THESIS

A PROPOSAL FOR
QUALIFICATION STANDARDS AS A CONTRACTING OFFICER
IN THE NAVAL FACILITIES ENGINEERING COMMAND

by
Gregory Allen Dalke

June 1985

Thesis Advisor: W. R. Talutis

Approved for public release; distribution unlimited.
A Proposal for Qualification Standards as a Contracting Officer in the Naval Facilities Engineering Command

Gregory Allen Dalke

Naval Postgraduate School
Monterey, California 93943

Naval Postgraduate School
Monterey, California 93943

Warrant
Contracting Officer
Naval Facilities Engineering Command

The Naval Facilities Engineering Command is responsible for all phases of the life cycle of public works and public utilities of the Naval Shore Establishment. This tasking includes the authority to contract for services from the private, civilian sector, as may be required. Contracting is performed through an agent of the Federal government referred as the contracting officer. This thesis analyzes the experience, education and training criteria found in law, regulation, and existing programs in the Government. Then, by analogy,
it develops a model of standards which might prove beneficial to those individuals who will be appointed contracting officers for the Naval Facilities Engineering Command. The study recommends the use of personal qualification standards to guide the military officer or civil service employee through a defined procedure of required training, required experience, tours of duty, and formal education. It also addresses the issues of establishing a maintenance training program and a certification program to provide periodic refresher courses and for oversight and review of individual contracting officer performance.
Approved for public release; distribution is unlimited.

A Proposal for Qualification Standards as a Contracting Officer in the Naval Facilities Engineering Command

by

Gregory A. Dalke
Lieutenant Commander, CFC, United States Navy
B.S.M.E., University of Arkansas/Fayetteville, 1972

Submitted in partial fulfillment of the requirements for the degree of

M ASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 1985

Author: Gregory A. Dalke

Approved by: W. R. Talvist, Thesis Advisor

R. G. Dreher, Second Reader

W. R. Greer, Chairman
Department of Administrative Science

K. T. Marshall
Dean of Information and Policy Sciences
The Naval Facilities Engineering Command is responsible for all phases of the life cycle of public works and public utilities of the Naval Shore Establishment. This tasking includes the authority to contract for services from the private, civilian sector, as may be required. Contracting is performed through an agent of the Federal government referred as the contracting officer. This thesis analyzes the experience, education and training criteria found in law, regulation, and existing programs in the Government. Then, by analogy, it develops a model of standards which might prove beneficial to those individuals who will be appointed contracting officers for the Naval Facilities Engineering Command. The study recommends the use of personal qualification standards to guide the military officer or civil service employee through a defined procedure of required training, required experience tours of duty, and formal education. It also addresses the issues of establishing a maintenance training program and a certification program to provide periodic refresher courses and for oversight and review of individual contracting officer performance.
## Table of Contents

### I. Introduction
- Nature of the Problem .................................................. 9
- Objectives of the Research .............................................. 13
- Methodology of the Research .......................................... 14

### II. Background and Discussion
- Federal Acquisition Regulations as Baseline Knowledge .......... 15
- NCMA: Another View
  1. Associations ....................................................... 20
  2. Criteria for Professional Certification .......................... 22
- NAVMAT Criteria for Career Development ......................... 24
- NAVPAC Concern with Training, Education and Experience .... 28
- The Environment in Other NAVMAT Syscons ...................... 34
- Other DoD and Federal Agencies ..................................... 36

### III. Qualifications or Requirements of the Individual
- Organization Objectives ............................................... 40
- Experience Requirements ............................................... 41
  1. Required by Law and/or Regulation or Directive ............. 41
  2. Ideal and/or Practical Requirements ............................ 45
- Training and Education Requirements .............................. 47
  1. General or Core Knowledge ...................................... 47
  2. NAVPAC Contracting Authority ................................. 50
  3. Ideal and/or Practical Requirements ............................ 52
4. Availability of Current Courses
   Applicable to NAVFAC
   D. PQS APPROACH
   E. MAINTENANCE TRAINING
   F. CERTIFICATION/LICENSING

