

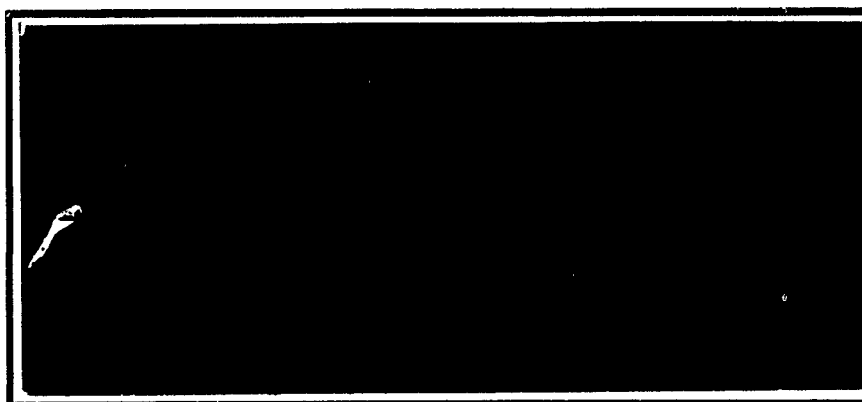


US Army Corps
of Engineers

AD-A243 233



DTIC
ELECTE
DEC 7 1991
S C D



Engineer Studies Center

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official US Department of the Army position, policy, or decision unless so designated by other official documentation.

91-17243



DISTRIBUTION STATEMENT A

Approved for public release;

**ARMY DIRECTORATE OF PUBLIC WORKS
RESEARCH REFERENCE GUIDE**

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 1991		3. REPORT TYPE AND DATES COVERED FINAL	
4. TITLE AND SUBTITLE ARMY DPW RESEARCH REFERENCE GUIDE				5. FUNDING NUMBERS	
6. AUTHOR(S) MR. JAMES SCOTT DR. LAWRENCE SMITH					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. ARMY ENGINEER STUDIES CENTER CASEY BUILDING #2594 FORT BELVOIR, VA 22060-5583				8. PERFORMING ORGANIZATION REPORT NUMBER CEESC-R-91-26	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. ARMY ENGINEER AND HOUSING SUPPORT CENTER KINGMAN BUILDING, # 2593 FORT BELVOIR, VA 22060-5516				10. SPONSORING/MONITORING AGENCY REPORT NUMBER N/A	
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This publication is a compilation of summaries of documents collected by the Engineer Studies Center (ESC) in a effort to assist the Army's Directorate of Public Works (DWP) Task Force. DOD has initiated the conversion of Army installation Directorates of Engineering and Housing into industrially-funded Directorates of Public Works. The Navy program has operated in this fashion for many years. Therefore, the Navy Public Works Center documentation was the original focus of the ESC reference gathering efforts. Applicable Army and DOD regulations, instructions, and directives were also gathered, along with appropriate Defense Management Report Decisions. Also collected were studies done on the RPMA management consolidation in the Washington D.C. area over the past 15 years. Each of the documents was reviewed for its significance to the Directorate of Public Works project and those considered important were summarized. In most cases, the Navy PWC documents serve as a good baseline for formulating Army DPW policy. Studies of past experiments and reorganizations should spotlight pitfalls that can be avoided in the current deliberations.					
14. SUBJECT TERMS PUBLIC WORKS CENTER, DIRECTORATE OF PUBLIC WORKS, INDUSTRIAL FUNDS				15. NUMBER OF PAGES 84	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNCLASSIFIED		

ARMY DIRECTORATE OF PUBLIC WORKS RESEARCH REFERENCE GUIDE



Prepared by
Engineer Studies Center
U.S. Army Corps of Engineers

September 1991

Accession For	
NTIS GRAB	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

ACKNOWLEDGMENTS

The Engineer Studies Center (ESC) prepared this report under the supervision of Mr. Michael M. Kishiyama, Senior Project Manager, and Mr. Charles R. Bailey, Project Manager. The summaries were written by Mr. James Scott and Dr. Lawrence Smith. Mrs. Sally Y. Bond prepared and edited this guide.

This summary would not have been possible without the cooperation and assistance of Ms. Linda Cullen, HECSA Library; Ms. Connie Candalaria, EACA; and the following Naval Facilities Engineering Command personnel: Captain E. R. Hamm, Assistant Commander for Public Works Centers and Departments; Mr. Curran D. Smith, Deputy Assistant Commander for Public Works Centers and Departments; Ms. Toni M. Pledger, Director, Public Works Centers Management Division; and Ms. Patricia B. Diggs, Financial Analyst.

FOREWORD

This publication resulted from research performed by the Engineer Studies Center (ESC) in an effort to assist the Army's Directorate of Public Works (DPW) Task Force in establishing industrially-funded DPWs at Army installations. The U.S. Navy has operated in this fashion for many years. Therefore, ESC began its efforts by gathering all available Navy Public Works Center documentation. Army and DOD regulations, along with the many studies done on RPMA management consolidation in the Washington D.C. area, were also gathered. While providing bibliographies of the collected data to the working committees, ESC discovered that summarizing each of the more important documents could be of possible benefit. This publication is a compilation of the resulting summaries.

The reference guide is intended to expedite the DPW Task Force committees' research efforts. As the committees develop their recommendations for the Army's Directorates of Public Works, this document will become useful to the individual installations converting to DPWs. I hope these summaries will be of value to you.

JOHN L. MOTES II
COL, EN
DPW Task Force Leader

Blank Page

DISTRIBUTION

	<u>No. of Copies</u>
U.S. Army Engineering and Housing Support Center, Fort Belvoir, VA 22060-5516	60
U.S. Army Engineer Studies Center, Casey Bldg. #2594, Telegraph & Leaf Roads, Fort Belvoir, VA 22060-5583	<u>10</u>
TOTAL	70

Blank Page

CONTENTS

<u>Section</u>	<u>Page</u>
ACKNOWLEDGMENTS	ii
FOREWORD	iii
DISTRIBUTION	v
CONTENTS	vii
EXECUTIVE SUMMARY	ix
 I. INTRODUCTION	
PURPOSE	1
BACKGROUND	1
OVERVIEW	1
OBTAINING DOCUMENTS	1
 II. MISSION, ORGANIZATION, AND STAFFING	
AAA REPORT ON FORT BELVOIR BASELINE STUDY	3
AIR FORCE GAO REPORT	4
AR 5-10	5
BASELINE CUSTOMER SATISFACTION SURVEY	5
EVALUATION OF EA,CA	6
FEASIBILITY OF RPMA CONSOLIDATION IN THE NCR	7
FT. BELVOIR BASELINE STUDY	7
GENERAL REPORT, PET TRAINING	8
GENERIC PWC	8
MANNING DOCUMENTS, PWCs, NORFOLK, PENSACOLA, AND GREAT LAKES	9
METHODOLOGY FOR FT. BELVOIR BASELINE STUDY	9
NAVFAC INSTRUCTION 11000.33	10
ORGANIZATION AND FUNCTION (O & F)	11
PWC ACCOUNTING SYSTEMS	12
PWC COMMANDERS GUIDE	12
PWC STANDARD C & F	13
PWC STRATEGIC PLAN	14
PWC WORK SERVICE PROCESSING PROBLEMS	15
PWD KEY WEST	16
RPMA CONSOLIDATION IN PANAMA	16
RPMA CONSOLIDATION IN THE NATIONAL CAPITAL REGION	17
1990 RPMA CONSOLIDATION LESSONS LEARNED	18
RPMA IMPROVEMENT ALTERNATIVES	19
RPMA NCR LESSONS LEARNED	20
 III. MONEY AND COMPETITION	
ANNUAL REPORT	21
AR ON INDUSTRIAL FUNDED INSTALLATIONS	21
BILLING RATES	22

<u>Section</u>	<u>Page</u>
COMPETITION	22
COMPETITION ADVOCATE LISTING	23
COMPETITION ADVOCATE OFFICE	23
COMPETITION IN CONTRACTING	24
CONTRACT WARRANT	25
CONTRACTING OUT IN THE PENSACOLA PWC	26
CORPUS	26
COST ACCOUNTING STANDARDS BOARD	27
DESCOM SUPPLEMENT TO AR ON INDUSTRIAL FUNDED INSTALLATIONS ..	27
DOD DIRECTIVE 7410.4	28
FT. BELVOIR BASELINE STUDY	28
GENERIC PWC	29
NAVFAC INSTRUCTION 11000.33	30
NAVY COMPTROLLER MANUAL	31
NAVY INDUSTRIAL FUND	32
PWC COMMANDERS GUIDE	32
PWC STRATEGIC PLAN	33
PWC WORK SERVICE PROCESSING PROBLEMS	34
WORKING CAPITAL FUNDS	35
REGULATIONS GOVERNING STOCK FUND OPERATIONS	36
STOCK FUND OPERATIONS	37
U.S. GOVERNMENT BANKCARD	38
 IV. PLANNING AND EXECUTION	
AAA REPORT ON FORT BELVOIR BASELINE STUDY	39
ANNUAL REPORT	40
FT. BELVOIR BASELINE STUDY	40
GENERIC PWC	41
METHODOLOGY FOR FT. BELVOIR BASELINE STUDY	42
PRODUCTIVITY ENHANCEMENT	42
PWC COMMANDERS GUIDE	43
PWC WORK SERVICE PROCESSING PROBLEMS	43
PWD KEY WEST	44
RPMA IMPROVEMENT ALTERNATIVES	44
RPMA CONSOLIDATION IN PANAMA	45
 V. OWNERSHIP AND RELATIONSHIPS	
BASELINE CUSTOMER SATISFACTION SURVEY	47
FEASIBILITY OF RPMA CONSOLIDATION IN THE NCR	48
NAVY RPMA MANPOWER REQUIREMENTS	48
PWC COMMANDERS GUIDE	49
PWC NORFOLK AND THE CUSTOMER	49
PWC WORK SERVICE PROCESSING PROBLEMS	50
SAN DIEGO PWC WORKLOAD FACTORS	51

