PRT, urinalysis, etc.?

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Safety and Accident Prevention Checklists and Worksite Self Evaluation

Appendix

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Naval Facilities Engineering Command (NAVFAC) prides itself on its continuing excellence in safety. The entire Command proactively participates in a safety program which makes "safety always" the focal point of every task.

Safety is part of every employee's responsibility. NAVFAC employees must aggressively adhere to and enforce safety policies in all of their work areas and look after each other. The following checklists can be used to ensure safety at the worksite.

SITE SAFETY CHECKLIST

FEAD/ROICC OFFICE:

DATE:

FINAL OVERALL SCORE: _____

CONTRACT% COMPLETE: _____

CONTRACTOR

CONTRACT TITLE:

SUPERINTENDENT:

SITE SAFETY MANGER:

PERSON COMPLETING INSPECTION:

ALL QUESTIONS ANSWERED "NO" WILL BE ENTERED INTO THE SAFETY AND OCCUPATIONAL HEALTH TRACKING SYSTEM FOR CORRECTION

		PREPARATORY PHASE/ PLANNING
1	(Yes) (No) (N/A)	ACCEPTED ACCIDENT PREVENTION PLAN ON-SITE and UPDATED TO REFLECT CURRENT MANAGEMENT?
2	(Yes) (No) (N/A)	COMPETENT PERSON EMPLOYED AS SITE SAFETY AND HEALTH OFFICER (SSH0)?
3	(Yes) (No) (N/A)	SAFETY AND HEALTH BULLETIN BOARD ERECTED IN AREA COMMONLY ACCESSED BY WORKERS?
4	(Yes) (No) (N/A)	SAFETY AND OCCUPATIONAL HEALTH DEFICIENCY TRACKING SYSTEM ESTABLISHED and UPDATED DAILY?
5	(Yes) (No) (N/A)	QUALIFIED PERSON CONDUCTING/DOCUMENTING SAFETY INDOCTRINATION TRAINING FOR NEW EMPLOYEES?
6	(Yes) (No) (N/A)	ACTIVITY HAZARD ANALYSIS (AHA) with COMPETENT PERSON IDENTIFIED and PROOF OF QUALIFICATIONS ATTACHED and ACCEPTED BY GOVERNMENT DESIGNATED AUTHORITY FOR EACH WORK INSTALLATION ON SITE?
7	(Yes) (No) (N/A)	ACTIVITY HAZARD ANALYSIS REVIEWED DURING PREPARATION and INITIAL PHASE MEETING?
8	(Yes) (No) (N/A)	ARE WEEKLY SAFETY MEETINGS FOR ALL WORKERS BEING HELD ON SITE AND DOCUMENTED?
9	(Yes) (No) (N/A)	ARE MONTHLY SAFETY FOR ALL SUPERVISORS ON THE PROJECT DOCUMENTED?
10	(Yes) (No) (N/A)	HAZARD COMMUNICATION PROGRAM SUBMITTED and IMPLEMENTED IAW 29 CFR 1910.1200 or 29 CFR 1926.59?
11	(Yes) (No) (N/A)	MSDS FOR EACH HAZARDOUS SUBSTANCE MAINTAINED WITH SITE MAP ATTACHED?
12	(Yes) (No) (N/A)	CURRENT ADDITION of EM 385-1-1 AVAILABLE ON SITE?
13	(Yes) (No) (N/A)	PRIME CONTRACTOR ASSURING SUBCONTRACTOR COMPLIANCE WITH REQUIREMENTS OF EM-385-1-1?
		Other? Extra Credit?
		OFFICE TRAILER
14	(Yes) (No) (N/A)	OFFICE AND STORAGE TRAILERS ANCHORED?
15	(Yes) (No) (N/A)	EMERGENCY PHONE NUMBERS POSTED?
16	(Yes) (No) (N/A)	PHONE AVAILABLE ON SITE?
17	(Yes) (No) (N/A)	COPY OF CONTRACTOR SIGNIFICANT INCIDENT REPORT (CSIR) FORM ON-SITE?
18	(Yes) (No) (N/A)	CONTRACTOR AWARE IMMEDIATE NOTIFICATION OF ALL INJURIES REQUIRED BY FEAD/ROICC OFFICE?
19	(Yes) (No) (N/A)	EMERGENCY PLANS IN CASE OF FIRE OR OTHER EMERGENCY PREPARED IN WRITING AND REVIEWED?
20	(Yes) (No) (N/A)	DRINKING WATER WITH DISPOSABLE CUPS AND A WASTE RECEPTACLE AVAILABLE?
21	(Yes) (No) (N/A)	TOILET FACILITIES WITH WASHING FACILITIES AVAILABLE?
22	(Yes) (No) (N/A)	MAP DELINEATING BEST ROUTE TO NEAREST MEDICAL FACILITY POSTED ON SAFETY BULLETIN BOARD?
23	(Yes) (No) (N/A)	FIRST-AID KIT, TYPE III, 16 UNIT, and ONE POCKET MOUTH PIECE OR CPR BARRIER PROVIDED AND MAINTAINED WITH INVENTORY LOG AVAILABLE?
24	(Yes) (No) (N/A)	SITE POSTED "HARD HAT AREA," "NOISE HAZARD," "CONSTRUCTION AREA," etc.?
25	(Yes) (No) (N/A)	GARBAGE CANS AND DUMPSTERS AVAILABLE?
26	(Yes) (No) (N/A)	WORK AREAS INSPECTED DAILY FOR ADEQUATE HOUSEKEEPING AND RECORDED ON DAILY INSPECTION REPORTS?
27	(Yes) (No) (N/A)	TRAFFIC CONTROL AROUND SITE ADEQUATE?
		Other? Extra Credit?
		FIRE PREVENTION
28	(Yes) (No) (N/A)	WRITTEN FIRE PREVENTION PLAN ON SITE AND USED TO BRIEF EMPLOYEES?
29	(Yes) (No) (N/A)	FIRE EXTINGUISHERS AVAILABLE, FULLY CHARGED, EASILY VISIBLE WITHIN 75 FEET FOR LOW HAZARD AREAS?
30	(Yes) (No) (N/A)	FIRE EXTINGUISHERS INSPECTED MONTHLY, RECORDED ON TAGS AND INITIALED?
31	(Yes) (No) (N/A)	FUEL STORED IN SAFETY CANS LABELED/LISTED and PAINTED RED WITH YELLOW BAND AND CONTENTS INDICATED?
32	(Yes) (No) (N/A)	ARE HOT WORK PERMITS BEING OBTAINED?
33	(Yes) (No) (N/A)	ARE FIRE WATCHES PROVIDED?
		Other? Extra Credit?
		SCAFFOLD SAFETY
34	(Yes) (No) (N/A)	COMPETENT PERSON SUPERVISES ALL ERECTION, MOVING, DISMANTLING, OR, ALTERING OF ALL SCAFFOLDING?
35	(Yes) (No) (N/A)	PLANKS OVERLAPPED NOT LESS THAN 6" OR MORE THAN 12" OVER END SUPPORTS WITH TOE BOARDS IN PLACE?

SITE SAFETY CHECKLIST

36	(Yes) (No) (N/A)	SCAFFOLD PINNED PROPERLY AND ALL CROSS BRACING IN PLACE?
37	(Yes) (No) (N/A)	SCAFFOLD HEIGHT 4 TIMES SMALLEST BASE DIMENSION IS SYSTEM SECURED TO STRUCTURE?
38	(Yes) (No) (N/A)	ALL GUARDRAILS ARE IN PLACE?
39	(Yes) (No) (N/A)	FULL WORK PLATFORM OR DECKS AT EACH WORKING LEVEL WITH NO CRACKS/SPLITS?
40	(Yes) (No) (N/A)	WORK PLATFORM OR DECK SECURELY FASTENED TO THE SCAFFOLD?
41	(Yes) (No) (N/A)	SAFE ACCESS PROVIDED TO EACH WORKING LEVEL?
42	(Yes) (No) (N/A)	SCAFFOLD AND COMPONENTS NOT OVERLOADED?
43	(Yes) (No) (N/A)	IS SCAFFOLD SYSTEM PLUMB AND LEVEL?
44	(Yes) (No) (N/A)	SUSPENDED SCAFFOLD SYSTEMS USING INDEPENDENT PERSONAL FALL ARREST SYSTEM?
45	(Yes) (No) (N/A)	PERSONNEL PROHIBITED FROM RIDING ON MANUALLY PROPELLED SCAFFOLDS?
		Other? Extra Credit?
FALL PROTECTION		
46	(Yes) (No) (N/A)	ARE EMPLOYEES TRAINED FOR FALL PROTECTION SYSTEMS IN USE?
47	(Yes) (No) (N/A)	HAS THE CONTRACTOR DESIGNATED A COMPETENT PERSON FOR FALL PROTECTION?
48	(Yes) (No) (N/A)	FALL PROTECTION PPE PROVIDED FOR ALL WORKING IN AREAS WHERE THEY COULD FALL 6' OR MORE?
49	(Yes) (No) (N/A)	IS A FULL BODY HARNESS USED WHERE APPLICABLE?
50	(Yes) (No) (N/A)	ALL WORKERS ALOFT TIED OFF AT ALL TIMES TO STRUCTURAL ELEMENT CAPABLE OF SUPPORTING 5,000 LBS?
51	(Yes) (No) (N/A)	HAVE STANDARD GUARDRAILS BEEN PROVIDED WHERE NEEDED?
52	(Yes) (No) (N/A)	HAVE HORIZONTAL LIFE LINES BEEN DESIGNED AND INSTALLED UNDER SUPERVISION OF A QUALIFIED PERSON?
53	(Yes) (No) (N/A)	MARINE (VESSEL) DECKS 6 FEET OR MORE ABOVE OTHER SURFACES TYPE A OR TYPE B FALL PROTECTION PROVIDED?
		OTHER? EXTRA CREDIT?
LADDER SAFETY		
54	(Yes) (No) (N/A)	LADDERS EXTEND 3' ABOVE LANDING PLATFORM AND TIED TO STRUCTURE?
55	(Yes) (No) (N/A)	LADDERS OVER 20 FOOT NOT USED ON PROJECT?
56	(Yes) (No) (N/A)	ARE LADDERS USED WITH HAND TOOLS ONLY?
57	(Yes) (No) (N/A)	ARE LADDER BASE DISTANCES FROM STRUCTURE 1/4 HEIGHT?
58	(Yes) (No) (N/A)	ARE FLOOR OPENINGS EITHER COVERED OR SURROUNDED BY A GUARDRAIL?
59	(Yes) (No) (N/A)	ELECTRICIANS NOT USING CONDUCTIVE LADDERS?
60	(Yes) (No) (N/A)	STAIRWAYS PROVIDED ON ALL STRUCTURES OVER 20' DURING CONSTRUCTION/WITH GUARDRAIL?
61	(Yes) (No) (N/A)	PORTABLE STEP LADDERS OVER 20' NOT USED ON THE SITE?
62	(Yes) (No) (N/A)	ARE LADDERS PROPERLY USED?
		OTHER? EXTRA CREDIT?
EXCAVATIONS		
63	(Yes) (No) (N/A)	DIGGING PERMITS OBTAINED WHEN REQUIRED?
64	(Yes) (No) (N/A)	COMPETENT PERSON INSPECTED AND DOCUMENTED EXCAVATION DAILY?
65	(Yes) (No) (N/A)	HIGH VISIBILITY APPAREL WORN BY ALL WORKERS EXPOSED TO VEHICLE TRAFFIC OR WORKING AROUND EQUIPMENT
66	(Yes) (No) (N/A)	EXCAVATOR, BACKHOE OPERATING MANUAL FOR HYDRAULIC EQUIPMENT AND ATTACHMENTS ON-SITE?
67	(Yes) (No) (N/A)	EXCAVATOR EQUIPMENT USED AS HOISTING EQUIPMENT ON CONTRACTS AWARDED SINCE JUNE 2005 FOLLOW NEW EM-385 SECTION 16.N.01 REQUIREMENTS BELOW?
	(Yes) (No) (N/A)	A. WRITTEN PROOF OF QUALIFICATION OF EQUIPMENT OPERATORS, RIGGERS INVOLVED IN HOISTING, TRANSPORTING OPERATIONS?
	(Yes) (No) (N/A)	B. OPERATIONAL TEST PERFORMED WITH EQUIPMENT?
	(Yes) (No) (N/A)	C. MANUFACTURERS OPERATING MANUAL WITH EQUIPMENT?
	(Yes) (No) (N/A)	D. MANUFACTURERS LOAD RATING CHART?
	(Yes) (No) (N/A)	E. PROPER USE OF RIGGING, INCLUDING POSITIVE LATCHING DEVICES?
	(Yes) (No) (N/A)	F. INSPECTION OF RIGGING
	(Yes) (No) (N/A)	G. COMMUNICATION BETWEEN WORKERS INVOLVED?
	(Yes) (No) (N/A)	H. USING TAG LINES?
	(Yes) (No) (N/A)	I. BARRICADE SWING RADIUS OF EQUIPMENT AND LOAD?
	(Yes) (No) (N/A)	J. SURFACE BENEATH EQUIPMENT STABLE?