IV. CONCLUSIONS AND RECOMMENDATIONS
   A. CONCLUSIONS
   B. RECOMMENDATIONS

APPENDIX A: GENERAL KNOWLEDGE OF A U. S. GOVERNMENT CONTRACTING OFFICER
   APPENDIX B: NCMA CERTIFICATION PROGRAM
   APPENDIX C: CONTRACT SPECIALIST, CONTRACT ADMINISTRATION (GS-1102) TRAINING
   APPENDIX D: TRAINING SITES FOR NAVFAC CONTRACTING OFFICERS
   APPENDIX E: CONTRACTING OFFICER WARRANTING PROCEDURES
   APPENDIX F: PERSONAL QUALIFICATION STANDARDS (PQS)
   APPENDIX G: BASIC RESEARCH QUESTIONS
   LIST OF REFERENCES
   BIBLIOGRAPHY
   INITIAL DISTRIBUTION LIST
LIST OF TABLES

I Knowledge Baseline Model of the Contracting Officer ........................................... 20
II Knowledge Required in NCMA CPCM ................................................................. 23
III NASA & GSA Contracting Officer Qualifications ................................................. 39
IV Requirements on Contracts Greater than $25,000 ................................................. 46
V Proposed Contracting Officer Experience Levels ...................................................... 48
VI Training & Education Requirements (Basic) ........................................................ 51
VII Training & Education Course Requirements (Basic) ............................................. 53
VIII Proposed NAVFAC Training and Education Course Requirements ....................... 55
IX Study-Recommended Schools by Experience and Course Standards ......................... 59
X NAVFAC Maintenance Training of Contracting Officers (Study Recommendations) ........ 63
## LIST OF FIGURES

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Value of Maintenance Contract Awards</td>
<td>12</td>
</tr>
<tr>
<td>2.1</td>
<td>Certificate of Appointment</td>
<td>19</td>
</tr>
<tr>
<td>2.2</td>
<td>NACO Report Form - page 1</td>
<td>29</td>
</tr>
<tr>
<td>2.3</td>
<td>NACO Report Form - page 2</td>
<td>30</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

A. NATURE OF THE PROBLEM

Each of the 26 contracting activities we visited displayed similar problems that, coupled with those disclosed in other audit agencies' reports, demonstrate
(1) a wide-spread pattern of contract formation and administration problems that cannot be considered as isolated to a few activities or contracts and (2) a need
for management to aggressively bring about improvements.... [Ref. 1:pg. 26]

This was the conclusion that the General Accounting Office reported from its July 1982 through June 1983 review
of the contracting functions being performed by the Naval Facilities Engineering Command (NAVFAC). In the latter part
of 1984, a Procurement Management Review (PMR) team from the Naval Material Command (NAVMAT) reported similar findings.

The PMR Team found the NAVFAC procurement organization unlike the procurement organizations of the other major Navy buying commands.... NAVFAC...has placed little emphasis on the development of a highly skilled staff of contract professionals. The appointment of individuals, both military and civilian, to positions where they exercise contracting officer authority but do not meet the qualification standards for such appointment as set forth in FAR 1-603 tends to diminish the effectiveness of the EFD contracts division. [Ref. 2]

The General Accounting Office statement appears to be a declaration of failure by NAVFAC to organizationally manage its contracting responsibilities; and the NAVMAT PMR team finding questions the contracting officer appointment criteria used by NAVFAC. The implications of these findings are that grave deficiencies exist in the contracting organizations and in the qualifications of the individuals who execute the contracting responsibility for NAVFAC. This research concentrates upon the responsibilities and knowledge required of the latter area of qualifications.
Defense of the NAVFAC organization is in first order to assure the reader that general mismanagement is not the conclusion which was meant to be drawn. Rather, it is that the managers within NAVFAC need to focus more attention to this area if the perceived problems are to be corrected. The NAVFAC contracting organization might be described as a system which maintains only sufficient procurement authority at the Headquarters' level to allow it to become involved when a significant problem arises: what many management theorists refer to as "management by exception". The execution and routine activities take place in the "field" where developing managers are in positions of learning-by-doing, under the tutelage of an area contracting official. This was and continues to be consistent with NAVFAC’s management philosophy of centralized control and decentralized execution. Management practices are reviewed with the intent to minimize micromanagement activity and to pass as much autonomy into the field units and activities as is permitted by statute and regulation. Such philosophy is exemplified in the following statement by the Commander, Naval Facilities Engineering Command, in his open letter to the Command on management guidance.