APPENDIX 1--REFERENCE DOCUMENTS
APPENDIX 2--POINTS OF CONTACT LIST

EXECUTIVE SUMMARY

This publication is a compilation of summaries of documents collected by the Engineer Studies Center (ESC) in a effort to assist the Army's Directorate of Public Works Task Force. DOD has initiated the conversion of Army installation Directorates of Engineering and Housing into industrially-funded Directorates of Public Works (DPWs). DPW is the Army's term for PWC. The Navy's Public Works Center (PWC) program has operated in this fashion for many years. Therefore, the Navy PWC documentation was the original focus of the ESC reference-gathering efforts. Applicable Army and DOD regulations, instructions, and directives were also gathered, along with appropriate Defense Management Report Decisions. ESC also collected studies done on the RPMA management consolidation in the Washington D.C. area over the past 15 years.

Each of the documents was reviewed for its significance to the Directorate of Public Works project and those considered important were summarized. In most cases, the Navy PWC documents serve as a good baseline for formulating Army DPW policy. Studies of past experiments and reorganizations should spotlight pitfalls to be avoided.

Working committees will be able to minimize their research time by referencing this guide. Individual installations converting to DPWs will also find this document to be a useful tool.

Blank Page

I. INTRODUCTION

1. **PURPOSE.** To provide the Army's Directorate of Public Works (DPW) Task Force with brief summaries of collected policy, regulatory, and guidance documents.

2. **BACKGROUND.** DOD has developed a series of Defense Management Report Decisions (DMRD) to improve the way the department does business. Two of interest to the Engineer and Installation Management communities are DMRD 967 (Base Engineering Services, dated 30 December 1990) and DMRD 971 (Defense Business Operating Fund (DBOF), dated 2 February 1991). In December 1990, the Engineering and Housing Support Center (EHSC) asked ESC to assist in this endeavor. ESC was tasked to provide the Army's Directorate of Public Works Task Force with documents that could be used to enhance its ability to provide timely management and operational guidance to the installations selected for implementing the DPW concept within the Army. The collected reference documents are listed in **Appendix 1**. In support of this tasking, ESC has summarized each pertinent document.

3. **OVERVIEW.** ESC summarized 47 reference documents found relevant to establishing and operating public works activities. Each reference summary is structured as follows: short title; title; source/responsible office; date published; notes (when appropriate); and summary. ESC has categorized these summaries under four major issue areas:

- Mission, Organization, and Staffing
- Money and Competition
- Planning and Execution
- Ownership and Relationships

Because of the breadth of the information in these references, many of the references may be listed in several or all of the categories.

4. **OBTAINING DOCUMENTS.** To obtain documents cited in this guide, see **Appendix 2** which provides the mailing address and telephone numbers of the source or responsible organization. The points of contact list covers the majority of the documents reviewed in this guide.

Blank Page

II. MISSION, ORGANIZATION, AND STAFFING

SHORT TITLE: **AAA REPORT ON FORT BELVOIR BASELINE STUDY**

TITLE: *Special Report, Fiscal Year 1986 Baseline Data for Facilities Engineering Real Property Maintenance Activities, Fort Belvoir, Virginia*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Audit Agency

DATE PUBLISHED: 19 December 1988

NOTES: This special 12-page review was performed at the request of the Director of Management, Office of the Chief of Staff, Army, and Office of the Chief of Engineers.

SUMMARY: This review was made of the E.L. Hamm study to establish an FY 86 baseline of Facilities Engineering activities at Ft. Belvoir to determine if the data was reasonable and was prepared by approved methodology. AAA determined that service work order data shown in tables 10-1 and 10-2 was unreliable and that service work order data was not collectible due to recording practices. These tables should be left out of the final FY 86 baseline data. Tables 1, 2, 4, 5, 12, 14, 15, and 16 (annexes A through H of this report) provided a reasonable estimate of the reported FY 86 costs. This report should be used with the baseline study figures because the final FY 86 report is not available.

SHORT TITLE: ~~AIR FORCE GAO REPORT~~

TITLE: *Base Support Services: Disestablishment of Two Consolidated Organizations in San Antonio*

SOURCE/RESPONSIBLE OFFICE: National Security and International Affairs Division,
General Accounting Office (GAO)

DATE PUBLISHED: March 1989

NOTES: The document tries to determine why the Air Force disestablished two DPW-like organizations.

SUMMARY: The GAO conducted this analysis to answer the following questions posed by Senator Phil Gramm:

- What was the rationale for disestablishing the San Antonio Real Property Maintenance Agency (SARPMA) and the San Antonio Contracting Center (SACC)?
- What was the impact on SARPMA and SACC employees?
- What was the cost of disestablishing SARPMA and SACC and reestablishing civil engineering and contracting offices at the applicable installations?
- What was the operating cost of SARPMA compared to the decentralized base civil engineering offices?

GAO Findings: The Air Force concluded that the consolidated concept for performing real-property maintenance and base-level contracting was neither better nor worse than the decentralized approach.

SHORT TITLE: **AR 5-10**

TITLE: *Reduction and Realignment Actions, AR 5-10*

SOURCE/RESPONSIBLE OFFICE: Department of the Army, Office of the Chief of Staff

DATE PUBLISHED: August 1977

NOTES:

SUMMARY: This regulation assigns responsibilities and provides guidance on the laws, directives, and policies that govern the reduction of personnel and manpower spaces, and installation and activity realignments in the Army. All staff elements and their responsibilities are listed. Formats for actions such as Economic Analysis, Facilities Cost Data, Environmental Documentation, Public Announcement Documents, and Congressional Notification are included.

SHORT TITLE: **BASELINE CUSTOMER SATISFACTION SURVEY**

TITLE: *Overview of Goals of TARP's Baseline Customer Satisfaction Survey*

SOURCE/RESPONSIBLE OFFICE: PWC Norfolk, Virginia

DATE PUBLISHED: Undated

NOTES:

SUMMARY: The key goals of the study are to establish a baseline or benchmark of PWC customer satisfaction and provide data to run the Technical Assistance Research Program's (TARP's) Damage Model to quantify the bottom-line impact of the current level of customer satisfaction. TARP studied four areas:

- problem experience
- complaining behavior
- contact handling effectiveness
- market action implications

This is an important document because the key to successful operations of a Public Works Center is customer satisfaction.

SHORT TITLE: EVALUATION OF EA,CA

TITLE: *Evaluation of the Consolidation of Real Property Maintenance Activities (RPMA) in the U.S. Army Engineer Activity, Capital Area (USAEACA), Volume I: Executive Summary, Volume II: Evaluation*

SOURCE/RESPONSIBLE OFFICE: Construction Engineering Research Laboratory

DATE PUBLISHED: March 1990

NOTES:

SUMMARY: Another study of the EA,CA organization and its effectiveness. The primary purpose of the study was to review the Implementation Planning Group (IPG) planning and EA,CA operations, and to compare planning forecasts by IPG experts with actual needs of a working management. CERL felt the experts did a very good job of forecasting. Areas of prediction uncertainties and planning limitations were also identified. It was felt that the primary benefit of the centralized RPMA organization is its potential for sustained support of both planned and unplanned levels of customer needs. Again, the difficulties of measuring performance in an organization with constantly changing roles and responsibilities prevented many qualitative comparisons. Cost savings were not evaluated, at least in this report. The report emphasizes that formation of a well planned IPG is critical to the consolidation of RPMA's--
"Future decisions to create a USAEA,CA-type organization should be based on careful consideration of the project objectives, the compatibility between consolidation objectives and the installation mission, and favorability of the local climate for supporting such a project. A centralized RPMA organization may not be practical or cost-effective in all regions; for this reason, the need to perform meticulous feasibility studies cannot be overemphasized"

SHORT TITLE: FEASIBILITY OF RPMA CONSOLIDATION IN THE NCR

TITLE: *Army and DMATC RPMA Consolidation in the National Capital Region, Vols. I and II*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center (ESC)

DATE PUBLISHED: Volume I--June 1978; Volume II--September 1979

NOTES: 283 pages

SUMMARY: This study was done to determine the feasibility of consolidating the Real Property Maintenance Activities for selected installations in the National Capital Region. It considered feasibility with regard to geographic, functional, and economic factors. The study considered several alternative approaches to consolidation. After evaluating each, ESC determined they were hardly equal. Although under the recommended consolidation the report projects rather substantial savings primarily through the elimination of 113 positions, it also admits that some of the background data may have been a bit weak.

SHORT TITLE: FT. BELVOIR BASELINE STUDY

TITLE: *Ft. Belvoir FY86 Baseline Study, National Capital Region Facility Engineer Consolidation Test*

SOURCE/RESPONSIBLE OFFICE: E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: September 1988

NOTES: This report appears to be far from complete.