SITE SAFETY CHECKLIST

68	(Yes) (No) (N/A)	OVER 4' DEEP MUST HAVE A LADDER WITHIN 25' AND TWO MEANS OF EGRESS?
69	(Yes) (No) (N/A)	HAS PROPER SLOPE OR TRENCH BOX/SHORING BEEN PROVIDED?
70	(Yes) (No) (N/A)	IS WATER CONTROLLED/REMOVED?
71	(Yes) (No) (N/A)	IS EXCAVATED MATERIAL AT LEAST 2' BACK FROM TRENCH EDGE?
72	(Yes) (No) (N/A)	BARRICADED, ETC., TO PREVENT WORKERS AND PUBLIC FROM FALLING INTO TRENCH/HOLE?
73	(Yes) (No) (N/A)	IN LOCATIONS OF KNOWN OR SUSPECTED CONTAMINATION, IS EXCAVATION ATMOSPHERE MONITORED?
		OTHER? EXTRA CREDIT?
		ELECTRICAL
74	(Yes) (No) (N/A)	HAS A SKETCH OF TEMPORARY POWER DISTRIBUTION BEEN SUBMITTED /ACCEPTED BY GDA?
75	(Yes) (No) (N/A)	ELECTRICAL WORK PERFORMED BY QUALIFIED PERSONNEL WITH VERIFIABLE CREDENTIALS?
76	(Yes) (No) (N/A)	ARE ARC FLASH REQUIREMENTS KNOWN AND ADHERED TO?
77	(Yes) (No) (N/A)	PROTECTIVE/TEMPORARY GROUNDS CONNECTED ON EQUIPMENT TO BE WORKED ON?
78	(Yes) (No) (N/A)	ARE TEMPORARY POWER PANEL AND RECEPTACLES PROTECTED FROM WEATHER?
79	(Yes) (No) (N/A)	GFCI'S IN USE FOR SITE TOOLS - APPLIES TO EXISTING OUTLETS IN RENOVATION PROJECTS AS WELL?
80	(Yes) (No) (N/A)	TEMPORARY LIGHTS INSULATED FROM SUPPORTS PROPERLY WITH ALL LAMPS WORKING AND GUARDED?
81	(Yes) (No) (N/A)	OVERHEAD POWER LINES IN AREA, OPERATIONS PROHIBITED UNLESS MAINTAINING AT LEAST 10' DISTANCE OR ISOLATION?
82	(Yes) (No) (N/A)	IS LOCKOUT/TAGOUT PROGRAM IN EFFECT?
83	(Yes) (No) (N/A)	VERTICAL CLEARANCE OF TEMPORARY WIRING LESS THEN 600 VOLTS AT LEAST 10 FEET MAINTAINED ?
84	(Yes) (No) (N/A)	ALL FLEXIBLE CORDS INSPECTED AT LEAST DAILY? DOCUMENTED?
85	(Yes) (No) (N/A)	FLEXIBLE CORDS NOT SPLICED EXCEPT HARD SERVICE CORDS # 12 OR LARGER WITH MOLDED OR VULCANIZED SPLICES BY QUALIFIED ELECTRICIAN?
		OTHER? EXTRA CREDIT?
	CRANES	
86	(Yes) (No) (N/A)	IS CRANE OPERATOR QUALIFIED IAW EM 385-1-1, APP. G, AND IS CRANE CERTIFICATION POSTED IN CAB?
87	(Yes) (No) (N/A)	ARE APPENDIX H DAILY START UP INSPECTIONS PERFORMED BY OPERATOR AND SUBMITTED WITH DRI?
88	(Yes) (No) (N/A)	HAS PERIODIC INSPECTION BEEN PERFORMED PRIOR TO USE ON SITE IAW EM 385-1-1, APP. H?
89	(Yes) (No) (N/A)	IS CRANE EQUIPPED WITH ANTI TWO-BLOCK DEVICE IF REQUIRED?
90	(Yes) (No) (N/A)	IS THE CRANE LEVEL AND ON FIRM GROUND AND OUTRIGGERS IN USE WITH APPROPRIATE CRIBBING?
91	(Yes) (No) (N/A)	IF NEAR ELECTRIC POWER SOURCES, ARE RULES FOLLOWED FOR CLEARANCE/ISOLATION IN OPERATING ZONE? 10 FOOT MINIMUM REQUIRED
92	(Yes) (No) (N/A)	IS CRANE SIDE LOADING PROHIBITED?
93	(Yes) (No) (N/A)	ARE RIGGING CABLES AND SLINGS INSPECTED BY A COMPETENT PERSON BEFORE EACH SHIFT?
94	(Yes) (No) (N/A)	ARE WORKERS PROTECTED FROM THE CRANE SWING RADIUS AND PREVENTED FROM PASSING UNDER THE LOAD?
		OTHER? EXTRA CREDIT?
		CONFINED SPACE
95	(Yes) (No) (N/A)	HAS ENTRY PLAN IAW 29 CFR 1910.146 AND EM-385 BEEN SUBMITTED AND ACCEPTED?
96	(Yes) (No) (N/A)	IS COMPETENT PERSON, IN WRITING, IDENTIFIED?
97	(Yes) (No) (N/A)	IS ATMOSPHERE BEING MONITORED?
98	(Yes) (No) (N/A)	IS SPACE BEING VENTILATED?
99	(Yes) (No) (N/A)	ARE ENTRANTS, ATTENDANTS AND ENTRY SUPERVISOR PROPERLY TRAINED?
100	(Yes) (No) (N/A)	IS RESCUE/RETRIEVAL SYSTEM IN PLACE FOR PERMIT REQUIRED CONFINED PLACES?
101	(Yes) (No) (N/A)	ARE ENTRY PERMITS POSTED AT POINT OF ENTRY AND SIGNED BY ENTRY SUPERVISOR?
102	(Yes) (No) (N/A)	IS POINT OF ENTRY POSTED "DANGER CONFINED SPACE"?
103	(Yes) (No) (N/A)	HAS BLANKING OR LOCKING OUT OF SYSTEMS TAKEN PLACE?
		OTHER? EXTRA CREDIT?
		ROOFING
104	(Yes) (No) (N/A)	HAS STRUCTURAL ANALYSIS OF THE ROOF BEEN CONDUCTED BY A QUALIFIED PERSON ?
105	(Yes) (No) (N/A)	HAS COMPETENT PERSON COMPLETED A DAILY INSPECTION OF EACH JOB SITE?
106	(Yes) (No) (N/A)	HAS COMPETENT PERSON DEVELOPED A FALL PROTECTION PLAN, SUBMITTED/ACCEPTED BY GDA?
107	(Yes) (No) (N/A)	ARE KETTLES AT LEAST 25 FEET AWAY FROM BUILDINGS?
108	(Yes) (No) (N/A)	IS KETTLE ATTENDANT WEARING PROPER PPE AT ALL TIMES?

SITE SAFETY CHECKLIST

109	(Yes) (No) (N/A)	ARE TWO FIRE EXTINGUISHERS AT THE KETTLE?
110	(Yes) (No) (N/A)	ARE SKYLIGHTS AND ROOF PENETRATIONS COVERED OR BARRICADED APPROPRIATELY?
111	(Yes) (No) (N/A)	HAS THE ROOF BEEN EVALUATED FOR ITS ABILITY TO SUPPORT THE INTENDED CONSTRUCTION LOADS?
112	(Yes) (No) (N/A)	ARE WARNING LINES ON LOW SLOPED ROOFS IN PLACE AND PROPERLY INSTALLED/MAINTAINED?
113	(Yes) (No) (N/A)	FUEL CYLINDER A MINIMUM OF 10' FROM OPEN FLAME?
		OTHER? EXTRA CREDIT?
		EQUIPMENT
114	(Yes) (No) (N/A)	ALL MACHINERY OR EQUIPMENT INSPECTED DAILY, WHEN IN USE, BY COMPETENT PERSONS?
115	(Yes) (No) (N/A)	ARE OPERATORS TRAINED AND AUTHORIZED TO OPERATE POWERED INDUSTRIAL TRUCKS, LIFT TRUCKS, AND SIMILAR EQUIPMENT?
116	(Yes) (No) (N/A)	MOBILE EQUIPMENT EQUIPPED WITH BACKUP ALARMS? ROLLOVER CAGES/ MOVING PARTS ADEQUATELY GUARDED?
117	(Yes) (No) (N/A)	ARE EQUIPMENT OPERATIONS MAINTAINING SAFE CLEARANCE FROM ELECTRICAL POWER LINES?
118	(Yes) (No) (N/A)	MODIFICATIONS MEET SAFETY RATING IAW MANUFACTURER (I.E., LIFTING PERSONNEL WITH FORKLIFT)?
119	(Yes) (No) (N/A)	ARE SAFETY LASHINGS PROVIDED FOR HIGH PRESSURE HOSE CONNECTIONS, I.E., AIR COMPRESSORS?
120	(Yes) (No) (N/A)	ARE WORKERS CLEAR OF BLIND SPOTS ASSOCIATED WITH MOBILE CONSTRUCTION EQUIPMENT?
121	(Yes) (No) (N/A)	ARE DAILY WALK AROUND INSPECTIONS OF AERIAL LIFTS PERFORMED AND DOCUMENTED BY QUALIFIED OPERATORS?
122	(Yes) (No) (N/A)	DO AERIAL LIFTS HAVE BASKET/PLATFORM WITH GUARDRAIL?
123	(Yes) (No) (N/A)	WORKERS NOT EXTENDING OVER GUARDRAIL OF AERIAL LIFTS?
124	(Yes) (No) (N/A)	ARE ARTICULATING BOOM PLATFORMS (JLG TYPE) USED WITH FULL BODY HARNESS ATTACHED TO PROPER ATTACHMENT POINTS ON BOOM OR BASKET?
125	(Yes) (No) (N/A)	ARE DUMP TRUCK CHECKLISTS BEING USED AND COPIES KEPT ON SITE?
		OTHER? EXTRA CREDIT?
		DEMOLITION
126	(Yes) (No) (N/A)	HAS DEMOLITION PLAN, BASED ON ENGINEERING, LEAD, AND ASBESTOS SURVEY BY A REGISTERED PROFESSIONAL ENGINEER BEEN ACCEPTED?
127	(Yes) (No) (N/A)	WASTE NOT BEING DROPPED > 6' UNLESS IN AN ENCLOSED CHUTE AND AREA SECURED FROM TRAFFIC?
128	(Yes) (No) (N/A)	FOR BUILDING DEMOLITION, HAS NOTIFICATION BEEN MADE TO STATE HAVING JURISDICTION?
129	(Yes) (No) (N/A)	ARE NAILS REMOVED FROM SCRAP LUMBER/MATERIALS?
130	(Yes) (No) (N/A)	FRAGMENTATION OF GLASS CONTROLLED?
131	(Yes) (No) (N/A)	MATERIAL CHUTES AT AN ANGLE GREATER THAN 45º FROM THE HORIZONTAL ENCLOSED?
		OTHER? EXTRA CREDIT?
		PPE
132	(Yes) (No) (N/A)	WORKERS WEARING SAFETY - TOED LEATHER SHOES OR BOOTS(NO TENNIS SHOES), LONG PANTS AND SLEEVE SHIRT?
133	(Yes) (No) (N/A)	HARD HATS BEING WORN PROPERLY?
134	(Yes) (No) (N/A)	SAFETY GLASSES WHERE APPROPRIATE?
135	(Yes) (No) (N/A)	HEARING PROTECTION WHERE APPROPRIATE? (IF YOU NEED TO YELL TO CONVERSE)
136	(Yes) (No) (N/A)	RESPIRATORS WHERE APPROPRIATE?
137	(Yes) (No) (N/A)	IMPALEMENT PROTECTION PROVIDED WHERE PERSONNEL COULD WORK ABOVE VERTICAL IMPALEMENT?
138	(Yes) (No) (N/A)	IS LIGHTING ADEQUATE?
139	(Yes) (No) (N/A)	HIGH VISIBILITY APPAREL BEING WORN BY ALL WORKERS ON SITE ON CONTRACTS AWARDED SINCE 30 APRIL 2007?
		OTHER? EXTRA CREDIT?
		ABATEMENT
140	(Yes) (No) (N/A)	HAS ABATEMENT PLAN BEEN SUBMITTED AND ACCEPTED?
141	(Yes) (No) (N/A)	IS INDEPENDENT AIR MONITORING BEING PERFORMED AS REQUIRED INSIDE AND OUTSIDE BARRIERS?
142	(Yes) (No) (N/A)	IS CONTAINMENT IN PLACE WITHOUT INTEGRITY COMPROMISE?
143	(Yes) (No) (N/A)	ARE EMPLOYEES UTILIZING APPROPRIATE PPE?
144	(Yes) (No) (N/A)	IF NEGATIVE AIR IS USED, ARE FANS USED CONTINUOUSLY AND MONITORED FOR PRESSURE DIFFERENTIAL?
145	(Yes) (No) (N/A)	HAS BASELINE BEEN PERFORMED AND NECESSARY FINAL CLEARANCE READINGS TAKEN?
146	(Yes) (No) (N/A)	ARE INSPECTIONS BY INDEPENDENT PQP PERFORMED PRIOR TO BARRIER REMOVAL?
147	(Yes) (No) (N/A)	IS WASTE MATERIAL PROPERLY CONTAINERIZED AND STORED?
148	(Yes) (No) (N/A)	ARE AIR MONITORING RESULTS PROVIDED TO FEAD/ROICC?
149	(Yes) (No) (N/A)	ARE WASTE SHIPMENT RECORDS PROVIDED TO FEAD/ROICC?