(On the subject of construction contracting decentralization). We must continue our efforts to decentralize management control of the contract administration and construction management effort to OICCs and ROICCs. I want as much authority at the construction site as is possible to be effectively used, in order that as many decisions as possible are being rendered at the time and place they are needed. [Ref. 3: pg. 6]

Before the late 1970’s, when the majority of contract actions related primarily to architect-engineer services and construction, the contracting activities in the NAVFAC system worked directly for the facilities acquisition (or, new construction) organization. However, with the coming of
the 1980s and with an aging, world-wide physical plant, NAVFAC has realized a greater contracting workload in the facility repair and rehabilitation responsibility. Maintenance and facilities support contracting (contracted efforts for continual maintenance and repair services) began to grow at substantial rates, as shown in Figure 1.1 below. This growth was driven primarily by the increased emphasis given the implementation of the Office of Management and Budget Circular A-76, which directs the studies and cost-comparisons of Government- versus contractor-performed activities of a commercial/industrial nature (such as maintenance and repair of buildings and grounds). Implementation saw labor resources convert from in-house, "blue-collar" workforces to contracted functions and to "white-collar" contract administrators. Also during this same time period, new construction gained significance. As a result of facility replacement requirements coming due and a Congressional body willing to fund the backlog, new construction projects increased. All of this activity provided sudden, increased loading on the field contracting activities.

Field staffing now became increasingly important. With this added volume of contracting activity, NAVFAC found itself initially labor-limited by an inability to hire civilian employees or to recruit or commission military personnel to oversee the contracting functions. The manning solution was to contract for these administrative support positions. Of course this action placed an even greater burden on an already strained contracting system. Also, along with increased contract involvements and actions, field activities pressed NAVFAC to relinquish even greater decision-making responsibility in order to expedite contract problem resolutions locally.
Figure 1.1 Value of Maintenance Contract Awards
The ability to actually hire knowledgeable people into its contracting activities and then to train the individuals in the specialty areas in which NAVFAC procures have become the recent and the most urgent issues for NAVFAC. As stated in its own internal survey, NAVFAC recognized its failings and reported:

NAVFAC is an engineering organization which tends to give preference to engineering positions....

The Command needs to establish an aggressive program for the development of personnel qualified to carry out our procurement program. This should include:

1. The establishment of a career development program for FAC procurement personnel.
2. The establishment of a FAC oriented procurement training program.
3. Employment of personnel possessing critical procurement skills such as business management, accounting, and economics.
4. Rotating personnel in EPD and ROICC assignments to develop in-depth understanding of procurement requirements and techniques.

It is with these stated problems then, that this research work is concerned. A rigor and some definitive standards are to be sought which will aid the development of a procedure to be followed for the placement of "qualified" personnel into NAVFAC's contracting positions.

B. OBJECTIVES OF THE RESEARCH

The objectives desired from this study follow:

1. To examine the feasibility of establishing standards of experience, training, and education for the contracting officer community of the Naval Facilities

---

1 A field activity survey was initiated by NAVFAC Headquarters Contracts Division (Code 02) to review contracting organizations and performances; the survey was concluded by March of 1984.

2 FAC is a shortened version of the acronym NAVFAC.
Engineering Command.

2. To support the premise that there exists a need for maintenance training as individuals enter and exit the contracting functions.

3. To assess the need of professional certification for the Government acquisition community.

C. METHODOLOGY OF THE RESEARCH

The research data collection methods and techniques utilized to answer the research questions include: identification and examination of the pertinent literature; interviews of the persons responsible for contracting; and interviews of the persons responsible for training and education. The interviews are expected to direct the research effort and to raise any additional questions not covered by the basic research questions. The basic research questions are included in the last appendix, Appendix G, for reference of the reader.
A. FEDERAL ACQUISITION REGULATIONS AS BASELINE KNOWLEDGE

The Federal Acquisition Regulation (FAR), issued jointly by the Department of Defense (DoD), the General Services Administration (GSA) and the National Aeronautics and Space Administration (NASA), is the primary regulation with which all Federal Executive agencies must comply in their acquisition of supplies and services with appropriated funds. The FAR was implemented 1 April 1984 as a simplified, Government-wide acquisition regulation containing common policies, procedures, contract clauses, and forms required for the implementation and execution of Federal laws. The FAR, together with agency supplemental regulations, replaces previously-issued individual regulations originated by the separate agencies (such as the Defense Acquisition Regulation). It expressly precludes agency regulations which unnecessarily repeat, paraphrase or otherwise restate the FAR. It limits any supplemental regulations to only those necessary to implement the FAR policies and procedures within an agency or to meet the unique needs of the agency which are not covered in the FAR.