SUMMARY: This is the second draft of the final report on the FY86 Ft. Belvoir Baseline Study on cost and performance of facility engineer functions. It covers the period 1 October 1985 to 30 September 1986 and includes only the data available on 6 October 1987. Several important pieces of data were missing, but not identified. Possibly the most important information in this document is the sources of the data which are listed in Appendix B.

SHORT TITLE: **GENERAL REPORT, PET TRAINING**

TITLE: *Productivity Enhancement Team (PET) Training by PWD Little Creek and PWD Key West*

SOURCE/RESPONSIBLE OFFICE:

DATE PUBLISHED: July 1990

NOTES:

SUMMARY: A Navy contractor did these reports on the Public Works Departments at the Naval Amphibious Base, Little Creek, Virginia, and the Naval Air Station, Key West, Florida. They do not involve revolving fund or PWC's--more like a DEH.

SHORT TITLE: **GENERIC PWC**

TITLE: *Generic POA&M for PWC Start-up*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 18 October 1990

NOTES: This document is based on Navy PWC operations and is detailed enough to prevent you from leaving an important step undone.

SUMMARY: The document is designed to help commanders who desire to establish a new Public Works Center in their areas of responsibility. When establishing a PWC, the following actions should be considered in the process.

- develop a strawman from which a detailed draft PWC operations plan can be constructed
- determine the source of funds
- draft a management information system (MIS) plan of action
- set up a precommissioning team
- develop a plan of actions and milestones (POA&M)
- construct a Gantt chart for the PWC establishment plan
- develop a start-up check list
- develop a data collection check list
- define the activities necessary for PWC start-up
- conduct a site survey
- develop a concept of operations
- develop functional plans for the new PWC
- define your resources
- develop a training agenda

SHORT TITLE: MANNING DOCUMENTS, PWCS, NORFOLK, PENSACOLA, AND GREAT LAKES

TITLE: *Manpower Authorization Listings--Public Works Centers, Norfolk, Pensacola, and Great Lakes, OPNAV 1000.2*

SOURCE/RESPONSIBLE OFFICE: Chief of Naval Operations, NFACENGCOM

DATE PUBLISHED: Each section of this document carries a different date--
Jun 90 to Nov 90

NOTES: Line-by-line entries of job series and grades for the PWC organizations

SUMMARY: This document displays the required and authorized strengths of the U.S. Navy's Norfolk, Virginia; Pensacola, Florida; and Great Lakes, Illinois; Public Works Centers. The required levels are projected through the POM years. It also shows what the requirements are during mobilization.

SHORT TITLE: METHODOLOGY FOR FT BELVOIR BASELINE STUDY

TITLE: *Methodology For Performing the FY86 Fort Belvoir Baseline Report*

SOURCE/RESPONSIBLE OFFICE: E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: 23 July 1987

NOTES: This methodology was required before the contractor could begin actual data collection. 59 pages

SUMMARY: E.L. Hamm basically used the Comparison Methodology for Evaluating Facility Engineer Consolidation in the National Capital Region Supplement 1, and eliminated all references and pages that contained items not collectable, or required to be collected. This methodology had been used in each of the earlier studies done during the establishment of EA,CA. There were conflicts as to what defined uncollectible data. Problem areas identified during development of the methodology included service orders, shop overhead rates, and troop support/labor. The comparison methodology mentioned above is included as part of this report. Also included is the Modified Data Collection Methodology and the Cost Comparison Data Automation Methodology.

SHORT TITLE: NAVFAC INSTRUCTION 11000.33

TITLE: *Public Works Center Operations*, NAVFAC Instruction 11000.33

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 22 March 1990

NOTES: Promulgates operating procedures for PWCs

SUMMARY: This instruction provides the following information:

- principles to be used as a guide for PWC organizational alignments
- guidance for quarterly development and submission of Financial and Operating Statements
- guidance for the preparation of the Information Systems (IS) budget -- reinforces the requirement to timely submit data
- discussion regarding delegation of IS approval authority and guidance for the administration and execution of the IS program for PWCs
- discussion regarding delegation of authority and guidance for the administration and execution of the NIF Special Projects Program for PWCs
- guidance for the application of PWC Mission Management Resources, Program IX

SHORT TITLE: ORGANIZATION AND FUNCTION (O & F)

TITLE: *Organization and Functions Manual, PWCINST 5450.2M; and Organization and Functions, PWCNORVAINST 5450.12M*

SOURCE/RESPONSIBLE OFFICE: Public Works Centers, Norfolk, Virginia, and San Diego, California

DATE PUBLISHED: 5450.12M--July 1988; 5450.2M--1 August 1990

NOTES:

SUMMARY: These O AND F manuals provide the following information:

- the mission of the PWC
- the functions of the PWC --
 - provide, operate, and maintain public utilities
 - perform maintenance, repair, and minor construction of public works
 - perform recurring housekeeping maintenance
 - inspect public works and public utilities
 - provide, operate, and maintain transportation equipment and waterfront/diving services
 - provide or arrange for engineering consultant and support services
 - maintain Navy family housing
- the duties of members of the PWC starting with the commander
- the functions of all the divisions and branches in each PWC

SHORT TITLE: PWC ACCOUNTING SYSTEMS

TITLE: *NAVFAC Management Information Strategy*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering System

DATE PUBLISHED: Unknown

NOTES: Appendix A and Appendix B

SUMMARY: These two appendices give a complete inventory of all the current PWC accounting systems and subsystems as well as the planned architecture subsystems descriptions. Appendix A shows 30 different subsystems that make up the PWC automated accounting system. They range from job order accounting to utilities tracking. Appendix B is the Information System Architecture Subsystem Descriptions. They give the subsystem definition, the job number, and a thorough description of what that particular subsystem will do. It also shows all the architecture opportunities. This document provides all the pieces needed to obtain a full accounting of what goes on in the PWC relative to obtaining products, performing customer work, and billing the customer. As PWCs become industrially funded, these two appendices will be an absolute necessity in helping them put their accounting system together so they can track their accounting actions for audit purposes.

SHORT TITLE: PWC COMMANDERS GUIDE

TITLE: *A Guide for Public Works Center Commanding Officers*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: April 1988

NOTES: Business-like

SUMMARY: The strategic planning process helps PWC commanders become fully effective in the shortest possible time. The PWC commitment bottom line is facility service. This document is needed to give commanders a head start.

SHORT TITLE: **PWC STANDARD O & F**

TITLE: *Public Works Center Standard Organization and Function*, NAVFAC Instruction 5450.21C

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 18 April 1980

NOTES: (FAC-151)

SUMMARY: The document provides the following guidance:

- PWCs will be organized in accordance with the directions in this document.
- Local deviations will not be taken without prior approval of NAVFACINSCOM.
- PWCs that are not in conformance with the organization, functions, and component codes contained in its enclosures will develop a transition plan that will result in the full implementation of the provisions of the instruction.

This document shows, within each PWC organization, the departments, the types of positions needed in each department, the responsibilities of individuals in each department, as well as the recommended codes for positions in each division and department.

SHORT TITLE: PWC STRATEGIC PLAN

TITLE: *Navy Public Works Center, San Diego Strategic Business Plan*

SOURCE/RESPONSIBLE OFFICE: PWC San Diego, California

DATE PUBLISHED: August 1990

NOTES: A strategic plan asking the question--what will this activity look like at some future time (i.e., the year 2000)?

SUMMARY: The document lists its mission "to provide quality, responsive, and effective engineering, maintenance, transportation, and utilities services to our fleet and shore customers through an innovative, talented, and dedicated workforce." To do this, the plan looked at critical success indicators such as the following:

- customer satisfaction
- improved operations
- planned automation
- managed overhead
- quality workforce
- improved material support
- capital investment
- safety

Document would be useful for someone trying to improve an already-established PWC.

SHORT TITLE: PWC WORK SERVICE PROCESSING PROBLEMS

TITLE: *An Investigation Into the Navy Public Works Centers Specific Work Service Processing Problems*

SOURCE/RESPONSIBLE OFFICE: Author: Cmdr. James G. Palmborg, Masters Thesis, Naval Postgraduate School, Monterey, CA

DATE PUBLISHED: December 1980

NOTES: 222 pages; available through DTIC; well written--a good reference

SUMMARY: Contains a good history of the Navy's PWC program--from the originally established first (Norfolk in 1948) through eleventh PWCs, to the present nine PWCs. Areas covered include --

- advantages and disadvantages of the PWC, overall savings from PWC consolidations, and the standard PWC organization
- descriptions of how a PWC works--the services provided, how they are prioritized and scheduled, contracting, cost estimates, and reimbursable procedures
- the summarized results of a survey conducted with PWC commanders, production officers, and other officials

Conclusions reached include the need for enhanced customer liaison, more accurate scheduling, better utilization of manpower, and better management of workload.

SHORT TITLE: **PWD KEY WEST**

TITLE: *PWD Key West Workshop Evaluation*

DATE PUBLISHED: March 1990

NOTES:

SUMMARY: A Navy contractor did this report on the Public Works Departments at the Naval Amphibious Base, Little Creek, Virginia, and the Naval Air Station, Key West, Florida. It does not involve revolving fund or PWC's--more like a DEH.

SHORT TITLE: **RPMA CONSOLIDATION IN PANAMA**

TITLE: *U.S. Army, Air Force, and Navy RPMA Consolidation In Panama--A Cost-Benefit Analysis, Volume I and Volume II*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center

DATE PUBLISHED: September 1979

NOTES:

SUMMARY: This report is the result of an OSD-directed study to determine the feasibility of consolidating the RPMA for U.S. Army, Air Force, and Navy installations in Panama. The study compared several explicit alternatives, and recommended consolidation under a single manager (Army) with work being reimbursed through a revolving fund.