SITE SAFETY CHECKLIST

		OTHER? EXTRA CREDIT?
		WATERFRONT ACTIVITIES
150	(Yes) (No) (N/A)	ARE EMPLOYEES WEARING APPROPRIATE FLOTATION DEVICES (PFDS)?
151	(Yes) (No) (N/A)	IS A RESCUE SKIFF AVAILABLE?
152	(Yes) (No) (N/A)	ARE EMERGENCY LIFE RINGS AVAILABLE?
153	(Yes) (No) (N/A)	IF DIVING OPERATIONS ARE TAKING PLACE, HAS A DIVE PLAN BEEN SUBMITTED AND ACCEPTED?
154	(Yes) (No) (N/A)	DOES DIVE TEAM CONSIST OF PROPER NUMBER AND QUALIFICATIONS FOR EMPLOYEES?
155	(Yes) (No) (N/A)	HAND RAILS FOR FALL PROTECTION ON ALL MARINE VESSELS ? CONTRACTS AWARDED SINCE MARCH 2007
		OTHER? EXTRA CREDIT?
	SCORING: Total applicable for each category = X (where X includes responses for category of "Yes" and "No" but does not include N/A)	
	Total with "Yes" responses for each category = Y * SCORE RATE EQUATION = Y/X *	
	SCORE FOR EACH CATEGORY:	
		1. PREPARATORY PHASE: 6. LADDER SAFETY: 11.ROOFING:
		2. OFFICE TRAILER: 7. EXCAVATIONS: 12. EQUIPMENT:
		3. FIRE PREVENTION: 8. ELECTRICAL: 13. DEMOLITION:
		4. SCAFFOLD SAFETY: 9. CRANES: 14:PPE:
		5. FALL PROTECTION: 10: CONFINED SPACES: 15: ABATEMENT:
	OVERALL RATING OF CHECKLIST EQUALS LOWEST RATING FOR ANY ONE CATEGORY:	
	ALL QUESTIONS ANSWERED "NO" WILL BE ENTERED INTO THE SAFETY & OCCUPATIONAL HEALTH TRACKING SYSTEM	

NAVFAC Naval Facilities Engineering Command

WORKSITE SAFETY SELF-EVALUATION

FEAD/ROICC OFFICE: _____ DATE:
CONTRACTOR: _____
CONTRACT TITLE: _____ CONTRACT %COMPLETE:
CONTRACTOR SUPERINTENDENT: _____

CATEGORY					Date Corrected
PREPARATORY PHASE (Planning)	(Yes)	(No)	(N/A)	1) Activity Hazard Analysis performed and used on the site for each major phase of the work?	
	(Yes)	(No)	(N/A)	2) Are weekly safety meetings and indoctrination held on site and documented for all workers?	
Comments/Notes:	(Yes)	(No)	(N/A)	3) Is the submitted safety plan on site and in use?	
	(Yes)	(No)	(N/A)	4) Is the Activity Hazard Analysis reviewed during the preparatory inspection?	
	(Yes)	(No)	(N/A)	5) Hazardous materials program in place with MSDS sheets available and maintained for easy reference?	
	(Yes)	(No)	(N/A)	6) EM 385-1-1 available on the site?	
	(Yes)	(No)	(N/A)	7) Other? Extra Credit?	
OFFICE TRAILER GENERAL	(Yes)	(No)	(N/A)	8) Are office and storage trailers anchored?	
	(Yes)	(No)	(N/A)	9) Are emergency phone numbers posted?	
Comments/Notes:	(Yes)	(No)	(N/A)	10) Is a phone available?	
	(Yes)	(No)	(N/A)	11) First aid log maintained (contractors must use OSHA Form 200)?	
	(Yes)	(No)	(N/A)	12) Toilet facilities available?	
	(Yes)	(No)	(N/A)	13) Site posted "HARD HAT AREA," "NOISE HAZARD," "CONSTRUCTION AREA," etc., as required?	
	(Yes)	(No)	(N/A)	14) Garbage cans and dumpsters available?	
	(Yes)	(No)	(N/A)	15) Jobsite cleaned daily?	
	(Yes)	(No)	(N/A)	16) Is traffic control around site adequate?	
	(Yes)	(No)	(N/A)	17) Other? Extra Credit?	
FIRE PREVENTION	(Yes)	(No)	(N/A)	18) Are fire extinguishers available, fully charged, and easily visible within 75 feet for low hazard areas?	
Comments/Notes:	(Yes)	(No)	(N/A)	19) Is fuel stored in proper containers?	
	(Yes)	(No)	(N/A)	20) Are hot work permits being obtained?	
	(Yes)	(No)	(N/A)	21) Are fire watches provided?	
	(Yes)	(No)	(N/A)	22) Are gas cylinders stored upright and secured with chain or rope?	
	(Yes)	(No)	(N/A)	23) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	24) Other? Extra Credit?	
SCAFFOLD SAFETY	(Yes)	(No)	(N/A)	25) Are daily scaffold inspections performed by designated competent person?	
	(Yes)	(No)	(N/A)	26) Planks overlapped not less than 6" or more than 12" over end supports with toe boards in place?	

CATEGORY					Date Corrected
Comments/Notes:	(Yes)	(No)	(N/A)	27) Tubing pinned properly and all cross bracing in place?	
	(Yes)	(No)	(N/A)	28) If scaffold height is 4X smallest base dimension, is system secured to structure?	
	(Yes)	(No)	(N/A)	29) All guardrails are in place?	
	(Yes)	(No)	(N/A)	30) Full work platform at each working level with no cracks/splits?	
	(Yes)	(No)	(N/A)	31) Safe access provided to each working level?	
	(Yes)	(No)	(N/A)	32) Scaffold and components not overloaded?	
	(Yes)	(No)	(N/A)	33) Is scaffold system plumb and level?	
	(Yes)	(No)	(N/A)	34) Suspended scaffold systems using independent personal fall arrest system?	
	(Yes)	(No)	(N/A)	35) Other? Extra Credit?	
FALL PROTECTION	(Yes)	(No)	(N/A)	36) Is a full body harness used where applicable?	
	(Yes)	(No)	(N/A)	37) Tied off at all times to structural element capable of supporting 5,000 lbs/person 100%?	
Comments/Notes:	(Yes)	(No)	(N/A)	38) Is protection provided for all working in an areas where they could fall 6' or more?	
	(Yes)	(No)	(N/A)	39) Are employees trained for fall protection systems in use?	
	(Yes)	(No)	(N/A)	40) Has the contractor designated a competent person for fall protection?	
	(Yes)	(No)	(N/A)	41) Have standard guardrails been provided where needed?	
	(Yes)	(No)	(N/A)	42) Have horizontal life lines been designed and installed under supervision of a qualified person?	
	(Yes)	(No)	(N/A)	43) Other? Extra Credit?	
LADDER SAFETY	(Yes)	(No)	(N/A)	44) Do ladders extend 3' above landing platform and tied to structure?	
Comments/Notes:	(Yes)	(No)	(N/A)	45) Are ladders used with hand tools only?	
	(Yes)	(No)	(N/A)	46) Are ladder base distances from structure 1/4 height?	
	(Yes)	(No)	(N/A)	47) Are floor openings either covered or surrounded by a guardrail?	
	(Yes)	(No)	(N/A)	48) Electricians not using portable or conductive ladders?	
	(Yes)	(No)	(N/A)	49) Stairways provided on all structures over 20' during construction and supplied with guardrail?	
	(Yes)	(No)	(N/A)	50) Portable step ladders over 20' not used on the site?	
	(Yes)	(No)	(N/A)	51) Are ladders properly used?	
	(Yes)	(No)	(N/A)	52) Other? Extra Credit?	
EXCAVATIONS	(Yes)	(No)	(N/A)	53) Over 4' deep must have a ladder within 25' and two means of egress?	
Comments/Notes:	(Yes)	(No)	(N/A)	54) Has proper slope or trench box/shoring been provided?	
	(Yes)	(No)	(N/A)	55) Is water controlled/removed?	
	(Yes)	(No)	(N/A)	56) Is excavated material at least 2' back from trench edge?	
	(Yes)	(No)	(N/A)	57) Barricaded, etc., to prevent workers and public from falling into trench/hole?	
	(Yes)	(No)	(N/A)	58) In locations of known or suspected contamination, is excavation atmosphere monitored?	
	(Yes)	(No)	(N/A)	59) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	60) Other? Extra Credit?	
ELECTRICAL	(Yes)	(No)	(N/A)	61) Are temporary power panel and receptacles protected from weather?	

CATEGORY					Date Corrected
Comments/Notes:	(Yes)	(No)	(N/A)	62) GFI's in use for site tools - applies to existing outlets in renovation projects as well?	
	(Yes)	(No)	(N/A)	63) Temporary lights rigged and secured to supports properly with covers?	
	(Yes)	(No)	(N/A)	64) If overhead power lines in area, are operations maintaining 10' distance or isolation?	
	(Yes)	(No)	(N/A)	65) Is lockout/tagout program in effect?	
	(Yes)	(No)	(N/A)	66) Sketch of proposed temporary power distribution been submitted/accepted before installing?	
	(Yes)	(No)	(N/A)	67) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	68) Other? Extra Credit?	
CRANES	(Yes)	(No)	(N/A)	69) Has periodic inspection been performed prior to use on site IAW EM 385-1-1, App. H?	
Comments/Notes:	(Yes)	(No)	(N/A)	70) Are App. H daily start up inspections performed by operator and submitted with DRI?	
	(Yes)	(No)	(N/A)	71) Is crane operator qualified IAW EM 385-1-1, App. G, and is crane certification posted in cab?	
	(Yes)	(No)	(N/A)	72) Are workers protected from the crane swing radius and prevented from passing under the load?	
	(Yes)	(No)	(N/A)	73) Are rigging cables and slings in good repair free of kinks and cracks?	
	(Yes)	(No)	(N/A)	74) Is the crane level and on firm ground and outriggers in use with appropriate cribbing?	
	(Yes)	(No)	(N/A)	75) Is crane side loading prohibited?	
	(Yes)	(No)	(N/A)	76) Near electric power sources, are rules followed for clearance/isolation in operating zone?	
	(Yes)	(No)	(N/A)	77) Is crane equipped with anti two-block device if required?	
	(Yes)	(No)	(N/A)	78) Other? Extra Credit?	
CONFINED SPACES	(Yes)	(No)	(N/A)	79) Has entry plan been submitted and accepted?	
	(Yes)	(No)	(N/A)	80) Is atmosphere being monitored?	
Comments/Notes:	(Yes)	(No)	(N/A)	81) Is space being ventilated?	
	(Yes)	(No)	(N/A)	82) Are entrants, attendants and entry supervisor properly trained?	
	(Yes)	(No)	(N/A)	83) Is rescue/retrieval system in place?	
	(Yes)	(No)	(N/A)	84) Are daily entry permits posted at point of entry and signed by entry supervisor?	
	(Yes)	(No)	(N/A)	85) Is point of entry posted "**DANGER CONFINED SPACE**"?	
	(Yes)	(No)	(N/A)	86) Has blanking or locking out of systems taken place?	
	(Yes)	(No)	(N/A)	87) Other? Extra Credit?	
ROOFING	(Yes)	(No)	(N/A)	88) Are kettles at least 25 feet away from buildings?	
Comments/Notes:	(Yes)	(No)	(N/A)	89) Has an employee fall protection system been implemented and in proper use?	
	(Yes)	(No)	(N/A)	90) Are skylights and roof penetrations covered or barricaded appropriately?	
	(Yes)	(No)	(N/A)	91) Has the roof been evaluated for its ability to support the intended construction loads?	
	(Yes)	(No)	(N/A)	92) Has the roof been surveyed for deterioration?	
	(Yes)	(No)	(N/A)	93) Are two fire extinguishers at the kettle?	
	(Yes)	(No)	(N/A)	94) Fuel cylinder a minimum of 10' from open flame?	
	(Yes)	(No)	(N/A)	95) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	96) Other? Extra Credit?	
EQUIPMENT	(Yes)	(No)	(N/A)	97) Are forklift operators qualified through training at the site (certificate included in Safety Plan)?	

CATEGORY					Date Corrected
Comments/Notes:	(Yes)	(No)	(N/A)	98) Mobile equipment equipped with rollover cages and backup alarms with moving parts adequately guarded?	
	(Yes)	(No)	(N/A)	99) Are equipment operations maintaining safe clearance from electrical power lines?	
	(Yes)	(No)	(N/A)	100) Modifications meet safety rating in accordance with manufacturer (i.e., lifting personnel with forklift)?	
	(Yes)	(No)	(N/A)	101) Are safety lashings provided for high pressure hose connections, i.e., air compressors?	
	(Yes)	(No)	(N/A)	102) Are workers clear of blind spots associated with mobile construction equipment?	
	(Yes)	(No)	(N/A)	103) Do aerial lifts have basket/platform with guardrail?	
	(Yes)	(No)	(N/A)	104) Workers not extending over guardrail of aerial lifts?	
	(Yes)	(No)	(N/A)	105) Are articulating boom platforms (JLG type) used with Full Body Harness attached to boom or basket?	
	(Yes)	(No)	(N/A)	106) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	107) Other? Extra Credit?	
DEMOLITION	(Yes)	(No)	(N/A)	108) Has demolition plan been submitted and accepted?	
Comments/Notes:	(Yes)	(No)	(N/A)	109) Waste not being dropped > 6' unless in an enclosed chute and area secured from traffic?	
	(Yes)	(No)	(N/A)	110) Has an engineering survey been prepared for structural elements?	
	(Yes)	(No)	(N/A)	111) Are removal operations from the top down?	
	(Yes)	(No)	(N/A)	112) Are all floor and wall openings covered or guarded to prevent falls?	
	(Yes)	(No)	(N/A)	113) For building demolition, has notification been made to State having jurisdiction?	
	(Yes)	(No)	(N/A)	114) Are nails removed from scrap lumber/materials?	
	(Yes)	(No)	(N/A)	115) Other? Extra Credit?	
	(Yes)	(No)	(N/A)	116) Other? Extra Credit?	
PPE	(Yes)	(No)	(N/A)	117) Workers wearing leather shoes (no tennis shoes), long pants and sleeve shirt?	
Comments/Notes:	(Yes)	(No)	(N/A)	118) Hard hats being worn?	
	(Yes)	(No)	(N/A)	119) Safety glasses where appropriate?	
	(Yes)	(No)	(N/A)	120) Hearing protection where appropriate? (if you need to yell to converse)	
	(Yes)	(No)	(N/A)	121) Respirators where appropriate?	
	(Yes)	(No)	(N/A)	122) Impalement protection provided where personnel could work above vertical impalement?	
	(Yes)	(No)	(N/A)	123) Is lighting adequate?	
	(Yes)	(No)	(N/A)	124) Other? Extra Credit?	
ABATEMENT	(Yes)	(No)	(N/A)	125) Has abatement plan been submitted and accepted?	
Comments/Notes:	(Yes)	(No)	(N/A)	126) Is independent air monitoring being performed as required inside and outside barriers?	
	(Yes)	(No)	(N/A)	127) Is containment in place without integrity compromise?	
	(Yes)	(No)	(N/A)	128) Are employees utilizing appropriate PPE?	
	(Yes)	(No)	(N/A)	129) If negative air is used, are fans used continuously and monitored for pressure differential?	
	(Yes)	(No)	(N/A)	130) Has baseline been performed and necessary final clearance readings taken?	
	(Yes)	(No)	(N/A)	131) Are inspections by independent PQP performed prior to barrier removal?	
	(Yes)	(No)	(N/A)	132) Is waste material properly containerized and stored?	
	(Yes)	(No)	(N/A)	133) Are air monitoring results provided to ROICC?	
	(Yes)	(No)	(N/A)	134) Are waste shipment records provided to ROICC?	