The DoD FAR Supplement is the Defense agency's implementing regulation which contains direction for DoD contracting personnel with respect to: 1) the provisions, clauses and cost principles authorized for DoD contracts, and, 2) other procedures and actions that must be followed in awarding and administering DoD contracts.

Together, the FAR and DoD FAR Supplement (collectively to be referred as the FAR) establish the baseline of knowledge which is required for all contracting officers who have
been appointed or warranted by the Naval Facilities Engineering Command (NAVFAC). It therefore becomes necessary to pursue what FAR requires for knowledge before reviewing any specific requirements of the Navy and of NAVFAC.

The general authority and responsibility to contract are vested in the agency head. In the case concerning this research effort, this is the Assistant Secretary of the Navy (Shipbuilding and Logistics) (ASN(S&L)). The agency head may establish contracting activities and delegate to heads of such contracting activities broad authority to manage the agency's contracting functions, including the responsibility to select and appoint additional contracting officers. The contracting activities below the level of ASN(S&L) concentrated upon in this study include Headquarters, Naval Material Command (NAVMAT) and one of its subordinate commands, the Naval Facilities Engineering Command. [Ref. 4: part 2.1]

Contracts may be entered into on behalf of the Government by contracting officers. It is only these contracting officers who solely have the authority to sign, administer, or terminate contracts and to make related determinations and findings. As such, FAR requires that contracting officers are to receive clear and written instructions regarding the limits of their authority from the appointing authority, and that their contracting limits shall be readily available to the public and to all agency personnel. Ultimately, it becomes their responsibility for ensuring performance of all necessary, effective contracting actions; for ensuring contractor compliance with terms and conditions of the contract; and for safeguarding the interests of the United States in the contractual relationship.

As of 6 May 1985, the Navy Secretary has disestablished NAVMAT, raising NAVFAC to an Echelon Two command, reporting to the offices of the Chief of Naval Operations (CNO) and to the Assistant Secretary of Navy (Shipbuilding & Logistics).
Specifically, the contracting officer shall:

1. Ensure that all clearances and approvals have been accomplished and that sufficient funds are available for obligation;
2. Ensure that all contractors receive impartial, fair and equitable treatment; and
3. Request and consider the advice of specialists in audit, law, engineering, transportation and/or other fields, as may be appropriate. [Ref. 5: part 1.602-2]

There are many disciplines of professional behavior evident in the above FAR performance responsibilities. The experience, training and formal education standards that are proposed in this study seek to enhance the capabilities of the contracting officer to discharge those responsibilities. Generally stated, the contracting officer must function in a business-like environment; must act responsibly in financial matters; must behave professionally and fairly with all parties involved; and must be able to effectively manage personnel resources in the specialized fields which may be called upon in executing contract actions. As an authorized agent of the Government, the contracting officer will be required to make independent and objective business judgments for the Government.

The FAR then continues to cite some generalized selection, appointment and termination criteria. These criteria are in the form of recommendations to all appointing officials, who are the heads of contracting activities, for placing contracting officers within their activities.

1. Selection Basis:
   a) The complexity and dollar value of acquisitions to be assigned.
   b) The individual's experience in Government contracting and administration, or commercial purchasing or related fields.
c) The individual's education or special training in:
   i) business administration,
   ii) law,
   iii) accounting,
   iv) engineering, or,
   v) related fields.

d) The individual's knowledge of acquisition policies and procedures.

e) The specialized knowledge in the particular assigned field of contracting.

f) The individual's satisfactory completion of acquisition training courses.

2. Appointment: Contracting officers shall be appointed in writing on a "Certificate of Appointment," Standard Form (SF) 1402 (Figure 2.1), which shall state any limitations on the scope of authority to be exercised, other than limitations contained in applicable laws and regulations.