The recommendation was not implemented due to the resistance of the services and the confusion of the Panama Canal Treaty.

SHORT TITLE: RPMA CONSOLIDATION IN THE NATIONAL CAPITAL REGION

TITLE: *RPMA Consolidation Activities in the National Capital Region, Volume I: Main Report*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Construction Engineering Research
Laboratory for the U.S. Army Engineer Division,
Huntsville

DATE PUBLISHED: May 1984

NOTES: 320 pages

SUMMARY: This is a follow-on to the 1978 ESC study on NCR RPMA consolidation. It documents the actions and decisions of the Implementation Planning Group (IPG) established in 1980, which resulted in the formation of Engineer Activity, Capital Area (EA,CA). The total plan was never completed because Walter Reed Army Medical Center and the Defense Mapping Agency were not incorporated into the EA,CA RPMA. The study purports to provide guidance to future IPG's doing similar RPMA consolidations, but since it was done before actual implementation in many cases, its utility may be limited. If used in conjunction with one of the lessons-learned documents, it could be quite valuable.

The following tasks are described:

- organizational development
- financial management
- procurement management
- supply management
- staff engineer and real property maintenance management
- consolidation evaluation
- consolidation planning

SHORT TITLE: 1990 RPMA CONSOLIDATION LESSONS LEARNED

TITLE: *Lessons Learned: Test of Consolidation and Centralization of Real Property Maintenance Activities (RPMA) in the National Capital Region*

SOURCE/RESPONSIBLE OFFICE: E. L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: 16 May 1990

NOTES: 19 pages

SUMMARY: This report is a follow-on to previous studies of the Engineer Activity, Capital Area (EA,CA) done during the 10 years since EA,CA was established. Several of these earlier studies are included in this bibliography. Among the findings included in this report are:

- RPMA consolidation is a workable concept that is rated highly successful by most of those involved or exposed to the organization.
- Consolidation is not necessary before other innovations (e.g., Industrial Funding, Corps of Engineers support, and dedicated, co-located supply and procurement) are applied to RPMA's.
- Consolidation and centralization may be applied over a larger area or with other types of organizations through improved communications, better business systems, preplanning, and ongoing public relations.
- Continued success of consolidated RPMA depends on strict adherence to customer billing procedures.
- District Corps of Engineers support is extremely important.
- The degree of success of a consolidated system is difficult to measure objectively.
- Any dual-hatted status of a consolidated RPMA CO should be avoided because of the potential for favoritism and divided loyalties.
- In-depth, detailed preplanning with sufficient manpower and time is recommended for any future consolidation efforts.

SHORT TITLE: RPMA IMPROVEMENT ALTERNATIVES

TITLE: *Review of Real Property Maintenance Activities (RPMA) Improvement Alternatives*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center

DATE PUBLISHED: February 1979

NOTES: 48 pages

SUMMARY: This is the result of a request for ESC to evaluate a study done by Lester B. Knight and Associates and to develop "a perspective for the Chief of Engineers regarding the future needs of the Army in the management and execution of its real property maintenance activities." Evidently, the Chief of Engineers was dissatisfied with this report and wanted ESC to evaluate it. In addition, a general officer panel also evaluated the report, arriving at the same conclusions as ESC.

ESC did not feel that it was appropriate to adopt the recommendations of the Knight report (recommendations are not identified or listed in the ESC report). ESC instead restructured the current (at time of study) RPMA organizations for the following reasons:

- There is no need for such change.
- There seems to be a serious error in the potential for savings projected by the contractor.
- Other advantages claimed by the contractor are available without the reorganization.

The study has little or no connection with the other RPMA studies done during the formation of EA,CA.

SHORT TITLE: RPMA NCR LESSONS LEARNED

TITLE: *Real Property Maintenance Activities Centralization and Consolidation in the National Capital Region: Executive Summary and Lessons Learned Report*

SOURCE/RESPONSIBLE OFFICE: Prepared by Pan Am World Services, Inc. for the U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: March 1984

NOTES:

SUMMARY: This report is a review of lessons learned from Jan 80 to Sep 83 in the EA,CA consolidation of RPMA responsibilities in the National Capital Region. It includes a brief history of the mandates, etc. preceding the consolidation and the methodology used in the consolidation. The primary conclusions reached in this study are listed below:

- RPMA consolidation has been proven as workable.
- The most efficient structure under consolidation is still being developed.
- It is almost impossible to measure test results in a constantly changing environment; thus, attempts at evaluation are premature.
- Valid or managerial sound judgments can not be made until the test is expanded to include large installations.

III. MONEY AND COMPETITION

SHORT TITLE: **ANNUAL REPORT**

TITLE: *Navy Public Work Centers Annual Report--Fiscal Year 1990*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: Undated

NOTES: This report uses average figures for all nine Public Work Centers.

SUMMARY: The document --

- contains a corporate financial picture of the PWCs for FY 1990 and focuses on attainment of Department of Defense goals
 - reports on yearly accomplishments for quality products and services, customer satisfaction competitiveness, people, financial indices, and financial reports
 - gives the new PWC commander an idea of what to do during the year in order to attain a satisfactory annual report
-

SHORT TITLE: **AR ON INDUSTRIAL FUNDED INSTALLATIONS**

TITLE: *Budgeting, Accounting, Reporting, and Responsibilities For Industrial Funded Installations and Activities, AR 37-110*

SOURCE/RESPONSIBLE OFFICE: originally the Office of the Assistant Comptroller of the Army (Finance and Accounting), but now under the DOD Comptroller's Office; POC is Mr. John Piedel, in Accounting Policy, at DSN 699-3029, at Ft. Ben Harrison

DATE PUBLISHED: 1 August 1980, with changes through 1 January 1983

NOTES: A draft new version was sent out in 1984, but was never finalized. A new overall accounting regulation, consolidated into AR 37-1 as a cost accounting chapter, was sent to the printer on 27 February 1991 and should be available in two or three months. Very few substantial changes were made to the Industrial Fund section.

SUMMARY: This regulation establishes financial, budget, and accounting policies and procedures for Army installations financed by the Army Industrial Fund. It includes accounting classifications, examples of blank forms to be used, and a copy of DOD Directive 7410.4 dated 25 September 1972.

SHORT TITLE: BILLING RATES

TITLE: "PWC Great Lakes Notice 7030, FY 1991 Billing Rates for Work or Services"

SOURCE/RESPONSIBLE OFFICE: Great Lakes Navy Public Works Center

DATE PUBLISHED: October 1990

NOTES: Notice is transmitted via letter dated 18 October 1990.

SUMMARY: This is a schedule of billing rates for FY 1991 for areas such as utilities, snow removal, contract administration, telephone service, and transportation equipment rental rates.

SHORT TITLE: COMPETITION

TITLE: *DLA Competition Advocate Program, DLAR 4105.17*

SOURCE/RESPONSIBLE OFFICE: Defense Logistics Agency (RCS DLA,Q&A)

DATE PUBLISHED: 26 February 1988

NOTES:

SUMMARY: This DLA regulation establishes policy and assigns responsibility for the DLA Competition Advocate Program. This regulation implements "DOD Directive 4245.9, Competitive Acquisitions," which requires that competition advocates be designated at each contracting activity. This regulation is applicable to HQ DLA and all DLA field activities.

SHORT TITLE: COMPETITION ADVOCATE LISTING

TITLE: "Department of Defense Competition Advocate Listing"

SOURCE/RESPONSIBLE OFFICE: DASD (Procurement)

DATE PUBLISHED: 18 October 1990

NOTES:

SUMMARY: This listing of competition advocates within the Department of Defense is published in support of efforts to increase competition and reduce the number and dollar value of non-competitive contracts. It supports the Competition-In-Contracting Act of 1984 which amended the Office of Federal Procurement Policy Act. The 1984 Act requires that each executive agency designate a competition advocate for the agency and for each procuring activity of the agency.

SHORT TITLE: COMPETITION ADVOCATE OFFICE

TITLE: Office of the Competition Advocate DCA Notice 640-45-80

SOURCE/RESPONSIBLE OFFICE: DCA Chief of Staff

DATE PUBLISHED: 24 January 1985

NOTES:

SUMMARY: This instruction provides policy, assigns responsibility, and prescribes procedures regarding competitive acquisitions. It applies to Headquarters DCA, DCA field activities, and the office of the manager, NCS. The document's purpose is to ensure that the agency acquires all services and products using full and open competition. The notice also establishes functional responsibilities among headquarters, directorates, and subordinate activities for its implementation.

SHORT TITLE: **COMPETITION IN CONTRACTING**

TITLE: *Public Law 98-369, Section 2711, TITLE VII--Competition in Contracting*

SOURCE/RESPONSIBLE OFFICE: U.S. Congress

DATE PUBLISHED: July 18, 1984

NOTES:

SUMMARY: This document sets out congressional policy with regard to procurement of goods and services. It amends section 303 of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 253). It states that in conducting a procurement of property or services, an executive agency shall --

- obtain full and open competition
- use the competitive procedure or combination of competitive procedures that is best suited under the circumstances.