CATEGORY					Date Corrected
	(Yes)	(No)	(N/A)	135) Other? Extra Credit?	
WATERFRONT ACTIVITIES	(Yes)	(No)	(N/A)	136) Are employees wearing appropriate flotation devices (PFDs)?	
	(Yes)	(No)	(N/A)	137) Is a space rescue skiff available?	
Comments/Notes:	(Yes)	(No)	(N/A)	138) Are emergency life rings available?	
	(Yes)	(No)	(N/A)	139) If diving operations are taking place, has a dive plan been submitted and accepted?	
	(Yes)	(No)	(N/A)	140) Does dive team consist of proper number and qualifications for employees?	
	(Yes)	(No)	(N/A)	141) Other? Extra Credit?	

SCORING: Total applicable for each category = X (where X includes responses for category of "Yes" and "No" but does not include N/A)

Total with "Yes" responses for category = Y

SCORE FOR EACH CATEGORY: **SCORE RATE EQUATION = Y / X**

1 PREPARATORY PHASE	_____	6 LADDER SAFETY	_____	11 ROOFING	_____
2 OFFICE TRAILER GENERAL	_____	7 EXCAVATIONS	_____	12 EQUIPMENT	_____
3 FIRE PREVENTION	_____	8 ELECTRICAL	_____	13 DEMOLITION	_____
4 SCAFFOLD SAFETY	_____	9 CRANE	_____	14 PPE	_____
5 FALL PROTECTION		10 CONFINED SPACES	_____	15 ABATEMENT	_____

OVERALL RATING = LOWEST RATING FOR ANY CATEGORY: _____

WATERFRONT ACTIVITIES: _____

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CNO NEPA Environmental Checklist

Appendix

G

Various environmental laws subject federal facilities to federal, state, local, and international substantive and procedural requirements. In general, federal facilities must comply with substantive and procedural requirements imposed by federal, state, interstate, local authorities, and overseas host-nation regulatory agencies. Where applicable the Federal Facility Compliance Act authorizes the Environmental Protection Agency (EPA) to seek monetary penalties from federal installations for certain environmental media violations. The CNO (N45) NEPA/EO 12114 Environmental Checklist is a good place to start to ensure the installation adheres to all EPA regulations.

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
I. Policy Considerations					
1. Would this action set a precedent for future actions that would have environmental impacts?					
2. Could this action cause impacts that would potentially violate other federal, state, and local environmental laws?					
3. Are any impacts uncertain, or involve unknown risks?					
II. Format, General Document Quality, User-Friendliness					
1. Is the standard CEQ format followed?					
2. Is a Table of Contents included?					
3. Is the document written concisely, clearly, and to the point, using plain language, and defining any technical terms that must be used?					
4. Is the document analytic rather than encyclopedic?					
5. Is information in tables and figures consistent with information in the text and appendices?					
6. Are the units consistent throughout the document?					
7. Are technical terms defined using plain language, where necessary?					
8. Are the correct regulatory terms used (e.g., no effect or may affect for ESA)?					
9. Are graphics and other visual aids used whenever possible to simplify the analysis?					
10. Are abbreviations and acronyms explained or defined?					
11. Is the use of abbreviations and acronyms minimized to the extent practical?					
12. Does the document make appropriate use of appendices (e.g., for material prepared in connection with the analysis and related environmental reviews, substantiating material, official communications, and descriptions of methodologies)? [40 CFR 1502.18 and 1502.24]					
13. Do the appendices support the content and conclusions contained in the main body of the document?					
14. Does the document contain copies of all pertinent correspondence?					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
III. Other General Requirements					
Does the NEPA or EO 12114 document include a:					
1. Distribution List - list of agencies, organizations, and persons to whom copies of the document were sent?					
2. List of consultations, permits, and other authorizations required and their status of approval?					
3. Does the document appropriately use incorporation by reference?					
4. Is the information up to date?					
5. Is the information summarized in the document?					
6. Are cited references publicly available? [40 CFR 1502.21]					
7. Does the document contain a list of preparers and their qualifications? [40 CFR 1502.17]					
8. Does the proposed action have force protection implications?					
9. Has the document been reviewed by the appropriate authorities to determine sensitivity level?					
IV. Cover Sheet					
Does the cover sheet:					
1. Include all required information on one page? (40 CFR 1502.11)					
2. Include the title of the proposed action?					
3. Identify the location of the proposed action (city or county, and state)?					
4. Identify the action proponent?					
5. Identify lead agency(ies)?					
6. Identify cooperating agencies (if any)?					
7. Identify the action proponent's point of contact, including name(s), command, address, telephone number, facsimile number, e-mail address?					
8. Include a one paragraph abstract of the document's contents?					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
9. Include the date of publication (month/year)?					
V. Executive Summary					
Does the Executive Summary describe:					
1. Lead agency and cooperating agency relationships?					
2. The underlying purpose and need for the proposed action?					
3. The proposed action?					
4. Is there more than one alternative, besides the No Action Alternative?					
5. Are the criteria for alternative selection clearly described?					
6. Are the alternative selection criteria applied in a logically manner?					
7. Is the preferred alternative identified? [must be identified in an FEIS]					
8. Does the summary highlight key differences among the alternatives?					
9. Does the summary stress:					
a. The major conclusions?					
b. Areas of controversy (including issues raised by agencies and the public)?					
c. Are the discussions in the Executive Summary consistent with the text or appendices?					
d. Does the Executive Summary adequately and accurately summarize the content and analysis of the document? [40 CFR 1502.12]					
e. Does the length of the Executive Summary exceed 15 pages for an EIS or 3 pages for an EA?					
VI. Purpose and Need					
1. Does the discussion specify the underlying purpose to which the Navy is responding in proposing the alternatives including the proposed action?					
2. Does the discussion specify the underlying need to which the Navy is responding in proposing the alternatives, including the proposed action?					
3. Does the purpose and need clearly delineate mission and operational requirements in the context of the scope of the proposed action?					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
4. Does the chapter discuss the lead agency and relationship with cooperating agencies?					
VII. Alternatives, Including the Proposed Action					
1. Does the document "rigorously explore and objectively evaluate the "reasonable alternatives" to be considered by the decision-maker? [40 CFR 1502.14(a)]					
2. As appropriate, does the document identify and analyze reasonable technology, transportation, or site alternatives, including those that could occur off-site?					
3. Are the criteria used to select alternatives clearly identified?					
4. Is a logical process used in applying the criteria to selecting alternatives?					
5. Is the no action alternative described in sufficient detail so that its scope is clear and the potential impacts can be identified?					
*6. If the Navy has a preferred alternative, is it identified? Must be identified in a FEIS but not a DEIS [40 CFR 1502.14(e)].					
7. For alternatives that were eliminated from detailed study, including those that appear obvious or were identified by the public, does the document explain fully and objectively why they were found to be unreasonable?					
8. Does the document present the potential environmental effects of the proposal and the alternatives in a comparative form, sharply defining the issues and providing a clear basis for choice?					
9. For each alternative analyzed in detail (including the no action alternative), is the depth of analysis approximately the same, allow reviewers to evaluate their comparative merits?					
10. Does the document take into account relationships between the proposed action and other actions to be taken by the Navy in order address connected actions, continuing actions, and similar actions, and avoid improper segmentation?					
VIII. Description of the Affected Environment					
1. Does the document succinctly describe the environment of the area(s) to be affected or created by the proposed actions and alternatives?					
2. Does discussion address conditions during the time of year/season when proposed action will be implemented?					
3. Does the document identify the presence or absence of the following within the study area (this list is not meant to be inclusive):					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
a. Geology and Soils?					
b. Water Resources:					
i. Water supply?					
ii. Water quality and sole source aquifers?					
iii. Floodplains					
iv. Wetlands					
v. Wild and Scenic Rivers? [40 CFR 1508.27(b)(3)]					
c. Terrestrial Biology?					
d. Marine Biology:					
i. Benthic sediments?					
ii. Marine mammals?					
iii. Fish and Essential Fish Habitat?					
iv. Coral reefs?					
e. Threatened or endangered species and/or their critical habitat (terrestrial and marine)?					
f. Air Quality?					
g. Noise?					
h. Airspace?					
i. Cultural Resources?					
j. Native American Concerns (if pertinent)?					
k. Socioeconomics?					
i. Demographics, employment, and income?					
ii. Minority and low-income populations?					
iii. Children and schools?					
l. Land Use?					
m. Coastal Zone Management Federal Consistency?					
n. Prime or Unique Farmland? [40 CFR 1508.7(b)(3)]					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
o. Parks, Forests, Including National Parks? [40 CFR 1508.27(b)(3)]					
p. Transportation?					
q. Hazardous Materials and Installation Restoration?					
r. Utilities (including electricity, natural gas, water, sewer, solid waste)?					
s. Public Health and Safety?					
t. Other Areas					
u. Other Areas					
v. Other Areas					
4. Do the descriptions of the affected environment provide the necessary information to support the impact analysis, including cumulative impact analysis? [40 CFR 1502.15]					
5. Is the discussion appropriately limited to information that is directly related to the scope of the proposed action and alternatives?					
6. Does the document avoid useless bulk and verbose descriptions of the affected environment and concentrate on important issues? [40 CFR 1502.15]					
IX. Environmental Effects					
1. Are alternatives discussed in the same order for each resource area?					
2. Are the direct and the indirect impacts of the proposed action and alternatives adequately identified and are they discussed in proportion to their significance? [40 CFR 1502.16(a) and (b)]					
3. Are both short- and long-term effects adequately analyzed?					
4. Are both beneficial and adverse impacts adequately analyzed? [40 CFR 1508.27(b)(1)]					
5. Does the document discuss reasonably foreseeable impacts of cumulative actions with regard to both the proposed action and alternatives? [40 CFR 1508.25(a)(2)]					
6. Does the document discuss the potential direct, indirect, and cumulative effects to the following:					
a. Geology and Soils?					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
b. Water Resources:					
i. Water supply?					
ii. Water quality and sole source aquifers?					
iii. Floodplains					
iv. Wetlands					
v. Wild and Scenic Rivers? [40 CFR 1508.27(b)(3)]					
c. Terrestrial Biology?					
d. Marine Biology?					
i. Benthic sediments?					
ii. Marine mammals?					
iii. Fish and Essential Fish Habitat?					
iv. Coral reefs?					
e. Threatened or endangered species and/or their critical habitat?					
f. Air Quality?					
g. Noise?					
h. Airspace?					
i. Cultural Resources?					
j. Native American Concerns (if pertinent)?					
k. Socioeconomics?					
i. Demographics, employment, and income?					
ii. Minority and low-income populations?					
iii. Children and schools?					
l. Land Use?					
m. Coastal Zone Management Federal Consistency?					
n. Prime or Unique Farmland? [40 CFR 1508.7(b)(3)]					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
o. Parks, Forests, Including National Parks? [40 CFR 1508.27(b)(3)]					
p. Transportation?					
q. Hazardous Materials and Installation Restoration?					
r. Utilities (including electricity, natural gas, water, sewer, solid waste)?					
s. Public Health and Safety?					
t. Other Areas					
u. Other Areas					
v. Other Areas					
w. Are applicable regulatory/statutory conclusions included for appropriate resources? (list of laws/regulations not inclusive)					
i. Endangered Species Act?					
ii. Marine Mammal Protection Act?					
iii. Essential Fish Habitat?					
iv. Coastal Zone Management Act?					
v. Migratory Bird Treaty Act?					
vi. National Historic Preservation Act?					
vii. Environmental Justice?					
viii. Prime Farmlands?					
6. *Does the EIS discuss possible conflicts with:					
a. *Land plans, policies, and controls? [40 CFR 1502.16(c)]					
b. *Energy requirements and conservation potential of various alternatives and mitigation measures? [40 CFR 1502.16(e)]					
7. Use of protective measures/standard operating procedures and/or means to mitigate adverse impacts?					
8. Are there monitoring requirements? If so, has CNO (N45) concurred with the recommended monitoring?					
9. *Does the EIS discuss:					

Review Topic	Yes	No	N/A	Document Page	Adequacy Evaluation and Comments
a. *Unavoidable, adverse environmental effects?					
b. *The relationship between short-term uses of the environment and long-term productivity?					
c. *Any irreversible, irretrievable commitments of resources? [40 CFR 1502.16]					
10. Does the analysis avoid presenting a speculative description of severe impacts (e.g., from accidents), without also describing the likelihood/probability of such impacts occurring?					
11. Are environmental impacts quantified where possible?					
12. Are sufficient data and references presented to allow validation of analysis methods and results?					
13. *If information related to significant adverse effects is incomplete or unavailable, does the document state that such information is lacking and why?					
14. As appropriate, are important sources of uncertainty in the analyses and conclusions identified?					
15. Are cumulative impacts addressed?					
X. For an FEIS Only*					
*An agency must respond in the FEIS to comments received on the DEIS. Does the FEIS:					
1. *Assess and consider comments both individually and collectively?					
2. *Have attached to it all substantive comments (or summaries thereof if the comments have been exceptionally voluminous), received on the DEIS whether or not the comment is thought to merit individual discussion by the Navy in the text of the EIS?					
XI. Overall Considerations/Incorporation of NEPA/EO 12114 Values					
1. Does the analysis demonstrate that the Navy has taken a “hard look” at environmental consequences?					
2. Do the conclusions regarding potential impacts follow from the information and analyses presented in the document?					
3. Does the document avoid the appearance of justifying decisions that have already been made? [40 CFR 1502.5]					
4. Are technical analyses and methodologies used in the document generally accepted/recognized by the scientific community? [40 CFR 1502.22 and 1502.24]					

Customer Satisfaction Survey

Appendix

H

An effective customer satisfaction survey program focuses on measuring customer perceptions of how well the Public Works Department (PWD) delivers on the critical success factors and dimensions of the business. These usually include factors like service promptness, staff responsiveness, and understanding of the customer's problem.