3. Termination: Contracting officers will be terminated by letter, unless the Certificate of Appointment contains other provisions for automatic termination. Terminations may be for such reasons as reassignment, termination of employment or unsatisfactory performance. [Ref. 5: parts 1.603-2, -3, -4]

A knowledge baseline may now be drawn from the performance responsibilities and the general contracting officer selection criteria recommendations of the FAR. These are exhibited in Table I below. For a more comprehensive explanation of the FAR-imposed requirements for contracting officers, refer to Appendix A.
Figure 2.1 Certificate of Appointment
TABLE I
Knowledge-Baseline Model of the Contracting Officer

Federal Acquisition Regulation (FAR) recommendations

I. EXPERIENCE (inclusive of related fields)
   a. Government contracting & administration
   b. Commercial purchasing

II. TRAINING/EDUCATION (incl. of related fields)
   a. Education and/or special training in:
      (1) Business administration
      (2) Law
      (3) Accounting
      (4) Engineering
   b. Acquisition policies & procedures
      (1) A general knowledge

B. NCPA: ANOTHER VIEW

1. Associations

Within the developing communities of private and public contracting, there exist associations of individuals who are attempting to place a more professional emphasis in these career fields. Many of these associations have had significant impact upon those who work in the acquisition environment. These associations have set established standards of education, training, and experience while others have continued into requirements for the successful completion of an examination in order to gain a certification. The certification is used as recognition of attaining a certain professional level. Among the associations sponsoring such programs in acquisition contracting are:
One association in particular has placed major emphasis in the contract management career field and has continued to pursue professional recognition. This is the National Contract Management Association (NCMA) of McLean, Virginia.

NCMA is made up primarily of those who work in or around contracts and procurements and includes: academicians, federal contract specialists, federal contract managers, federal program/project managers, their private industry counterparts and lawyers. The association has developed a certification program to acknowledge those who have exhibited and continue to demonstrate a combination of education/training, experience, and knowledge about their career field. The program has also been adopted by the Air Force Institute of Technology, School of Systems and Logistics, to recognize DoD military and civilian employees who are the practicing journeyman and supervisors in contracting, production, contract administration, and related fields.
2. **Criteria for Professional Certification**

The certification program offered by NCMA dealing with the level of knowledge expected of a contracting officer is called the Certified Professional Contract Manager, or CPCM. The program consists of verification of individual qualifications, an examination, and, upon certification, continued practice in the field (a re-certification process is maintained to assure individual currency). Initially, the applicant must demonstrate the general knowledge he/she has acquired through experience and the level of formal education and training he/she has attained prior to being allowed to proceed with the examination step. The verification step must reflect the following:

a) Experience - A minimum of two years of performing contracting, procurement or purchasing operations.

b) Training/education - A bachelor degree or equivalent formal education and a specified number of training courses from fields of:
   i) General procurement and contracting, inclusive of commercial purchasing and state and local government purchasing;
   ii) Legal aspects of procurement;
   iii) Financial management (finance/economics/accounting);
   iv) Production management (as related to procurement); and
   v) Logistics management (also, as related to procurement).

In developing the knowledge requirements of the NAVFAC contracting officer, the NCMA requirements for contract manager certification can be contrasted with that of the FAR, as shown in Table II. As demonstrated by the use of the "and"s and "or"s, the NCMA CPCM certification
program presents a much more rigorous and thorough requirement. Yet a good correlation of criteria remains between the FAR and the NCMA CPCM program. A more comprehensive discussion of the NCMA Certification Program can be found in Appendix B.

<table>
<thead>
<tr>
<th>TABLE II</th>
<th>Knowledge Required in NCMA CPCM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. EXPERIENCE (inclusive of related fields)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FAR</strong></td>
<td><strong>NCMA</strong></td>
</tr>
<tr>
<td>a. Govt contract &amp; admin</td>
<td>a. Two years contracting</td>
</tr>
<tr>
<td>b. Commercial purchasing</td>
<td>b. procuring</td>
</tr>
<tr>
<td></td>
<td>c. purchasing</td>
</tr>
<tr>
<td><strong>II. TRAINING/EDUCATION (inclusive of related fields)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FAR</strong></td>
<td><strong>NCMA</strong></td>
</tr>
<tr>
<td>a. Education and/or special training in:</td>
<td></td>
</tr>
<tr>
<td>(1) Business admin</td>
<td>(1) Production mgmt</td>
</tr>
<tr>
<td>- or -</td>
<td>- and -</td>
</tr>
<tr>
<td>(2) Law</td>
<td>(2) Legal aspects</td>
</tr>
<tr>
<td>- or -</td>
<td>- and -</td>
</tr>
<tr>
<td>(3) Accounting</td>
<td>(3) Financial mgmt</td>
</tr>
<tr>
<td>- or -</td>
<td>- and -</td>
</tr>
<tr>
<td>(4) Engineering</td>
<td>(4) Logistics mgmt</td>
</tr>
<tr>
<td>b. Acquisition policies &amp; procedures:</td>
<td>(5) Bachelor degree</td>
</tr>
<tr>
<td>(1) General knowledge</td>
<td>(1) General knowledge</td>
</tr>
</tbody>
</table>
C. NAVMAT CRITERIA FOR CAREER DEVELOPMENT