SHORT TITLE: **CONTRACT WARRANT**

TITLE: *Contracting Manual, NAVFAC P-68*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: October 1987

NOTES:

SUMMARY: Appendix P of this manual discusses legal review. Pertinent parts include --

- NAVFACENGCOM contracting authority, contracting officer authority, qualification requirements
- Level VI contract actions up to \$25,000
- Level V contract actions up to \$100,000
- Level IV contract actions up to \$500,000
- Level III contract actions up to \$1,000,000
- Level II contract actions up to \$5,000,000
- Level I contract actions for over \$5,000,000.

It discusses appointment of contracting officers, shows certificates of appointment (warrant) levels and provides a sample contract warrant, and gives an outline of the duties of the ordering officer along with some special delegations.

SHORT TITLE: **CONTRACTING OUT IN THE PENSACOLA PWC**

TITLE: *Implementation of the Commercial Activities Program at Navy Public Works Center, Pensacola*

SOURCE/RESPONSIBLE OFFICE: University of Florida, Department of Civil Engineering

DATE PUBLISHED: June 1984

NOTES: An 107-page report presented to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Engineering

SUMMARY: This report is concerned with the Commercial Activities Program and its effect on the Navy PWC at Pensacola, Florida. The first 48 pages give a detailed history of the Commercial Activities Program, especially the developments over the past 15 years. The next chapter covers the Navy PWC program. After 66 pages, the report gets to the Pensacola PWC, which is apparently an efficiently managed organization that has aggressively cut costs and has been able to keep its contracts and, thus, its work and workers. The Pensacola PWC has won several awards based on its business smarts and efficiency. There is little information about the formation of the PWC.

SHORT TITLE: **CORPUS**

TITLE: *U.S. Code Title 10, Section 2209*

SOURCE/RESPONSIBLE OFFICE: U.S. Congress

DATE PUBLISHED: July 3, 1942; revised 1949

NOTES:

SUMMARY: This section gives the Secretary of Defense authority to prescribe expenditures from a management fund for material (other than stock), personal services, and contract services. All services must have a management fund account consisting of a corpus of \$ 1 million dollars or such amounts as may be appropriate thereto from time to time. Approval for establishing such an account must be obtained from the Secretary of Defense.

SHORT TITLE: **COST ACCOUNTING STANDARDS BOARD**

TITLE: *Part 409 – Cost Accounting Standard – Depreciation of Tangible Capital Assets*

SOURCE/RESPONSIBLE OFFICE: 40 Federal Regulation 4264

DATE PUBLISHED: 29 January 1975

NOTES: Authority for this document is 84 stat. 796, sec 103 (50 U.S.C. App. 2168)

SUMMARY: The purpose of this document is to provide criteria and guidance for consistently and objectively assigning costs of tangible capital assets to cost accounting periods and allocating such costs to cost objectives within such periods. "The standard is based on the concept that depreciation costs identified with cost accounting periods and benefiting cost objectives within periods should be a reasonable measure of the expiration of service potential of the tangible assets subject to depreciation." The document covers such topics as economic impact of the standard, need for the standard, method of depreciation, service lives, beginning and ending periods, residual value, and costs and benefits.

SHORT TITLE: **DESCOM SUPPLEMENT TO AR ON INDUSTRIAL FUNDED INSTALLATIONS**

TITLE: *DESCOM Supplement 1 to AR 37-110, Budgeting, Accounting, Reporting, and Responsibilities for Industrial Funded Installations and Activities*

SOURCE/RESPONSIBLE OFFICE: Commander, U.S. Army Depot Systems Command,
ATTN: AMSDS-RM-RFP

DATE PUBLISHED: 25 March 1987, with changes through 13 April 1989

NOTES:

SUMMARY: This is the Depot Systems Command supplement to the regulation that establishes financial, budget, and accounting policies and procedures for Army installations financed by the Army Industrial Fund. In addition to including many items exclusive to depots, it also covers many that may be more applicable to the PWC than the base document, AR 37-110.

SHORT TITLE: DOD DIRECTIVE 7410.4

TITLE: *Industrial Fund Policy, Department of Defense Directive 7410.4*

SOURCE/RESPONSIBLE OFFICE: Assistant Secretary of Defense (Comptroller)

DATE PUBLISHED: 1 July 1988

NOTES:

SUMMARY: This directive addresses working capital funds (hereafter called industrial funds) for industrial and commercial activities that provide common services within or between the DOD components. These industrial funds have been set up for all services. Upon receiving DOD approval, individual activities within each service may be chartered under this Directive. The Secretaries of the Military Departments and the Directors of the Defense Agencies are responsible for complying with the DOD Directive by designating a management agency or command responsible for managing each industrial fund activity and forwarding applications for new industrial funds to DOD. Section 2208, Title 10 U.S.C., requires that heads of DOD components submit, in accordance with DOD Instruction 7220.9-M, annual reports on the financial condition and operations of working capital funds to the President and Congress.

SHORT TITLE: FT. BELVOIR BASELINE STUDY

TITLE: *Ft. Belvoir FY86 Baseline Study, National Capital Region Facility Engineer Consolidation Test*

SOURCE/RESPONSIBLE OFFICE: E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: September 1988

NOTES: This report appears to be far from complete.

SUMMARY: This is the second draft of the final report on the FY86 Ft. Belvoir Baseline Study on cost and performance of facility engineer functions. It covers the period 1 October 1985 to 30 September 1986 and includes only the data available on 6 October 1987. Several important pieces of data were missing, but not identified. Possibly the most important information in this document is the sources of the data which are listed in Appendix B.

SHORT TITLE: **GENERIC PWC**

TITLE: *Generic POA&M for PWC Start-up*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 18 October 1990

NOTES: This document is based on Navy PWC operations and is detailed enough to prevent you from leaving an important step undone.

SUMMARY: The document is designed to help commanders who desire to establish a new Public Works Center in their areas of responsibility. When establishing a PWC, the following actions should be considered in the process.

- develop a strawman from which a detailed draft PWC operations plan can be constructed
- determine the source of funds
- draft a management information system (MIS) plan of action
- set up a precommissioning team
- develop a plan of actions and milestones (POA&M)
- construct a Gantt chart for the PWC establishment plan
- develop a start-up check list
- develop a data collection check list
- define the activities necessary for PWC start-up
- conduct a site survey
- develop a concept of operations
- develop functional plans for the new PWC
- define your resources
- develop a training agenda

SHORT TITLE: NAVFAC INSTRUCTION 11000.33

TITLE: *Public Works Center Operations*, NAVFAC Instruction 11000.33

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 22 March 1990

NOTES: Promulgates operating procedures for PWCs

SUMMARY: This instruction provides the following information:

- principles to be used as a guide for PWC organizational alignments
- guidance for quarterly development and submission of Financial and Operating Statements
- guidance for the preparation of the Information Systems (IS) budget--reinforces the requirement to timely submit data
- discussion regarding delegation of IS approval authority and guidance for the administration and execution of the IS program for PWCs
- discussion regarding delegation of authority and guidance for the administration and execution of the NIF Special Projects Program for PWCs
- guidance for the application of PWC Mission Management Resources, Program IX

SHORT TITLE: NAVY COMPTROLLER MANUAL

TITLE: *Navy and Marine Corps Industrial Funds, Navy Comptroller Manual, Vol. 5*

SOURCE/RESPONSIBLE OFFICE: Department of the Navy, Office of the Comptroller

DATE PUBLISHED: Includes changes through 5 April 1990

NOTES: Volume 5 provides a good background upon which to build on the knowledge of Public Works Center Industrial Fund operations.

SUMMARY: Significant chapters:

- Introduction to Industrial Funding and General Information
- Budgeting
- Account Coding Structure
- Accounting Procedures
- Disbursing
- Miscellaneous Operating Policy and Procedures
- Financial and Operating Statements
- Appendices
- Glossary of Terms
- Regulation Governing Industrial Fund Operations--DOD Directive 7410.4
- Public Works Centers

SHORT TITLE: NAVY INDUSTRIAL FUND

TITLE: "Navy Industrial Fund, Public Works Center, Norfolk, Virginia"

SOURCE/RESPONSIBLE OFFICE: Department of the Navy

DATE PUBLISHED: Undated

NOTES: Source is Mr. John Evans of OSD

SUMMARY: This document provides a brief description of the factors affecting a PWC's future projections and workloads. The primary goal of a PWC is to reduce unit costs, and the focus of this document is on cost-per-unit output. A PWC may be affected by base closures. This document covers the shore establishment. The following factors are also covered:

- total funding managed by the PWCs
 - summaries of financial operations
 - workload indicators
 - personnel data
 - price and program resources
 - real property maintenance expenses
 - proposed billing rate adjustments
 - military work years and costs
-

SHORT TITLE: PWC COMMANDERS GUIDE

TITLE: *A Guide for Public Works Center Commanding Officers*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: April 1988

NOTES: Business-like

SUMMARY: The strategic planning process helps PWC commanders become fully effective in the shortest possible time. The PWC commitment bottom line is facility service. This document is needed to give commanders a head s/tart.

SHORT TITLE: PWC STRATEGIC PLAN

TITLE: *Navy Public Works Center, San Diego Strategic Business Plan*

SOURCE/RESPONSIBLE OFFICE: PWC San Diego, California

DATE PUBLISHED: August 1990

NOTES: A strategic plan asking the question--what will this activity look like at some future time (i.e., the year 2000)?