A Public Works Officer (PWO) may conduct a routine, face-to-face to interview, in the form of a customer satisfaction survey, with all of its clients. The survey should gleam information that is both qualitative and quantitative. After analyzing the survey, the PWO should provide timely feedback and corrective action for all negative client dissatisfaction.

Provided in this appendix are examples of two customer surveys that a PWO may choose to use to obtain client feedback.

Customer Survey Sample #1

Performance criteria:

Timeliness

- Reasonable
- When promised
- Account for scheduling constraints

Quality

- Meets requirements
- Minimal defects
- Defects quickly corrected

Cost

- Reasonable
- Within budget
- Communicate unexpected cost impacts

Communication

- Involved in planning and execution
- Kept informed
- Established point of contact
- Prompt response to inquires

Performance rating:

Scoring

- Raw score for each factor (1 to 10)
- Relative importance of each factor (The total must be equal to 10. The higher the number, the greater the importance.)
- Verbal or written comments complement the assessment

Customer Survey Sample #1

DATE OF SURVEY: _____

PWD: _____

COMMAND/ORGANIZATION: _____

Please rate our performance this past quarter in the following areas: Timeliness, Quality, Cost, and Communication (defined below). For each of the four areas, we ask that you provide two numbers. The first number is a rating of our performance, and the second is a measure of which areas are most important to you.

SCORE: Use a scale of 1 (Major Problems) to 10 (Outstanding Job) to rate each Performance Criteria below.

____ Timeliness
____ Quality
____ Cost
____ Communication

RELATIVE IMPORTANCE: Rate the relative importance of each of the four Performance Criteria. Note that the total of all four Performance Criteria must equal 10.

For example, it Timeliness is most important to you, you might enter a 5 for Timeliness, a 2 for Quality, a 2 for Cost, and a 1 for Communication.

____ Timeliness
____ Quality
____ Cost
____ Communication
10 TOTAL

Customer Survey Sample #1

COMMENTS:

Timeliness: (*Our products and services are delivered within a reasonable timeframe and when promised. Your scheduling constraints are taken into consideration in project planning and execution.)*

Quality: *(Our products and services meet your technical and mission requirements and are delivered with minimal defects. Defects are immediately corrected to your satisfaction.)*

Cost: *(Our products and services are delivered at a reasonable cost and within the expected budget. Unexpected cost impacts are clearly and quickly communicated.)*

Customer Survey Sample #1

Communication: *You feel adequately involved in planning and execution of products and services that we deliver in support of your command/organization. We keep you informed of schedules, impacts, and issues. You know who to call if you have a question or a problem and your inquiry is answered quickly and sufficiently.*

Scoring the results:

To determine their overall performance rating:

1. For each Performance Criteria, multiply the Score by its Relative Importance.

2. Total the four Performance Criteria Rankings to obtain an overall Ranking.

3. Divide the overall Ranking by 10 to obtain the Ranking Metric.

Overall Ranking Metric values will range from 0 (Major Problems) to 10 (Outstanding Job).

Example 1. Ranking Metric Calculation

Criteria	Score	X	Importance	=	Ranking
Timeliness	5		5		25
Quality	6		2		12
Cost	4		2		8
Communication	8		1		8
			Rankings Total	=	**53**
			Divide by		10
			Ranking Metric	=	**5.3**

Customer Survey Sample #2

NAVFAC Customer Satisfaction Survey

Section 1 - Customer

Name: (Optional) Last _____ First _____

Title: _____

Email Address: _____

Organization: _____

Project Name: _____

NAVFAC Component Evaluated: _____

Section II - Customer

NAVFAC is committed to improving our services to you and would like to know how well we're doing. Please rate our performance over the past year. Your straightforward answers will help us to improve our service to you. Please indicate your level of satisfaction with the following services. You may select 'NA' if the question is not applicable to your project. We would greatly appreciate a brief explanation of any negative ratings. Thank you for your time.

	Attitude	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	NA	Explanation of ratings.
1.	NAVFAC commitment to ensuring customer satisfaction.							
2.	Listening to my needs.							
3.	Reliability of NAVFAC and follow-through on commitments.							
4.	Treating me as an important member of the team.							
5.	Displaying flexibility in responding to my needs.							
	Product and Services	**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
6.	Delivering quality products and services							
7.	Incorporating my requirements into the NAVFAC products and services.							
	NAVFAC Staff	**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
8.	Responsiveness of NAVFAC Staff.							
9.	Technical competency of NAVFAC staff.							
10.	Managing projects and programs effectively.							
	Timely Service	**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
11.	Providing services in a timely manner.							
12.	Meeting our schedules.							
	Cost and Affordability	**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
13.	Quality of financial information I receive.							
14.	Cost of NAVFAC products and services.							
15.	Sensitivity to my budget constraints.							

Customer Survey Sample #2

Communication		Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	NA	Explanation of ratings.
16.	Always keeping me well informed.							
17.	Quality of NAVFAC documents.							
18.	Clarity and conciseness of NAVFAC correspondence.							
Problem Solving		**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
19.	Notifying me in a timely manner if a problem occurs.							
20.	Addressing problems in a timely manner.							
21.	Resolving my concerns.							
Overall Satisfaction		**Very Dissatisfied**	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**	**NA**	**Explanation of ratings.**
22.	My Overall satisfaction with NAVFAC products and services.							
23.	I would recommend NAVFAC.							
24.	NAVFAC would be my choice for future projects and services.							

Overall Comments/Suggestions

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A

A/E	Architect/Engineer
AARR (A2R2)	Annual Allowance Requirements Review
ABC	Association of Boards of Certification
ABC(M)	Activity Based Costing (Management)
ABFC	Advanced Base Functional Component
ABSLA	Approved Basic Stocking Level of Ammunition
ACASS	Architect/Engineer Contractor Appraisal Support System
ACBD	Active Commission Base Date
ACE	Activity Civil Engineer
ACEMIS	Automotive/Construction Equipment Management Information System
ACIP	Assessment and Control of Installation Pollutants
ACF	Area Cost Factor
ACO	Administrative Contracting Officer
ACOE	Army Corps of Engineers
ACOS	Assistant Chief of Staff
ACP	Asset Capitalization Program
ACTY	Activity
ADA	Americans with Disabilities Act
ADCON	Adminstrative Control
ADDU	Additional Duty
ADMIN	Administration
ADP	Automatic Data Processing
ADSW	Active Duty for Special Work
AEC	Area Environmental Coordinator
AED	Associated Equipment Distributors
AEL	Allowance Equipment List
AESO	Aircraft Environmental Support Office
AFB	Air Force Base
AFE	Association of Facilities Engineering
AFIT	Air Force Institute of Technology
AFPMB	Armed Forces Pest Management Board, Armed Forces Preventive Medicine Board
AFV	Alternate Fuel Vehicle
AG	Activity Group
AGC	Association of General Contractors
AGI	Activity General Information
AICUZ	Air Installations Compatible Use Zones
AIG	Activity Information Group
AIRFA	American Indian Religious Freedom Act
AIS	Annual Inspection Summary
ALESP	Activity Level Energy Systems Plan
ALFA	Activity Land and Facilities Assets
ALMC	Army Logistics Management College
ALnO	Activity Liason Officer
ALO	Activity Liaison Officer
AMHAZ	Ammunition Handling Hazard (Board)
ANSI	American National Standards Institute
AOIC	Assistant Officer in Charge
AOR	Accumulated Operating Results, Area of Responsibility
APA	Appropriation Purchases Account
APAS	Alternative Performance Appraisal System
APC	Acquisition Professional Community
APCD	Air Pollution Control District
APF	Appropriated Funds
APHIS	Animal and Plant Health Inspection Service
API	American Petroleum Institute, Asset Protection Index
APL	Allowance Parts List
APMM	Activity Planning and Management Model
APN	Aircraft Procurement, Navy
APPA	American Public Power Association
APPA	Association of Higher Education Facilities Officers
APPN	Appropriation
APR	Acquisition Property Record
APWA	American Public Works Association
APWO	Assistant Public Works Officer
APZ	Accident Potential Zone (re: AICUZ)
AQMD	Air Quality Management District
AREICC	Assistant Resident Engineer in Charge of Construction
ARMS	Automated Review Management System
AROIC	Assistant Resident Officer in Charge
AROICC	Assistant Resident Officer in Charge of Construction
ARP	Activity Record Printout
ARPA	Archeological Resources Protection Act
ASBCA	Armed Services Board of Contract Appeals
ASCE	American Society of Civil Engineers
ASD	Assistant Secretary of Defense

ASN(I&E)	Assistant Secretary of the Navy (Installations and Environment)
AST	Aboveground Storage Tank
ASPA	Armed Services Procurement Act
AST	Aboveground Storage Tank
ASTM	American Society of Testing Materials
AT/FP	Antiterrorism/Force Protection
AUL	Authorized Use List
AWP	Annual Work Plan
AWWA	American Water Works Association

B

BA	Budget Activity
BACT	Best Available Control Technology
BACTEA	Best Available Control Technology Economically Achievable
BAFO	Best and Final Offer
BAM	Baseline Assessment Memorandum
BAQ	Basic Allowance for Quarters
BASEREP	Base Readiness Report
BASH	Bird/Wildlife Aircraft Strike Hazard
BC	Basic Category
BCA	Board of Contract Appeals, Business Case Analysis
BCE	Base Civil Engineer
BCM	Business Clearance Memorandum
BEAP	Base Exterior Architecture Plan
BEQ	Bachelor Enlisted Quarters
BESEP	Base Electronics System Engineering Plan
BEST	Base Engineering Support, Technical
BFR	Basic Facility Requirement
BGD	Billion Gallons per Day
BIA	Bureau of Indian Affairs
BLC	Business Line Coordinator
BLL	Business Line Leader
BLM	Business Line Managers
BLM	Bureau of Land Management (of Dept. of Interior)
BLP	Business Line Plan
BLR	Base Loading Report
BMAR	Backlog of Maintenance and Repair
BMP	Best Management Practice
BMR	Backlog of Maintenance and Repair
BMS	Business Management System
BOAC	Billing Office Address Code
BOCA	Building Officials and Code Administators International
BOD	Beneficial Occupancy Date
BOQ	Bachelor Officers Quarters
BOS	Base Operating Support (contract)
BOWTS	Bilge and Oily Water Treatment System
BP	Budget Project
BPA	Blanket Purchase Agreement
BPG	Business Practices Group
BPR	Business Process Reengineering
BQ	Bachelor Quarters
BRAC	Base Realignment and Closure
BSA	Basic Stock Allowance
BSV&E	Base Support Vehicles & Equipment
BTU	Boiler Tune-Up Program or British Thermal Units
BU	Builder
BUMED	Bureau of Medicine and Surgery
BUPERS	Bureau of Navy Personnel
BV	Best Value
BY	First Budget Year
BY+1	Second Budget Year

C

CA	Commercial Activities
CAA	Clean Air Act
CAB	Command Advisory Board
CAC	Cost Account Code
CADD	Computer Aided Design and Drafting
CAFM	Computer Aided Facilities Management
CAMEO	Computer Assisted Maint. & Equip. Operations
CAN	Cost Account Number
CAO	Contract Administration Office
CAPDET	Commericial Activities Program Detachment
CAS	Cost Accounting System
CASEMIS	Construction, Automotive, & Specialized Equipment Management Information System
CASREP	Casualty Report
CATCODE	Category Code
CATEX	Categorical Exclusion
CBA	Core Business Areas, Collective Bargaining Agreement
CBB	Capabilities Based Budget
CBC	Construction Battalion Center
CBD	Commerce Business Daily
CBMU	Construction Battalion Maintenance Unit
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive Program