The sole directive which had been issued by the Naval Material Command (NAVMAT) dealing with career development of the Navy's contracting officers was its Instruction 1543.2C [Ref. 6]. The instruction provides for the Navy's comprehensive program for establishing and developing the Navy Acquisition Contracting Officers (NACOs) for future assignment to middle and senior grade contracting management billets. Officers are nominated to the program by the Naval Supply Systems Command (NAVSUP) Headquarters and all billets are centrally established at the Navy Fleet Material Support Office (FMSO) at Mechanicsburg, Pennsylvania. Those officers nominated report by orders to FMSO but actually perform duty at separate activities having acquisition and contracting responsibilities. Such additional duty activities include NAVSUP and other NAVMAT Systems Command Headquarters (Naval Sea Systems Command, Naval Air Systems Command, etc.), with the exception of the Naval Facilities Engineering Command (NAVFAC).

The thrust of the program is to place responsibility on senior reporting officials to oversee the NACO's professional development: ensuring growth of the individual as an acquisition contracting manager and as a Supply Corps officer. NAVFAC does not participate in the program since its contracting officers are Civil Engineer Corps officers or senior civilian employees who are not directly linked to the Supply Corps. These are facilities engineers who are involved in all of the tasks related to acquiring new facilities and to continuing technical responsibility through the life cycle of the facility (operating, maintaining and repairing), inclusive of disposal and/or demolition and programmed replacement, if appropriate.
However, the NACC program does offer another model on experience and training of the contracting officers which may be used as an analogy for building a NAVFAC model when no other NAVMAT direction exists. The purpose of the program is to provide the individual the opportunity to learn the acquisition contracting system through contract participation and through required training. Each NACO has the opportunity to progress to a fully qualified, journeyman contract specialist and to develop contract management expertise. This exposure includes contract policy, planning, management, negotiation and administration in as many different contractual methods, contract types and commodity types as would be possible. It is expected that assignments should be progressively more complex and difficult.

Typically, assignments may begin with a brief introduction to acquisitions under $10,000 and progresses quickly to formally advertised contracting, then research and development, large dollar component buys, and system acquisition contract negotiations [Ref. 6: encl. 2].

Every NACO is required to complete training courses during his/her duty assignment which will enhance contracting expertise, all as part of the program. The courses and their recommended sequence of completion are structured and closely parallel the DoD civilian training plan for advancement in the contract management career field specified in the Office of Personnel Management (OPM).

**The $10,000-level in procurement is the upper bound within the "small purchase" classification which does not require a synopsis in the Commerce Business Daily - a daily journal prepared by the Department of Commerce which summarizes all Government contract actions greater than, or anticipated to be greater than, $10,000.**

**Under the Armed Services Procurement Act of 1947 (P.L. 84-1028/10 U.S.C. Sections 2301 - 2314) as amended by the Competition in Contracting Act of 1984 (Title VII of the Spending Reduction and Deficit Reduction Acts of 1984), the use of the term "Formally Advertised" has been dropped in favor of the new term of "Sealed Bid."**
Handbook X-118, DoD Manual 1430.10-M-1, and the Defense Management Education and Training (DMET) Catalog. Reference to Appendix –C offers a review of the more definitive training and development plan for the civilian Contract Specialist (Contract Administration) series (GS-1102). The NACO courses which are required for program completion are listed below.