SUMMARY: The document lists its mission "to provide quality, responsive, and effective engineering, maintenance, transportation, and utilities services to our fleet and shore customers through an innovative, talented, and dedicated workforce." To do this, the plan looked at critical success indicators such as the following:

- customer satisfaction
- improved operations
- planned automation
- managed overhead
- quality workforce
- improved material support
- capital investment
- safety

Document would be useful for someone trying to improve an already-established PWC.

SHORT TITLE: PWC WORK SERVICE PROCESSING PROBLEMS

TITLE: *An Investigation Into the Navy Public Works Centers' Specific Work Service Processing Problems*

SOURCE/RESPONSIBLE OFFICE: Author: Cmdr. James G. Palmborg, Masters Thesis, Naval Postgraduate School, Monterey, CA

DATE PUBLISHED: December 1980

NOTES: 222 pages; available through DTIC; well written--a good reference

SUMMARY: Contains a good history of the Navy's PWC program--from the originally established first (Norfolk in 1948) through eleventh PWCs, to the present nine PWCs. Areas covered include --

- advantages and disadvantages of the PWC, overall savings from PWC consolidations, and the standard PWC organization
- descriptions of how a PWC works--the services provided, how they are prioritized and scheduled, contracting, cost estimates, and reimbursable procedures
- the summarized results of a survey conducted with PWC commanders, production officers, and other officials

Conclusions reached include the need for enhanced customer liaison, more accurate scheduling, better utilization of manpower, and better management of workload.

SHORT TITLE: WORKING CAPITAL FUNDS

TITLE: *U.S. Code Title 10, Section 2208*

SOURCE/RESPONSIBLE OFFICE: U.S. Congress

DATE PUBLISHED: 1947; revised 1982

NOTES:

SUMMARY: Section 2208 establishes control and accountability for the cost of programs and the work performed in DOD. The Secretary of Defense may require establishment of working capital funds in DOD to --

- finance inventories of designated supplies
- provide working capital for commercial/industrial-type activities that provide common services within or among those departments and agencies designated by the Secretary of Defense

DOD will request the Secretary of Labor to establish working capital funds.

SHORT TITLE: REGULATIONS GOVERNING STOCK FUND OPERATIONS

TITLE: *Regulations Governing Stock Fund Operations*, Department of Defense Directive 7420.1

SOURCE/RESPONSIBLE OFFICE: Assistant Secretary of Defense (Comptroller)

DATE PUBLISHED: 26 January 1967

NOTES: 30 pages

SUMMARY: This directive contains the general DOD requirements for Stock Funds, or Industrial Funds. These requirements are the same for all the services--Army, Air Force, Navy, Marine--and Defense Stock Fund.

The following major areas are included in this directive:

- assets and liabilities
- items to be included in Stock Fund
- depth of extension of Stock Fund
- general policies for pricing of Stock Fund material
- manufacturing, processing, repair, and preservation of stocks
- stock sales
- issues
- transfers and reimbursements
- authorized nonreimbursables
- return of material to Stock Funds
- requirements for accounting

SHORT TITLE: STOCK FUND OPERATIONS

TITLE: *Stock Fund Operations*, Department of Defense Directive 7420.13 and
Stock Fund Operations, Department of Defense Regulation 7420.13-R

SOURCE/RESPONSIBLE OFFICE: Office of the Assistant Secretary of Defense
(Comptroller)

DATE PUBLISHED: DOD Directive: 27 January 1983
DOD Regulation: June 1986

NOTES:

SUMMARY: DOD Directive 7420.13 applies to DOD, the various services,
and their reserve components It --

- establishes policy
- assigns responsibilities
- authorizes publication of DOD Regulation 7420.13-R, Stock Fund Operations

DOD Regulation 7420.13-R prescribes uniform policy and procedures for all DOD stock funds. It includes policies for the following subjects:

- stock fund charters
- efficiencies and economics
- general ledger accounts
- items included in stock fund
- pricing of stock fund items
- sales, issues, loans, and leases
- fabrication, testing, repair, and preservation of stocks
- returns and stock fund reports

The regulation is phrased primarily in terms of sale and inventories, then services.

SHORT TITLE: U.S. GOVERNMENT BANKCARD

TITLE: "Instructions for the Use of the U.S. Government BANKCARD"

SOURCE/RESPONSIBLE OFFICE:

DATE PUBLISHED: August 1990

NOTES:

SUMMARY: The purpose of this document is to provide instruction on the proper use of the GSA government-wide credit card as a supplement for Standard Form 44, Imprest Fund purchases, and purchase orders up to an amount established by each department/agency, not to exceed the small purchase dollar amount of \$25,000. As background, the Federal Government has used various methods to accomplish the purchase of goods and services. These methods, such as the SF-44, have proven to be costly, and occasionally they have not been accepted by merchants. To promote vendor acceptance and operational efficiency, the Department of Commerce initiated a pilot credit card project under authority from the Office of Federal Procurement Policy, Office of Management and Budget. This directive extends credit card service to all government agencies.

IV. AREA PLANNING AND EXECUTION

SHORT TITLE: AAA REPORT ON FORT BELVOIR BASELINE STUDY

TITLE: *Special Report, Fiscal Year 1986 Baseline Data for Facilities Engineering Real Property Maintenance Activities, Fort Belvoir, Virginia*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Audit Agency

DATE PUBLISHED: 19 December 1988

NOTES: This special 12-page review was performed at the request of the Director of Management, Office of the Chief of Staff, Army, and Office of the Chief of Engineers.

SUMMARY: This review was made of the E.L. Hamm study to establish an FY 86 baseline of Facilities Engineering activities at Ft. Belvoir to determine if the data was reasonable and was prepared by approved methodology. AAA determined that service work order data shown in tables 10-1 and 10-2 was unreliable and that service work order data was not collectible due to recording practices. These tables should be left out of the final FY 86 baseline data. Tables 1, 2, 4, 5, 12, 14, 15, and 16 (annexes A through H of this report) provided a reasonable estimate of the reported FY 86 costs. This report should be used with the baseline study figures because the final FY 86 report is not available.

SHORT TITLE: ANNUAL REPORT

TITLE: *Navy Public Work Centers Annual Report--Fiscal Year 1990*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: Undated

NOTES: This report uses average figures for all nine Public Work Centers.

SUMMARY: The document --

- contains a corporate financial picture of the PWCs for FY 1990 and focuses on attainment of Department of Defense goals
 - reports on yearly accomplishments for quality products and services, customer satisfaction competitiveness, people, financial indices, and financial reports
 - gives the new PWC commander an idea of what to do during the year in order to attain a satisfactory annual report
-

SHORT TITLE: FT. BELVOIR BASELINE STUDY

TITLE: *Ft. Belvoir FY86 Baseline Study, National Capital Region Facility Engineer Consolidation Test*

SOURCE/RESPONSIBLE OFFICE: E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: September 1988

NOTES: This report appears to be far from complete.

SUMMARY: This is the second draft of the final report on the FY86 Ft. Belvoir Baseline Study on cost and performance of facility engineer functions. It covers the period 1 October 1985 to 30 September 1986 and includes only the data available on 6 October 1987. Several important pieces of data were missing, but not identified. Possibly the most important information in this document is the sources of the data which are listed in Appendix B.

SHORT TITLE: **GENERIC PWC**

TITLE: *Generic POA&M for PWC Start-up*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: 18 October 1990

NOTES: This document is based on Navy PWC operations and is detailed enough to prevent you from leaving an important step undone.

SUMMARY: The document is designed to help commanders who desire to establish a new Public Works Center in their areas of responsibility. When establishing a PWC, the following actions should be considered in the process.

- develop a strawman from which a detailed draft PWC operations plan can be constructed
- determine the source of funds
- draft a management information system (MIS) plan of action
- set up a precommissioning team
- develop a plan of actions and milestones (POA&M)
- construct a Gantt chart for the PWC establishment plan
- develop a start-up check list
- develop a data collection check list
- define the activities necessary for PWC start-up
- conduct a site survey
- develop a concept of operations
- develop functional plans for the new PWC
- define your resources
- develop a training agenda

SHORT TITLE: METHODOLOGY FOR FT. BELVOIR BASELINE STUDY

TITLE: *Methodology For Performing the FY86 Fort Belvoir Baseline Report*

SOURCE/RESPONSIBLE OFFICE: E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville

DATE PUBLISHED: 23 July 1987

NOTES: This methodology was required before the contractor could begin actual data collection. 59 pages

SUMMARY: E.L. Hamm basically used the Comparison Methodology for Evaluating Facility Engineer Consolidation in the National Capital Region Supplement 1, and eliminated all references and pages that contained items not collectable, or required to be collected. This methodology had been used in each of the earlier studies done during the establishment of EA,CA. There were conflicts as to what defined uncollectible data. Problem areas identified during development of the methodology included service orders, shop overhead rates, and troop support/labor. The comparison methodology mentioned above is included as part of this report. Also included is the Modified Data Collection Methodology and the Cost Comparison Data Automation Methodology.

SHORT TITLE: PRODUCTIVITY ENHANCEMENT

TITLE: *Productivity Enhancement Team Review Evaluation/Comparative Analysis*

SOURCE/RESPONSIBLE OFFICE: Navy Facilities Engineering Command

DATE PUBLISHED: Undated

NOTES:

SUMMARY: A Navy contractor did this report on the Public Works Departments at the Naval Amphibious Base, Little Creek, and the Naval Air Station Key West. It does not involve revolving fund or PWC's, being more like a DEH.