CBU	Construction Battalion Unit
CCASS	Construction Contractor Appraisal Support System
CCB	Construction Criteria Base
CCD	Contract Completion Date, Category Code Directory
CCF	Construction Cost Factor
CCN	Category Code Number
CCPO	Consolidated Civiliean Personnel Office
CDBG	Community Development Block Grants
CDO	Command Duty Officer
CDR	Contract Discrepancy Report
CE	Categorical Exclusion
CEC	Civil Engineer Corps or Chief Construction Electrician
CECOS	Civil Engineer Corps Officers School
CEM	Certified Energy Manager
CENTCOM	Central Command (also CNCENT)
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
CESE	Civil Engineering Support Equipment
CESO	Civil Engineer Support Office
CESQG	Conditionally Exempt Small Quantity Generator
CFC	Chlorofluorocarbon
CFFC	Commander, Fleet Forces Command
CFM	Contractor Furnished Material
CFMC	Claimant-funded Minor Construction
CFR	Code of Federal Regulations
CG	Commanding General, Category Group
CHIL	Consolidated Hazardous Items List
CHINFO	Navy Chief of Information
CHIP	Chemical Hazard Information Profile
CHIP	Control of Hazardous and Industrial Pollutants
CHRIMP	Consolidated Hazardous Material Reutilization and Inventory Management
CHRIS	Chemical Hazards Response Information System
CHT	Collection, Holding, and Transfer (System)
CI	Controlled Inspection
CIBL	Capital Improvements Business Line
CICA	Competition in Contracting Act
CIP	Critical Infrastructure Protection, Capital Improvements Plan, Continuous Inspection Program
CIRCUITS	Centralized & Integrated Reporting for the Comprehensive Utilities Info Tracking System
CITA	Commercial/Industrial Type Activity
CIV-M-MARP	Civilian Mobilization Manpower
CL	Capability Level
CLEAN	Comprehensive Long-term Environmental Action Navy (A/E)
CLF	Commander, Atlantic Fleet
CLIN	Contract Line Item Number
CMB	Community Management Board
CMC	Commandant of the Marine Corps
CMC	Commandant of the Marine Corps, Command Master Chief, Chief Construction Mechanic
CMMI	Civilian Manpower Management Instruction
CMP	Community Management Plan
CMS	Construction Mangement System
CNA	Center for Naval Analysis
CNET	Commander Naval Eductionand Training
CNIC	Commander Navy Installations Command
CNO	Chief of Naval Operations
CNOBO	Chief of Naval Operations Budget Office
CNP	Comprehensive Neighborhood Plan
CNRMA	Commander, Navy Region Mid-Atlantic
CNRSW	Commander, Navy Region Southwest
CNTT	Chief of Naval Technical Training
CO	Commanding Officer, Contracting Officer (*also KO*)
COAR	Contracting Officers Authorized Representative
COC	Certificate of Competency, Chain of Command, Combat Operations Center
COD	Chemical Oxygen Demand
COE	Corps of Engineers
COM	Change of Occupancy Maintenance
COMLANTFLT	Commander, U.S. Atlantic Fleet
COMNAVAIRLANT	Commander Naval Air Force, Atlantic Fleet
COMNAVAIRPAC	Commander Naval Air Force, Pacific Fleet
COMPACFLT	Commander, U.S. Pacific Fleet
COMUSNAVEUR	Commander, U.S Naval Forces, Europe (also CNE)
CONCAP	Construction Capabilities
CONREP	Construction Representative

CONUS	Continental United States
COO	Change of Occupancy
COPARS	Contractor Operated Parts Store
COR	Contracting Officer's Representative
CORM/IPT	Commission on Roles and Missions Integrated Policy Team
CORRS	Commanding Officers Readiness Report System
COTR	Contracting Officers Technical Representative
COTS	Commercial off the Shelf
CP	Cost Plus
CPAF	Cost Plus Award Fee
CPAM	CNO Program Analysis Memorandum
CPFF	Cost Plus Fixed Fee
CPIF	Cost Plus Incentive Fee
CPM	Critical Path Method, Construction Project Management
CPO	Civilian Personnel Officer, Chief Petty Officer
CPP	Capital Purchases/Procurement Program
CPV	Current Plant Value
CQC REP	Construction Quality Control Representative
CRD	Certified Ready for Design
CREF	Client Request and Evaluation Form
CRT	Cathode Ray Tube Computer Terminal
CSC	Civil Service Commission
CSFE	Center for Seabees and Facilities Engineering
CSG	Corporate Steering Group
CSI	Construction Specifications Institute
CSO	Caretaker Site Office
CSR	Contract Surveillance Representative
CSSE	Combat Service Support Element
CT	Counter Terrorism (also Combating Terrorism)
CWA	Clean Water Act
CWE	Current Working Estimate
CY	Current Year, Calendar Year
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act (of 1972)

D

D&F	Determination and Findings
DA	Design (Economic) Analysis
DAC	Defense Acquisition Circular
DACM	Defense Acquisition Course Management
DAP/MIS	Deficiency Abatement Project/Management Information System
DAR	Defense Access Roads
DARPA	Defense Advanced Research Projects Agency
DASN (I&F)	Deputy Assistant Secretary of the Navy, Installations and Facilities
DASN(I&E)	Deputy Assistant Secretary of the Navy (Installation and Environment)
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DBA	Davis Bacon Act
DBOF	Defense Business Operations Fund (also NWCF)
DBOM	Design, Build, Operate, Maintain
DCAA	Defense Contract Audit Agency
DCADS	Defense Contracting Action Data System
DCAS	Defense Contract Administration Service
DCE	District Civil Engineering
DCNO	Deputy Chief of Naval Operations
DCSC	Defense Construction Supply Center
DD	Distribution Depot, Department of Defense (used on forms)
DDC	Direct Digital Controls
DDESB	Department of Defense Explosive Safety Board
DE	Data Element
DECA	Defense Commissary Agency
DEIS	Draft Environmental Impact Statement
DERA	Defense Environmental Restoration Account
DERF	Defense Emergency Response Fund
DESARC	Defense Systems Acquisition Review Council
DESCIM	Defense Environmental Security Corporate Information Management
DESR	Defense Environmental Status Report
DFARS	Department of Defense Federal Acquistion Regulation Supplement
DFAS	Defense Finance and Accounting Service

DFG	Department of Fish and Game
DA	Design (Economic) Analysis
DFM	Diesel Fuel Marine
DFRP	Demolition, Footprint Reduction Program
DFT	Deployment for Training
DL	Direct Labor
DLA	Defense Logistics Agency
DLP	Differential Lease Payments
DM	Design Manager
DMET	Defense Management Educational Training
DMFO	Defense Medical Facilities Office
DMI	Direct Material Inventory
DMR	Discharge Monitoring Report
DMSO	Director of Major Staff Office
DNA	Defense Nuclear Agency
DOD	Department of Defense
DODIG	Department of Defense Inspector General
DODIS	Department of Defense Index of Specifications and Standards
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOL	Department of Labor
DON	Department of the Navy
DONIBUS	Department of Navy Industrial Budget Information System
DONSEPB	Department of the Navy Shore Energy Policy Board
DOT	Department of Transportation
DPG	Defense Planning Guidance
DPS	Decision Package Sets
DQ	Definite Quantity
DRID	Defense Reform Initiative Directive
DRMO	Defense Reutilization Marketing Office
DRMR	Defense Reutilization Marketing Region
DRMS	Defense Reutilization Marketing Service
DSA	Defense Supply Agency
DSC	Defense Supply Center
DSM	Demand Side Management
DTID	Defense Turn-In Document
DTRA	Defense Threat Reduction Agency
DUERS	Defense Utilities Energy Reporting System
DUSD (ES)	Deputy Under Secretary of Defense for Environmental Security
DUSN	Deputy Undersecretary of the Navy
DVECC	Disease Vector Ecology and Control Center
DWCAS	Defense Working Capital Accounting System

E

E/S	Emergency/Service
EA	Economic Analysis, Environmental Assessment, Engineering Aide
EAR	Energy Audit Report
EASE	Expanded Access Program
EBS	Environmental Baseline Survey
ECAB	Employee Compensation Appeals Board
ECAP	Energy Cost Avoidance Program
ECC	Estimated Construction Cost
ECD	Estimated Completion Date
ECE	Environmental Compliance Evaluation
ECIP	Energy Conservation Investment Program
ECP	Energy Conservation Plan
EDM	Effort Distribution Matrix
EE	Engineering Evaluation (of Existing Assets)
EEO	Equal Employment Opportunity
EEOO	Equal Employment Opportunity Office/Officer
EES	Environmental Engineering Survey
EFI	Efficient Facilities Initiative
EI	Engineering Investigation
EIC	Engineer in Charge
EICO	Engineering Innovation and Criteria Office
EIMS	Environmental Information Management System
EIRB	Environmental Impact Review Board
EIS	Environmental Impact Statement
ELIN	Exhibit Line Item Number
ELO	Enabling Learning Objective
EMAAV	Energy Management Assessment and Assist Visit
EMC	Emergency Military Construction
EMCS	Energy Monitoring and Control System
EMI	Electromagnetic Interference
EMR	Electromagnetic Radiation
EMS	Engineered or Environmental Management Systems
EMW	Expeditionary Maneuver Warfare
E-NET	Expertise Network
ENG	Engineering
EO	Executive Order, Equipment Operator

EOB	Expense Operating Budget
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
EPACT	Energy Policy Act
EPCRA	Emergency Planning and Community Right to Know Act
EPMU	Environmental and Preventive Medicine Unit
EPPG	Electronic Project Procurement Generator
EPR	Environmental Program Requirements
EPRST	Expanded Performance Requirements Summary Table
EPS	Engineered Performance Standards
EPSS	Energy Project Status System
EQA	Environmental Quality Assessment
ERA	Ecological Reserve Officer, Economic Regulatory Administration (DOE)
ER,N	Environmental Restoration, Navy
ES	Engineering Services, Environmental Statement
ESA	Endangered Species Act
ESB	Engineer Support Battalion (USMC)
ESC	Executive Steering Committee
ESEB	Executive Senior Engineering Board
ESOL	Electronic Solicitation
ESPC	Energy Savings Performance Contract
ESQD	Explosive Safety Quantity Distance (Arc)
ESR	Engineering Service Request
ETAP	Energy Technology Applications Program
EUCOM	US European Command

F

F&GOQ	Flag & General Officers Quarters
FA	Functional Assessments
FAA	Federal Aviation Administration
FAC	Functional Activity Code, Facility Analysis Category
FACNET	Federal Acquisition Computer Network
FACSO	Facilities Systems Office
FAD	Force Activity Designator
FAP	Functional Assessment Plan
FAR	Federal Acquisition Regulation
FAST	Federal Automotive Statistical Tool
FBSC	Financial Business Standards Committee
FBST	Financial Business Standards Team
FC	Facility Class
FCAP	Facility Condition Assessment Program
FCI	Facility Condition Index
FDM	Facility Degredation Model, Funds Distribution Matrix
FEAA	Federal Employees Appeals Authority
FEAT	Facility Evaluation and Assistance Team
FEC	Foreign Exchange Costs
FECA	Federal Employees Compensation Act
FEDBIZOPPS	Federal Business Opportunities
FEEB	Facilities Engineer Executive Board
FEIS	Final Environmental Impact Statement
FEJE	Facilities Engineering Job Estimating
FEMA	Federal Emergency Management Agency
FEMP	Federal Energy Management Program
FEP	Facility Energy Plan
FES	Final Environmental Statement
FFCA	Federal Facilities Compliance Act
FFP	Firm Fixed Price
FFSC	Fleet and Family Service Center
FH	Family Housing
FHMI	Family Housing Management Institute
FHN	Family Housing, Navy
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIIN	Federal Item Identification Number
FIPC	Financial Information Processing Center
FISC	Fleet and Industrial Supply Center
FLDSUPPACT	Field Support Activity
FLEP	Facility Life Extension Program
FLT	Fleet
FMB	Financial Management and Budget (new name for NAVCOMPT)
FMD	Facilities Management Director
FMED	Facilities Management Engineering Division (replaces MCD)
FMF	Fleet Marine Force
FMO	Facilities Maintenance Officer
FMRR	Facility Maintenance Responsibility Report
FMSO	Fleet Material Support Office

FOM	Field Office Model
FONSI	Finding of No Significant Impact
FOR	Fuel Oil Reclaimed, Forces
FOSC	Federal On-Scene Coordinator
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FPA	Fundamental Planning Analysis (Economic)
FPAF	Fixed Price Award Fee
FPCON	Force Protection Conditions
FPD	Facility Planning Document
FP-EPA	Fixed Price - Economic Price Adjustment
FPIF	Fixed Price Incentive Fee
FPM	Facility Planning Model, Federal Personnel Manual
FPQI	Fixed Price with Quality Incentive
FR	Federal Register
FRCC	Fleet Readiness Condition Criteria
FRES	Facilities Readiness Evaluation System
FRM	Facility Recapitalization Metric
FRP	Facilities Requirements Plan
FRPS	Facilities Requirements Plan Summary
FSC	Facilities Support Contract, Federal Supply Classification
FSCM	Facilities Support Contracts Manager (replaces SCM)
FSM	Facility Sustainment Model
FSO	Fuel Supply Office
FSP	Facilities Support Plan
FSR	Facility Support Requirements
FSRM	Facility Sustainment, Restoration and Modernization
FTE	Full Time Equivalent
FTS	Federal Telecommunication System, Full Time Support
FUR	Facilities Utilization Report
FWPCA	Federal Water Pollution Control Act (Same as CWA)
FWS	Federal Wage System, Fish and Wildlife Service
FY	Fiscal Year
FYDP	Future Year Defense Program