1. **Management of Defense Acquisition Contracts**, DMET 8D-4320 (JT); four weeks in length; content: provides a detailed study of contracting procedures as prescribed by statutes, FAR, DoD FAR Supplement, and other directives which govern DoD acquisition.

2. **Defense Cost and Price Analysis**, DMET PN (JT); two weeks in length; content: an introduction into the pricing of DoD contracts, including the tools and techniques available to the pricer for cost estimation, cost analysis, projection techniques, factors affecting profit or fee, and the weighted guidelines techniques of profit analysis.

   - or -

   **Principles of Contract Pricing**, DMET QT 170 (JT); three weeks in length; content: estimation of the environment in which cost and price analysis takes place, sources of data for cost and price analysis, methods for analyzing direct and indirect costs, performance of profit analysis, and discussion of selected, current pricing topics.

3. **Business Resources Management**, sponsored by NAVMAT; four weeks in length; content: conducted by NAVMAT Code 01N2* and offers an overview of the economic environment of Defense contracting.

---

*The responsibility for the presentation of this course is expected to be assumed by the Naval Office of Acquisition Support, in the offices of ASN(S&L).*
4. **Government Contract Law**, DMET PPM 302 (JT); two weeks in length; content: reviews basic legal principles and sources of contract law, modifications, terminations, remedies, interpretation of contract language, award law, Government property, defective pricing data, patent and data law, labor law, law involving the flow of contract monies, and studies the rulings of courts and boards, stressing the contractor and Government interface.

Course substitution of the above courses may be possible with graduate-level courses offered in advanced degree college curricula in which the courses are directed specifically at U.S. Government acquisition contracting. Such a substitution of a required course can only be approved by NAVMAT.

In addition to the above mandatory courses, certain optional courses are also recommended to enhance learning and expertise in the contracting field. These include:

1. **Advanced Contract Administration**, DMET PPM 304 (JT), thirteen class days in length;

2. **Management of Defense Acquisition Contracts (Advanced)**, DMET 8D-F12 (JT), fourteen class days in length;

3. **Introductory Quantitative Analysis**, DMET QMT 345 (JT), four weeks in length;

4. **Defense Acquisition and Contracting Executive Seminar**, DMET ER (JT), one week in length;

5. **Civilian Personnel Management Orientation for Officer Personnel**, sponsored by the Navy Civilian Personnel Command, two class days in length;

6. **Defense Contracting and Subcontracting with Small and Disadvantaged Business Concerns**, DMET SB (JT), two days in length;
7. **Defense Fundamentals of Incentive Contracting**, DMET FI (JT), one week in length;


Documentation of the NACO’s progress occurs primarily in three phases:

1. The Individual Development Plan (IDP),
2. Six-month progress reports by the NACO, and
3. Completion certificate.

The IDP must be submitted by the activity within 30 days of the NACO's reporting date for approval by NAVMAT.8 Then, in his/her two year assignment, each NACO is required to submit an informal, progress report to NAVMAT at six-month intervals. The reports are to discuss actual development versus the IDP, to report course completions and to offer any suggestions or recommendations for program improvement. Figures 2.2 and 2.3 [Ref. 6: encl. (3)] are used by the NACO to report progress for these six-month reports. At the conclusion of the NACO's program, NAVMAT will award a certificate of completion to the individual. A copy of this certificate is then forwarded by NAVMAT to the Naval Military Personnel Command for entry into the officer's official personnel folder.

D. **NAVFAC CONCERN WITH TRAINING, EDUCATION AND EXPERIENCE**

The Naval Facilities Engineering Command (NAVFAC) is mission-charged to build and maintain the Naval Shore Establishment. In this capacity, NAVFAC holds

---

7Under the reorganization plan configured after the disestablishment of NAVMAT (May 1985), the Naval Electronic Systems Command was given increased authority and renamed the Naval Space and Warfare Systems Command.