SHORT TITLE: PWC COMMANDERS GUIDE

TITLE: *A Guide for Public Works Center Commanding Officers*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: April 1988

NOTES: Business-like

SUMMARY: The strategic planning process helps PWC commanders become fully effective in the shortest possible time. The PWC commitment bottom line is facility service. This document is needed to give commanders a head start.

SHORT TITLE: PWC WORK SERVICE PROCESSING PROBLEMS

TITLE: *An Investigation Into the Navy Public Works Centers Specific Work Service Processing Problems*

SOURCE/RESPONSIBLE OFFICE: Author: Cmdr. James G. Palmborg, Masters Thesis, Naval Postgraduate School, Monterey, CA

DATE PUBLISHED: December 1980

NOTES: 222 pages; available through DTIC; well written--a good reference

SUMMARY: Contains a good history of the Navy's PWC program--from the originally established first (Norfolk in 1948) through eleventh PWCs, to the present nine PWCs. Areas covered include --

- advantages and disadvantages of the PWC, overall savings from PWC consolidations, and the standard PWC organization
- descriptions of how a PWC works--the services provided, how they are prioritized and scheduled, contracting, cost estimates, and reimbursable procedures
- summarized results of a survey conducted with PWC commanders, production officers, and other officials

Conclusions reached include the need for enhanced customer liaison, more accurate scheduling, better utilization of manpower, and better management of workload.

SHORT TITLE: **PWD KEY WEST**

TITLE: *PWD Key West Workshop Evaluation*

SOURCE/RESPONSIBLE OFFICE

DATE PUBLISHED: March 1990

NOTES:

SUMMARY: A Navy contractor did this report on the Public Works Departments at the Naval Amphibious Base, Little Creek, Virginia, and the Naval Air Station, Key West, Florida. It does not involve revolving fund or PWC's--more like a DEH.

SHORT TITLE: **RPMA IMPROVEMENT ALTERNATIVES**

TITLE: *Review of Real Property Maintenance Activities (RPMA) Improvement Alternatives*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center

DATE PUBLISHED: February 1979

NOTES: 48 pages

SUMMARY: This is the result of a request for ESC to evaluate a study done by Lester B. Knight and Associates and to develop "a perspective for the Chief of Engineers regarding the future needs of the Army in the management and execution of its real property maintenance activities." Evidently, the Chief of Engineers was dissatisfied with this report and wanted ESC to evaluate it. In addition, a general officer panel also evaluated the report, arriving at the same conclusions as ESC.

ESC did not feel that it was appropriate to adopt the recommendations of the Knight report (recommendations are not identified or listed in the ESC report). ESC instead restructured the current (at time of study) RPMA organizations for the following reasons:

- There is no need for such change.
- There seems to be a serious error in the potential savings projected by the contractor.
- Other advantages claimed by the contractor are available without the reorganization.

The study has little or no connection with the other RPMA studies done during the formation of EA,CA.

SHORT TITLE: RPMA CONSOLIDATION IN PANAMA

TITLE: *U.S. Army, Air Force, and Navy RPMA Consolidation In Panama—A Cost-Benefit Analysis, Volume I and Volume II*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center

DATE PUBLISHED: September 1979

NOTES:

SUMMARY: This report is the result of an OSD-directed study to determine the feasibility of consolidating the RPMA for U.S. Army, Air Force, and Navy installations in Panama. The study compared several explicit alternatives, and recommended consolidation under a single manager (Army) with work being reimbursed through a revolving fund.

The recommendation was not implemented due to the resistance of the services and the confusion of the Panama Canal Treaty.

Blank Page

V. OWNERSHIP AND RELATIONSHIPS

SHORT TITLE: **BASLINE CUSTOMER SATISFACTION SURVEY**

TITLE: *Overview of Goals of TARP's Baseline Customer Satisfaction Survey*

SOURCE/RESPONSIBLE OFFICE: PWC Norfolk, Virginia

DATE PUBLISHED: Undated

NOTES:

SUMMARY: The key goals of the study are to establish a baseline or benchmark of PWC customer satisfaction and provide data to run the Technical Assistance Research Program's (TARP's) Damage Model to quantify the bottom-line impact of the current level of customer satisfaction. TARP studied four areas:

- problem experience
- complaining behavior
- contact handling effectiveness
- market action implications

This is an important document because the key to successful operations of a Public Works Center is customer satisfaction.

SHORT TITLE: FEASIBILITY OF RPMA CONSOLIDATION IN THE NCR

TITLE: *ARMY and DMATC RPMA Consolidation in the National Capital Region, Vols. I and II*

SOURCE/RESPONSIBLE OFFICE: U.S. Army Engineer Studies Center (ESC)

DATE PUBLISHED: Volume I--June 1978; Volume II--September 1979

NOTES: 283 pages

SUMMARY: This study was done to determine the feasibility of consolidating the Real Property Maintenance Activities for selected installations in the National Capital Region. It considered feasibility with regard to geographic, functional, and economic factors. The study considered several alternative approaches to consolidation. After evaluating each, ESC determined they were hardly equal. Although under the recommended consolidation the report projects rather substantial savings primarily through the elimination of 113 positions, it also admits that some of the background data may have been a bit weak.

SHORT TITLE: NAVY RPMA MANPOWER REQUIREMENTS

TITLE: *Real Property Maintenance Activity (RPMA) Programs: Analysis of Navy Manpower Requirements*

SOURCE/RESPONSIBLE OFFICE: Mathtech, Inc. for Navy Personnel
Research and Development Center, San
Diego

DATE PUBLISHED: March 1984

NOTES: 20 Pages

SUMMARY: This report describes the development of equations to forecast the portion of PWC manpower that performs real property maintenance functions at all major Navy shore bases. The resulting forecasting models can then be used to evaluate Navy manpower required to do RPMA functions.

Primary conclusion--RPMA manpower requirements are driven by the physical size of the plant to be maintained.

SHORT TITLE: **PWC COMMANDERS GUIDE**

TITLE: *A Guide for Public Works Center Commanding Officers*

SOURCE/RESPONSIBLE OFFICE: Naval Facilities Engineering Command

DATE PUBLISHED: April 1988

NOTES: Business-like

SUMMARY: The strategic planning process helps PWC commanders become fully effective in the shortest possible time. The PWC commitment bottom line is facility service. This document is needed to give commanders a head start.

SHORT TITLE: **PWC NORFOLK AND THE CUSTOMER**

TITLE: "PWC Norfolk and the Customer"

SOURCE/RESPONSIBLE OFFICE: PWC Norfolk

DATE PUBLISHED: 1990

NOTES:

SUMMARY: A set of briefing slides and questions used by the Norfolk PWC business manager to explain how that PWC measures its effectiveness in dealing with its customers.

SHORT TITLE: PWC WORK SERVICE PROCESSING PROBLEMS

TITLE: *An Investigation Into the Navy Public Works Centers Specific Work Service Processing Problems*

SOURCE/RESPONSIBLE OFFICE: Author: Cmdr. James G. Palmborg,
Masters Thesis, Naval Postgraduate
School, Monterey, CA

DATE PUBLISHED: December 1980

NOTES: 222 pages; available through DTIC; well written--a good reference

SUMMARY: Contains a good history of the Navy's PWC program--from the originally established first (Norfolk in 1948) through eleventh PWCs, to the present nine PWCs. Areas covered include --

- advantages and disadvantages of the PWC, overall savings from PWC consolidations, and the standard PWC organization
- descriptions of how a PWC works--the services provided, how they are prioritized and scheduled, contracting, cost estimates, and reimbursable procedures
- summarized results of a survey conducted with PWC commanders, production officers, and other officials

Conclusions reached include the need for enhanced customer liaison, more accurate scheduling, better utilization of manpower, and better management of workload.

SHORT TITLE: **SAN DIEGO PWC WORKLOAD FACTORS**

TITLE: *Analysis of Demands on the Navy Public Works Center, San Diego*

SOURCE/RESPONSIBLE OFFICE: Navy Personnel Research and
Development, San Diego, California

DATE PUBLISHED: November 1977

NOTES: 19 pages

SUMMARY: This is the report of analysis of demand on the San Diego PWC to determine the feasibility of building an input/output (I/O) model of the fleet-support demand network. These workload factors are based on items such as --

- customer energy use, averaged out by activity
- utility use rates by ship type
- ground equipment fuel usage by activity
- distribution of total PWC by activity
- maintenance man-hour by activity

Blank Page

LAST PAGE OF REFERENCE GUIDE

APPENDIX 1

REFERENCE DOCUMENTS

Other Federal Government

Base Support Services: Disestablishment of Two Consolidated Organizations in San Antonio (a report to U.S. Senator Gramm) (U.S. General Accounting Office, March 1989).

U.S. Code Title 10, Section 2208 (dated 1947, revised 1982).

U.S. Code Title 10, Section 2209 (dated 1942, revised 1949).

Department of Defense

Base Engineering Services, Defense Management Report Decision 967, (Department of Defense, 30 December 1990).

Department of Defense Financial System, Defense Management Report Decision 971 (Department of Defense, 2 February 1991).

"DOD Financial System" Briefing Slides, December 1991.

Industrial Fund Policy, Department of Defense Directive 7410.4 (Department of Defense, 1 July 1988).

Regulations Governing Stock Fund Operations, Department of Defense Directive 7420.1 (Department of Defense, 26 January 1967).

Stock Fund Operations, Department of Defense Directive 7420.13 (Department of Defense, 27 January 1983).