G

G&A	General and Administrative (home office)
GAO	General Accounting Office
GAP	Global Ashore Plan
GDM	General Development Map
GE	Government Estimate
GEMS	Graphic Engineering and Mapping System
GFCI	Ground Fault Circuit Interruptor
GFE	Gas Free Engineering, Government Furnished Equipment
GFM	Government Furnished Material
GFP	Government Furnished Property
GIS	Geographic Information System
GITMO	Guantanamo Bay, Cuba
GOCO	Government Owned Contractor Operated (facility)
GOTS	Government Off-the-Shelf
GP	General Provisions
GPE	Government-wide Point of Entry
GPWS	Guide Performance Work Statement
GS	General Schedule
GSA	General Services Administration
GSE	Ground Support Equipment
GVW	Gross Vehicle Weight

H

H/T Code	Host/Tenant Code
H&W	Health and Welfare
HAC	House Appropriations Committee
HARP	Historic & Archeological Resources Protection (Plan)
HAZMIN	Hazardous Waste Minimization
HCA	Hazard Control Assessment
HCRS	Heritage Conservation and Recreation Service
HE	High Explosive
HERF	Electromagnetic Radiation Hazard to Fuel
HERO	Electromagnetic Radiation Hazard to Ordnance
HERP	Electromagnetic Radiation Hazard to Personnel
HFP	Housing Funded Projects
HHS	Department of Health and Human Services
HM	Hazardous Material
HMC&M	Hazardous Material Control & Management
HMMG	Hazardous Materials Management Guide
HMMS	Hazardous Material Management Survey
HMTA	Hazardous Materials Transportation Act

HMTIS	Hazardous Materials Turned Into Store
HOOH	Home Office Overhead
HQMC	Headquarters, U.S. Marine Corps
HRO	Human Resources Office (new name for CCPO)
HRSC	Human Resources Service Center
HSWA	Hazardous & Solid Waste Amendment
HTREA	Host/Tenant Real Estate Agreement
HUB	Historically Underutilized Business
HUD	Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
HW	Hazardous Waste
HWM	Hazardous Waste Management

I

I2M	Integrated Installation Management
IAS	Initial Assessment Study
IAW	In Accordance With
IB	Information Bulletin (NEESA Publication)
IBOP	International Balance of Payments
IC	Investment Category, Installation Commander
ICBM	Installation Core Business Model
ICC	Installation Claimant Consolidation
ICIM	Installation Corporate Information Management
ICP	Inventory Control Point
ICRMP	Integrated Cultural Resources Management Plan
ID/IQ	Indefinite Delivery/ Indefinite Quantity
IDDQ	Indefinite Delivery Definite Quantity
IDR	Indefinite Delivery, Requirements
IDTC	Indefinite Delivery Type Contract
IEFACMAN	Interoperable enterprise Facilities Management
IF	Inflation Factor
IFB	Invitation for Bids
IFD	Integrated Facilities Data
IFMI	Integrated Facilities Management Information
IG	Inspector General
IH	Industrial Hygienist
ILM	Installation Life Cycle Management
ILS	Integrated Logistic Support, Integrated Landing System
ILSP	Integrated Logistics Support Plan
IMAP	Installation Management Account Project
IMC	Installation Management Claimants
IMESC	Installation Management Executive Stearing Committee
IMWG	Installation Management Working Group
INFADS	Internet Navy Facility Assets Data Store
INRMP	Integrated Natural Resource Management Plan
IP	Investment Program
IPD	Issue of Priority Designator
IPE	Industrial Plant Equipment
IPL	Integrated Priority List
IPM	Integrated Pest Management
IPT	Integrated Product Team
IQ	Indefinite Quantity (contract)
IR	Installation Restoration
IRMC	Information Resources Management Committee
IRO	Industrial Relations Office
IRRS	Installation Readiness Reporting System
IRV	Item Rating Value
ISAB	Installation Support Advisory Board
ISEERB	Interservice Environmental Education Review Board
ISIC	Immediate Superior in Command
ISO	International Standard Organization
ISPB	Information Systems Policy Board
ISSA	Inter/Intra-service Support Agreement
IT	Information Technology
IWAR	Integrated Warfare Architecture

J

JAG	Judge Advocate General
JCS	Joint Chiefs of Staff
JFAI	Joint Formal Acceptance Inspection (NATO)
JFCOM	Joint Forces Command
JFIP	Japanese Facility Improvement Program
JFTR	Joint Federal Travel Regulations

JOC	Job Order Contract
JON	Job Order Number
JSF	Joint Strike Fighter
JTR	Joint Travel Regulations

K

KO	Contracting Officer
KSF	Thousand Square Feet
KTR	Contractor
KWH	Kilowatt Hour

L

L&M	Labor and Materials
LC	Leadership Council
LCC	Life Cycle Cost, Labor Class Code
LD	Liquidated Damages
LDB	Day/Night Average Sound Level
LDR	Land Disposal Restriction
LLC	Limited Liability Corporation
LMC	Level of Maintenance Classification Code
LNG	Liquefied Natural Gas
LOA	Line of Accounting
LPG	Liquefied Petroleum Gas
LQG	Large Quantity Generator
LRMP	Long Range Maintenance Plan
LS	Lump Sum
LSNP	Logistic Support Mobilization Plan
LSR	Logistics Support Requirements
LUC	Land Use Compatibility
LUP	Land Use Plan
LUST	Leaking Underground Storage Tank
LWOP	Leave Without Pay

M

M&R	Maintenance and Repair
M/S	Maintenance Services
M/S	Maintenance Services
MAC	Multiple Award Contract
MACC	Multiple Award Construction Contract
MADR	Maximum Allowable Defect Rate
MAGIC	Master Activity General Information and Control
MAHC	Maximum Allowable Housing Cost
MAP	Maintenance Action Plan
MAPIT	Military Construction Acquisition Process Improvement Team
MARID	Marine Corps Air Reserve Training Detachment
MARTD	Marine Corps Air Reserve Training Detachment
MAV	Management Assistance Visit
MBO	Management by Objectives
MBTA	Migratory Bird Treaty Act
MC	Major Claimant
MCAS	Marine Corps Air Station
MC/A	Minor Construction and Alteration
MCB	Marine Corps Base
MCN	Military Construction, Navy (Appropriation)
MCNR	Military Construction, Naval Reserve
MCO	Marine Corps Order
MCON	Military Construction, Navy
MCP/MIS	Military Construction Program/Management Information System
MCR	Maintenance Cost Report
MCSF BN	Marine Corps Security Force Battalion
MCSSD	Mobile Combat Service Support Detachment (USMC)
MEF	Marine Expeditionary Force
MEG	Marine Expeditionary Force Engineering Group
MEO	Most Efficient Organization
MEP	Mobilization Enhancement Funds
MESO	Marine Environmental Support Office
MHE	Materials Handling Equipment
MHPI	Military Housing Privatization Initiative
MIC	Management Information Center
MIF	Modified Industrial Funds
MILCON	Military Construction
MILCON RL	Military Construction Requirements List
MILSPEC	Military Specification
MILSTD	Military Standard
MIP	Model Installation Program
MIS	Management Information System
MLC	Military Labor Contract
MMPA	Marine Mammals Protection Act

MO	Maintenance and Operations (manuals)
MOA	Memorandum of Agreement
MOD	Modification
MOOTW	Military Operations Other Than War
MOQ	Married Officer Quarters
MOU	Memorandum of Understanding
MP	Master Plan
MP(N)	Military Personnel, Navy
MPD	Minimum Project Documentation
MPRSA	Marine Protection, Research, and Sanctuaries Act
MRL	MILCON Requirements List
MRP	Maintenance of Real Property
MSC	Military Sealift Command, Medical Service Corps
MSD	Marine Sanitation Device
MSDS	Material Safety Data Sheet
MSI	Material & Supply Inventory
MT	Measurement Ton = 40 CF
MTCE	Metric ton carbon equivalents
MUSE	Mobile Utility Support Equipment
MWR	Morale Welfare and Recreation
MWSS	Marine Wing Support Squadron
MYMP	Multi-year Maintenance Plan

N

N-1	Personnel and Admin Section of a Navy Staff
N-2	Intelligence Section of a Navy Staff
N-3	Operations Section of a Navy Staff
N-4	Logistics Section of a Navy Staff
N44	Seabee Readiness Division
N46	Ashore Readiness Division
N-5	Planning Section of a Navy Staff
N-6	Communication Section of a Navy Staff
NA	Network Analysis
NAA	Non Attainment Area
NACIP	Navy Assessment and Control of Installation Pollutants
NACWIS	Navy Controlled Waste Inventory System
NADC	Naval Air Development Center
NADEP	Naval Aviation Depot
NAF	Non-appropriated Funds, Naval Air Facility
NAFI	Navy-Air Force Interface
NAFTA	North American Free Trade Agreement
NAGPRA	Native American Graves Protection and Repatriation Act
NAICS	North American Industry Class Systems (formally SIC)
NALF	Naval Auxiliary Landing Field
NAPS	Navy Acquisition Procedures Supplement
NAPSIS	Navy Air Pollution Source Information System
NAR	Naval Air Reserve
NARU	Naval Air Reserve Unit
NAS	Naval Air Station
NATRABRN	Naval Air Training Branch
NAVAIR	Naval Air Systems Command (also NAVAIRSYSCOM)
NAVCOMPT	Comptroller of the Navy
NAVELEX	Naval Electronics Systems Command
NAVFAC	Naval Facilities Engineering Command (also NAVFACENGCOM)
NAVMEDCOM	Naval Medical Command
NAVOSH	Navy Occupation Safety and Health Program
NAVREP	Navy Representative (at FAA)
NAVRESFOR	Naval Reserve Forces (also RESFOR)
NAVRESO	Naval Resale System Office
NAVSEA	Naval Sea Systems Command (also NAVSEASYSCOM) Naval Sea Systems Command
NAVSTA	Naval Station
NAVSUP	Naval Supply Systems Command (also NAVSUPSYSCOM)
NAVTELCOM	Naval Telecommunications Command
NCA	Navy Concentration Area, Noise Control Act
NCBC	Naval Construction Battalion Center
NCC	Navy Crane Center
NCD	Naval Construction Division
NCF	Naval Construction Force
NCF RPC	Naval Construction Force Requirements & Policy Council
NCFC	Naval Construction Forces Command
NCMA	National Contract Management Association
NCO	Non-commissioned Officer
NCP	National Contingency Plan
NCPC	National Capital Planning Commission
NCR	National Capital Region, Naval Construction Regiment
NCTC	Naval Construction Training Center

NDAA	National Defense Authorization Act
NEADS	NAVFAC Employee Assessment and Development System
NECA	Navy Environmental Compliance Account
NEHC	Navy Environmental Health Center
NEPA	National Environmental Policy Act
NEPSS	Naval Environmental Protection Support Service
NESHAP	National Emission Standard for Hazardous Air Pollutants
NESO	Navy Environmental Support Office (merged with NEESA)
NETC	Naval Education and Training Command
NETS	Naval Environmental Training System
NEX	Navy Exchange
NFA	Naval Facility Assets
NFACT	Naval Facilities Acquisition Center for Training
NFADB	Naval Facilities Assets Data Base
NFAS	Naval Facilities Acquisition Supplement
NFCTC	Naval Facilities Contracts Training Center
NFELC	Naval Facilities Expeditionary Logistics Center
NFESC	Naval Facilities Engineering Service Center
NHPA	National Historic Preservation Act
NIB	National Institute for the Blind
NIF	Navy Industrial Fund
NIOSH	National Institute for Occupational Safety and Health
NISH	National Institute for the Severely Handicapped
NITC	NAVFAC Information Technology Center
NMAR	Non-deferable Maintenance and Repair
NMCAR	Navy and Marine Corps Acquisition Regulations
NMCB	Naval Mobile Construction Battalion
NMCI	Navy-Marine Corps Intranet
NMCRB	Navy Military Construction Review Board
NMFS	National Marine Fisheries Service
NOA	New Obligational Authority
NOAA	National Oceanic and Atmospheric Administration
NOHSPCP	National Oil and Hazardous Substances Pollution Contingency Plan
NOI	Notice of Impact/Intent
NOMIS	Naval Ordnance Management Information System
NOR	Net Operating Results
NORTHCOM	Northern Command
NOS	Naval Ordnance Station
NOSC	Naval Ocean Systems Center, Naval On-Scene Coordinator
NOSCDR	Naval On-Scene Commander
NOSHIP	Navy Occupational Safety and Health Inspection Program
NOTAL	Not to All
NOTW	Navy-Owned Treatment Works
NOV	Notice of Violation
NPDC	Naval Personnel Development Command
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NPV	Net Present Value
NRMP	Natural Resources Management Plan
NRSO	Navy Resale Systems Office
NRT	National Response Team
NSA	Navy Stock Account
NSAAQS	National Secondary Ambient Air Quality Standard
NSC	Naval Supply Center (old now FISC)
NSCSCOL	Naval Supply Corps School
NSD	Naval Supply Depot
NSF	Navy Stock Fund
NSFO	Navy Special Fuel Oil
NSI	Navy Shore Installations
NSN	Navy Stock Number
NSP	Navy Support Plan
NSPS	New Source Performance Standards
NSRDC	Naval Ship Research and Development Center
NTE	Not to Exceed
NTP	Notice to Proceed
NWCF	Navy Working Capital Fund
NWP	Navy Warfare Publication

O

O&M	Operations and Maintenance
O&MN	Operations and Maintenance, Navy
O&MNR	Operations & Manintenance, Navy Reserve
OA	Obligation Authority

OB/OD	Open Burning/Open Detonation
OBE	Overtaken (Overcome) by Events
OBEGD	Overseas Baseline Environmental Guidance Document
OBOS	Other Base Operating Support
OCP	Office of Civilian Personnel
OCR	Occupational Safety and Health Control Report
OCS	Outer Continental Shelf
OCZM	Office of Coastal Zone Management *(of NOAA)*
ODR	Observed Defect Rate
ODS	Ozone Depleting Substance
OEF	Operation Enduring Freedom
OESO	Ordnance Environmental Support Office
OFPP	Office of Federal Procurement Policy
OH	Over-the-Horizon
OH/OVD	Overhead
OIC	Officer in Charge (of Facilities Support Contracts)
OICC	Officer in Charge of Construction
OIT	Operator in Training
OJT	On the Job Training
OLF	Outlying Landing Field
OMB	Office of Management and Budget
OMES	Operations & Management of Energy Systems
OMFTS	Operational Maneuver from the Sea
OMSI	Operational, Maintenance and Support Information
ONI	Office of Naval Intelligence
ONR	Office of Naval Research
OOD	Officer of the Day
OPA	Oil Pollution Act
OPCON	Operational Control
OPLAN	Operations Plan
OPN	Other Procurement, Navy
OPNAV	Office of the Chief of Naval Operations
ORM	Operational Risk Management
ORV	Off-Road Vehicles
OSC	On-Scene Coordinator
OSD	Office of Secretary of Defense
OSHA	Occupational Safety and Health Act
OSO	Outsourcing Support Office
OSOT	On Scene Operation Team
OW/WO	Oily Waster/Waste Oil
OWCP	Office of Workers Compensation Programs (Department of Labor)
OWS	Oil/Water Separator

P/Q

P&E	Planner and Estimator
P2	Pollution Prevention
P-68	NAVFAC Contracting Manual
P-72	Category Code Directory
P-78	Instructions to NFADB
P-80	Facility Planning Factor Criteria for Navy/Marine Shore Installations
P-445	NAVFAC Economic Analysis Manual
PAB	Perfromance Assessment Board
PAC	Performance Assessment Criteria
PACOM	Pacific Command
PALT	Procurement Administrative Lead Time
PAP	Performamnce Assessment Plan
PAPS	Projected Aviation Program Summary
PAR	Performance Assessment Representative
PARS	Performance Appraisal Review System
PAW	Performance Assessment Worksheet
PBD	Program Budget Directive
PBSA	Performance Based Services Act
PBSA	Performance Based Services Acquisition
PCB	Polychlorinated Biphenyls
PCE	Parametric Cost Estimate (for MILCON projects)
PCO	Procurement Contracting Officer
PCR	Pollution Control Report
PD	Position Description
PDE	Project Design Engineer
PDM	Program Decision Memorandum
PDS	Project Data Sheet
PEA	Preliminary Environmental Assessment
PEB	Pre-Expended Bin, Pre-Engineered Building
PED	Project Engineering Documentation
PEIA	Preliminary Environmental Impact Assessment
PENRES	Pentagon Reservation
PERT	Program Evaluation and Review Technique
PICO	People, Innovation, Clients, Operations
PL	Public Law
PM	Program or Project Manager

PMAP	Performance Measurement and Assistance Program
PMC	Procurement, Marine Corps
PMI	Preventive Maintenance Inspection
PMRS	Performance Management & Recognition System
PNM	Pre/Post Negotiation Memorandum
PNO	Pre-Negotiation Objectives
PNP	Pre-Negotiation Position
PO	Purchase Order, Project Order
POA&M	Plan of Action and Milestones
POD	Permissible Operating Distance, Plan of the Day
PO	Purchase Order, Project Order
POL	Petroleum, Oil and Lubricants
POM	Program Objective Memorandum
POTW	Publicly Owned Treatment Works
PPBES	Planning, Programming, Budgeting and Execution System
PPBS	Planning, Programming and Budgeting System
PPE	Personal Protective Equipment
PPEP	Pollution Prevention Equipment Program
PPV	Public/Private Venture
PQA	President's Quality Award
PR	Property Record
PRD	Public Record of Decision, Projected Rotation Date
PRE-M-DAY	Pre-Mobilization Day; Peacetime Operations
PRESS	Progress Report on Energy Savings at Shore Activities
PRIDU	Primary Duty
PRP	Potentially Responsible Party
PRST	Performance Requirements Summary Table
PRV	Plant Replacement Value
PSD	Prevention of Significant Deterioration, Personnel Support Department
PSE	Physical Security Equipment
PSF	Personnel Support Facilities, Private Source Funds
PWD	Public Works Department
PWFSO	Public Works Field Support Office
PWLA	Public Works Lead Activity
PWMA	Public Works Management Automation
PWO	Public Works Office/Officer
PWRMS	Prepositioned War Reserve Material Stock System
PWS	Performance Work Statement
QA	Quality Assurance
QAE	Quality Assurance Evaluator
QAP	Quality Assurance Plan
QC	Quality Control
QDR	Quality Defense Report
QMS	Quality Management System
QOL	Quality of Life
QOW	Quality of Work
QSI	Quality Step Increase

R

R&D	Research and Development
R4	Recovery and Reuse of Refuse Resources
RAC	Remedial Action Contract, Regional Area Coordinator, Risk Assessment Code
RAP	Resource Allocation Plan
RBI	Reserve Business Integration, Readiness and Business Integration
RC	Regional Commander
RCC	Regional Commander's Conference
RCP	Request for Contractual Procurement (DD Form 2276)
RCRA	Resource Conservation and Recovery Act
RDF	Restoration of Damaged Facilities, Refuse Deprived Fuel
RD/RA	Remedial Design/Remedial Action
RDT&E	Research, Development, Test and Evaluation
REC	Regional Environmental Coordinator
REHAB	Rehabilitate
REPS & CERTS	Representations & Certifications
RESO	Regional Environmental Support Office
RFI	Request for Informtion
RFP	Request for Proposal
RFQ	Request for Quotations
RI/FS	Remedial Investigation/Feasibility Study
RIF	Reduction in Force
RJE	Remote Job Entry
RL	Requirements List
RMANs	Recovery Materials Advisory Notices
RNA	Research Natural Area
RO/RO	Roll On/Roll Off
ROD	Record of Decision
ROI	Return on Investment
ROIC	Resident Officer in Charge
ROICC	Resident Officer in Charge of Construction
RPB	Range Policy Board

RPI	Real Property Inventory, Regional Planning Initiative
RPM	Real Property Maintenance
RPMA	Real Property Maintenance Activity
RPMD	Real Property Maintenance Defense
RQ	Reportable Quantity
RRR	Regional Readiness Requirements
RRT	Regional Response Team
RSB	Request for Sealed Bids
RSED	Random Sampling with Extrapolated Deductions
RSIMS	Regional Shore Installation Management System
RSIP	Regional Shore Infrastructure Plan
RSWED	Random Sampling Without Extrapolated Deductions
RTF	Refuse-to-Fuel
RWG	Range Working Group

S

SA	Special Area
SACO	Special Action Committee on Okinawa
SADBU	Small and Disadvantaged Business Utilization
SAG	Sub-activity Group
SAIL	Shape, Anticipate, Innovate, and Lead
SAM	Support Agreement Manager
SAP	Simplified Acquisition Procedures
SAR	Search and Rescue
SARA	Superfund Amendments and Reauthorization Act
SAT	Simplified Acquisition Threshold
SATO	Scheduled Airlines Ticket Office
SBA	Small Business Administration
SBP	Strategic Business Plan
SBS	Small Business Specialist
SCA	Service Contract Act
SCE	Staff Civil Engineer, Supervisory Civil Engineer
SCN	Shipbuilding and Conversion, Navy
SCP	Spill Contingency Plan
SCS	Soil Conservation Service
SD	Sustainable Development
SDB	Small Disadvantaged Business
SDWA	Safe Drinking Water Act
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SEIS	Supplemental Environmental Impact Statement
SERT	Seabee Engineer Recon Team
SERVMART	Supply Service Market
SES	Supplemental Environmental Statement, Shared Energy Savings
SESO	Ship Environmental Support Office
SET	Source Emission Test
SF	Standard Form
SFBCDC	San Francisco Bay Conservation and Development Commission
SFMR	Supply Facility Management Report
SFPB	Shore Facilities Programming Board
SFPS	Shore Facilities Planning System
SHAPE	Safety, Health and Protection of the Environment
SHOREFLEP	Shore Facilities Life Extension Program
SHORESTAMPS	Shore Requirements, Standards and Manpower Planning System
SHOROC	Shore Required Occupational Capability
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification, Special Interest Code
SIM	Shore Installation Management
SIMA	Shore Intermediate Maintenance Activity
SIOH	Supervision, Inspection and Overhead
SIP	State Implementation Plan (Air)
SIPB	Shore Installation Planning Board
SIR	Savings to Investment Ratio
SITREP	Situation Report
SJO	Standing Job Order
SL	Service Level
SLC	Seabee Logistics Center
SMSA	Standard Metropolitan Statistical Area
SNDL	Standard Navy Distribution List
SOA	Sustained Operations Ashore
SOC	Solution Order Concept
SOFA	Status of Forces Agreement
SOPA	Senior Officer Present Afloat
SOUTHCOM	Southern Command
SOW	Statement of Work
SPAR	Senior Performance Assessment Representative
SPAWAR	Space and Naval Warfare Systems Command (old)
SPCC	Spill Prevention Control and Countermeasure
SPECS	Specifications
SPG	Strategic Planning Group

SQG	Small Quantity Generator
SRG	Seabee Readiness Group
SRGLANT	Seabee Readiness Group Atlantic
SRGPAC	Seabee Readiness Group Pacific
SRM	Sustainment, Restoration and Modernization
SRMP	Short Range Maintenance Plan
SRO	Shop Repair Order
SS	Strategic Sourcing
SSACOE	Strategic Sourcing Acquisition Center of Excellence
SSD	Specialized Support Depot
SSN	Social Security Number
SSP	Strategic Systems Programs, Sustained Superior Performance
SUPSALV	Supervisor of Salvage
SWDA	Solid Waste Disposal Act (Part of RCRA)
SWOB	Ship Waste Off-Load Barge
SWWCA	Ship Waste Water Collection Ashore
SYDP	Six Year Defense Plan
SYSCOM	Systems Command

T

T&M	Time and Material
TAB	Test and Balance (as in HVAC systems)
TAD	Temporary Active Duty
TAP	Theater Assessment and Planning
TCE	Trichloraethane
TCLP	Toxic Characteristic Leachate Procedure
TCO	Termination Contracting Officer
TCR	Transportation Cost Report
TEA	Total Exisitng Assets
TEMC	Transportation Equipment Management Center
TEMES	Transportation Equip. Management Evaluation Summary
TFC	Termination for Convenience
TFD	Termination for Default
TFE	Task Force EXCEL
TFR	Total Facility Requirement
TFWEB	Task Force Web
THM	Trihalomethane
TINA	Truth in Negotiation Act
TISP	The Infrastructure Security Partnership
TLO	Terminal Learning Objective
TMAV	Transportation Management Assist Visit
TO	Task Order
TOA	Table of Allowance, Total Obligation Authority
TOC	Task Order Contract
TOPO	Topography
TPD	Tons per Day
TQL	Total Quality Leadership
TRCO	Technical Representative of the Commanding Officer
TREC	Tri-Services Renewable Energy Committee
TSCA	Toxic Substances Control Act of 1976 (pronounced TOSCA)
TSD	Treatment, Storage, and Disposal
TSS	Total Suspended Solids
TYCOM	Type Commander

U

UAC	Uniform Annual Cost
UAL	Unit Authorization List
UCAR	Utilities Cost Analysis Report
UCD	Useable Completion Date
UCF	Uniform Contract Format
UDAG	Urban Development Action Grants
UEPH	Unaccompanied Enlisted Personnel Housing
UESC	Utility Energy Savings Contract
UFC	Unified Facilities Criteria
UFD	Unfunded Facility Deficiency
UFGS	United Facilities Guide Specifications
UIC	Unit Identification Code, Underground Injection Control
UIP	Utilities Improvement Program
UMC	Unspecified Minor Construction
UMM	Utility Management Module
UMMIPS	Uniform Material Movement and Issue Priority System
UND	Urgency of Need Designator
UOPH	Unaccompanied Officer Personnel Housing
UP	Utilities Privatization
UPB	Unit Price Book
USA	Utility System Assessments
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USBR	Bureau of Reclamation
USC	United States Code
USCG	U.S. Coast Guard
USCS	United States Civil Service

USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFF	U.S. Fleet Forces
USFS	Forest Service (of USDA)
USFWS	Fish and Wildlife Service (of DOI)
USGS	United States Geological Survey (of DOI)
UST	Underground Storage Tank
USUHS	Uniformed Services University of Health Sciences
UTS	Utility Technical Studies
UXO	Unexploded Ordinance

V

VA	Veteran's Administration
VE	Value Engineering
VECP	Value Engineering Change Proposal
VHA	Variable Housing Allowance
VOC	Volatile Organic Compounds
VSB	Very Small Business

W/X

WATS	Wide Area Telecommunications Service
WBDG	Whole Building Design Guide
WBS	Work Breakdown Structure
WEB-CM	Web Contract Management
WHE	Weight Handling Equipment
WOSB	Women Owned Small Business
WMD	Weapons of Mass Destruction
WPN	Weapons Procurement, Navy
WQCB	Water Quality Control Board
WR	Work Request
XO	Executive Officer