Stock Fund Operations, Department of Defense Regulation 7420.13 (Department of Defense, June 1986).

Department of the Navy

A Guide For Public Works Center Commanding Officers (NAVFAC, April 1988).

An Investigation Into the Navy Public Works Centers Specific Work Service Processing Problems
(Naval Postgraduate School--a thesis, December 1980).

Analysis of Demands on the Navy Public Works Center and Development Center, San Diego (Navy Personnel Research and Development Center, San Diego, November 1977).

Contracting Manual, NAVFAC P-68 (Naval Facilities Engineering Command, October 1987).

"General Report, PET Training, PWDs Little Creek, Virginia, and Key West, Florida" (These reports were done by a contractor for the Navy on the Public Works Departments at the Naval Amphibious Base, Little Creek, and the Naval Air Station, Key West. They do not involve revolving fund or PWCs--more like a DEH.) (31 July 1990).

Generic POA&M for PWC Start-up (NAVFAC HQ, 18 Oct 1990).

Implementation of the Commercial Activities Program at Navy Public Works Center, Pensacola
(Department of Engineering, University of Florida, June 1984).

Introduction to the Navy Industrial Fund (a group of self-instructional lessons on what Navy industrial funds are and how they operate) (Department of the Navy Comptroller, undated).

Manpower Authorization, Norfolk PWC, OPNAV 1000.2 (Department of the Navy, 10 November 1990).

Manpower Authorization Listing, PWC Great Lakes (Department of the Navy, 29 June 1990).

Manpower Authorization Listing, PWC Pensacola (Department of the Navy, 29 June 1990).

Naval Public Works Department (PWD), Key West Workshop Evaluation, PWD Little Creek, Virginia, and Key West, Florida (March 1990).

Navy Public Works Center, San Diego Strategic Business Plan (PWC San Diego, August 1990).

Navy Public Works Center, San Diego Management Indicators Report (PWC San Diego, September 1990).

"Navy Industrial Fund Public Works Center, Norfolk, Virginia" Exhibit 1F-F (a brief description of the factors affecting PWCs, future projections, and workloads) (Department of the Navy, Undated).

Navy and Marine Corps Industrial Funds, Navy Comptroller Manual, Vol. 5, NAVSO P-1000 (Department of the Navy, includes changes through 5 April 1990).

Navy Public Works Centers Annual Report--Fiscal Year 1990 (Naval Facilities Engineering Command, Undated)

Navy Public Works Centers Long-Range Strategic Plan (Naval Facilities Engineering Command, 1991).

Norfolk PWC IF-6, FY 91 (a list of services, revenues, units of measure, work years, etc.) (PWC Norfolk, 30 January 1991).

"Norfolk PWC" Briefing Slides (describes Norfolk PWC and its responsibilities) (PWC Norfolk, 1990).

Organization and Functions Manual, PWCINST 5450.2M (PWC San Diego, 1 August 1990).

Organization and Functions, PWCNORVAINST 5450.12M (PWC Norfolk, July 1988).

"Overview of Goals of TARP's Baseline Customer Satisfaction Survey," (Technical Assistance Research Programs, Inc.) (PWC Norfolk, Undated).

Productivity Enhancement Team Review Evaluation/Comparative Analysis (NAVFAC, Undated).

Public Works Center Management Information System, Appendix A (a list and description of MIS subsystems and their output) (Department of the Navy, undated).

Public Works Center Standard Organization and Functions, NAVFAC Instruction 5450.21C (Naval Facilities Engineering Command, 18 April 1980).

Public Works Center Operations, NAVFAC Instruction 11000.33 (Naval Facilities Engineering Command, 22 March 1990).

"PWC Great Lakes Notice 7030, FY 1991 Billing Rates for Work or Services" (PWC Great Lakes, October 1990).

"PWC Norfolk and the Customer" Briefing Charts (PWC customer relations, survey results, quality measurement factors, etc.) (PWC Norfolk, 1990).

PWC Norfolk Customer Survey Summary (PWC Norfolk, 1990).

Real Property Maintenance Activity Programs: Analysis of Navy Manpower Requirements (Navy Personnel Research and Development Center, San Diego, March 1984).

San Diego PWC Strategic Business Plan (PWC San Diego, August 1990).

The Naval Industrial Improvement Program, Initiative 1985-1989 (one of four Navy industrial funds) (Department of the Navy, October 1989).

Department of the Army

"Army Audit Agency Report on E. L. Hamm Report" (Army Audit Agency, 16 March 1989).

Army and DMATC RPMA Consolidation in the National Capital Region, Vols. I and II (U.S. Army Engineer Studies Center, June 1978 and September 1979).

Budgeting, Accounting, Reporting, and Responsibilities for Industrial Funded Installations and Activities, AR 37-110 (Department of the Army, August 1980 with changes through 1 January 1983).

"Concept Plan" Briefing Slides (initial plan to develop Army PWCs) (EHSC, 1990).

DESCOM Supplement 1 to AR 37-110 (U.S. Army Depot Systems Command, 25 March 1987).

DESCOM Supplement 1 to AR 37-110, Change 1 (U.S. Army Depot Systems Command, 25 March 1989).

"EHSC Remarks on DMRD 971" (EHSC, 18 December 1990).

Evaluation of the Consolidation of Real Property Maintenance Activities (RPMA) in the U.S. Army Activity, Capital Area (USAEACA), Volume I: Executive Summary, Volume II: Evaluation (Construction Engineering Research Laboratory, March 1990).

Ft. Belvoir FY86 Baseline Study, National Capital Region Facility Engineer Consolidation Test (E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville, September 1988).

Lessons Learned: Test of Consolidation and Centralization of Real Property Maintenance Activities (RPMA) in the National Capital Region (E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville, 16 May 1990).

Methodology for Performing the FY86 Fort Belvoir Baseline Report (E.L. Hamm & Associates for U.S. Army Engineer Division, Huntsville, 23 July 1987).

Real Property Maintenance Activities Centralization and Consolidation in the National Capital Region: Executive Summary and Lessons Learned Report (Pan Am World Services, Inc. for U.S. Army Engineer Division, Huntsville, March 1984).

Reduction and Realignment Actions, AR 5-10 (Department of the Army, August 1977).

Review of Real Property Maintenance Activities (RPMA) Improvement Alternatives (U.S. Army Engineer Studies Center, February 1979).

RPMA Consolidation Activities in the National Capital Region, Volume I: Main Report
(Construction Engineering Research Laboratory for U.S. Army Engineer Division, Huntsville, May 1984).

"Summary of Army Response to DOD Financial Systems, DMRD 971" (EHSC, Undated).

U.S. Army, Air Force and Navy RPMA Consolidation in Panama--A Cost-Benefit Analysis (U.S. Army Engineer Studies Center, September 1979).

Blank Page

LAST PAGE OF APPENDIX 1

APPENDIX 2

POINTS OF CONTACT LIST

<u>ADDRESS</u>	<u>PHONE NUMBER</u>	<u>REMARKS</u>
<u>OTHER FEDERAL GOVERNMENT</u>		
General Accounting Office P.O. Box 6015 Gaithersburg, MD 20877	COMM: (202) 275-6241 FAX: (301) 840-3638	Request latest listing of GAO reports and testimonies
House Document Room U.S. House of Representatives Washington, DC 20515	COMM: (202) 225-3456	Legislative documents such as U.S. Code, Title 10
<u>DEPARTMENT OF DEFENSE</u>		
Defense Technical Information Service 5285 Port Royal Road Springfield, VA 22161	COMM: (703) 487-4650 FAX: (703) 321-8547	Request DOD Directives from this Service
Defense Technical Information Center Registration Cameron Station Alexandria, VA 22304-6145	Registration: DSN: 284-6871 COMM: (703) 274-6871 Reference: DSN: 284-7633 COMM: (703) 274-7633 FAX: DSN: 284-9307 COMM: (703) 274-9307	Request DOD Technical Information documents from this Center
<u>DEPARTMENT OF THE ARMY</u>		
U.S. Army Publications and Printing Command ATTN: ASQZ-NV 2461 Eisenhower Avenue Alexandria, VA 22331-0302		Installation personnel should attempt to obtain publications from their installation publications office before contacting the Army Pubs Command
U.S. Army Audit Agency ATTN: SAAG-PRP Alexandria, VA 22302-1596	COMM: (703) 756-2875 FAX: (703) 756-2860	

ADDRESS**PHONE NUMBER****REMARKS**

U.S. Army Engineering and
Housing Support Center
ATTN: CEHSC-F-DPW
Fort Belvoir, VA 22060-5516

COMM: (703) 355-7749
FAX: (703) 355-8199

U.S. Army Engineering Division,
Huntsville, CEHND
P.O. Box 1600
Huntsville, AL 35807-3089

COMM: (205) 955-5810
DSN: 645-5810
FAX: (205) 955-3089/3204

U.S. Army Engineer Studies Center
Casey Building, #2594
Fort Belvoir, VA 22060-5583

COMM: (703) 355-2119
DSN: 345-2119
FAX: (703) 355-2503

Designated Engineer Strategic
Studies Center as of 1 Oct 91

DEPARTMENT OF THE NAVY

Naval Facilities Engineering Command
ATTN: Code 16
200 Stovall Street
Alexandria, VA 22332

COMM: (703) 325-8195
FAX: (703) 325-6904

All requests for Comptroller
documents and PWC documents
should go to the Naval
Facilities Engineering Command

LAST PAGE OF APPENDIX 2