8Whenever NAVMAT is listed as the action addressee, it is anticipated that the Naval Office of Acquisition Support in ASN(SEL) will be assuming action responsibility now that NAVMAT has been disestablished.
# Navy Acquisition Contracting Officer Career Development Program

## Fact Sheet and Six-Month Report Form

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Designator</th>
<th>ADON Activity</th>
<th>Year Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Month/Year Reported:** PRD  
**Office Phone (Commercial/Autovon):**  

## TRAINING COURSES

<table>
<thead>
<tr>
<th>Mandatory Courses</th>
<th>Date Scheduled</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management of Defense Acquisition Contracts 8D-4320 (JT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Defense Cost and Price Analysis PN (JT) or Principles of Contract Pricing OM1 370 (JT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: This course should be completed prior to Business Resources Management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Business Resources Management, CMM sponsored (not TMET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Government Contract Law PPM 302 (JT)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Optional Courses

| 1. Advanced Contract Administration PPM 304 (JT) |               |           |
| 2. Management of Defense Acquisition Contracts (Advanced) 8D-F12 (JT) |               |           |
| 3. Introductory Quantitative Analysis OM1 345 (JT) |               |           |
| 4. Defense Acquisition and Contracting Executive Seminar ER (JT) |               |           |

*Figure 2.2 NACO Report Form - page 1*
5. Civilian Personnel Management Orientation for Officer Personnel; Navy sponsored (not DMET)  
6. Defense Contracting & Subcontracting with Small and Disadvantaged Business Concerns SB (JT)  
7. Defense Fundamentals of Incentive Contracting FI (JT)  
8. Direct-Cost Analysis Seminar; NAVELEX Sponsored (not DMET)  
9. Navy Department Planning and Management Systems (NVI (Washington, D.C. area only))

<table>
<thead>
<tr>
<th>NACO's Signature</th>
<th>Date</th>
<th>Reviewer's Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Officer responsible for implementing the development plan)</td>
</tr>
</tbody>
</table>

Mail to: NACO Program Sponsor Liaison Officer  
Headquarters Naval Material Command (MAT OBCI)  
Washington, D.C. 20360

Figure 2.3 NACO Report Form - page 2
responsibility and authority to perform the planning, development, design, construction, modification, alteration, repair and the maintenance for public works and public utilities of all shore activities and also to procure construction, transportation and weight-handling equipment. This mission responsibility requires a substantial involvement in the federal-to-private sector contracting process.

Recently, NAVFAC has been required to review its contracting process and to better organize along the guidelines contained in the FAR. A particular area of concern is the use of warrants to appoint NAVFAC Contracting Officers.

Prior to February 1985, NAVFAC did not use a warranting procedure, electing rather to hold the title of "contracting officer" only for the position of Commander, Naval Facilities Engineering Command. All subordinate officers/officials who were redelegated part of this total authority acted and signed:

"For Commander, Naval Facilities Engineering Command, Contracting Officer. [Ref. 7: part 1-401]"

NAVFAC's Engineering Field Division (EFD) Commanders/Commanding Officers are all designated "Officers in Charge of Construction" and "Officers in Charge", or OICCs and OICs, respectively. Contractually, the OICC represents the Commander, NAVFAC, in the administration of construction contracts and supervises civil works' contracts for other commands and offices of the Navy Department. The OICC/CIC holds the delegated authority in NAVFAC to authorize and administer the contracts technically assigned.

---

*In the U.S. Navy, civil works is defined as construction performed by a contractor at a privately-operated activity or facility which is owned by the Government or which is utilizing Federally-appropriated construction funds.*
to NAVFAC's mission responsibilities as delineated in its contracting manual [Ref. 7].

Civil Engineer Corps officers assigned as Public Works Officers normally can anticipate additional duty orders directing them to report, by letter, to the geographical EFD Commander/Commanding Officer for duty as an OICC/OIC. The EFD Commander may then delegate contractual authority, still only as "For Commander,... (NAVFAC)", stipulating in an assignment letter the type and extent of the reporting officer's authority. Every OICC/OIC is, in turn, required to designate one other individual, with the concurrence of the EFD Commander, to be the assistant OICC/OIC. The purpose of such action is to ensure that a responsible individual is always available for the performance of the contract functions. The OICC/OIC authority normally includes the following functions:

1. Preparation, award, and supervision of the contracted effort, including the preparation of the drawings and specifications;
2. Issuance of the invitations for bids;
3. Opening of the bids;
4. Issuance of notices of award;
5. Execution of contracts, change orders, and other contractual instruments;
6. Negotiation of change orders; and
7. Selection of contracts and fee negotiations for authorized negotiated contracts. [Ref. 7: parts 1-402, 1-403]

NAVFAC delegated its contracting authority based usually upon seniority and the position an individual filled. Generally, this individual held a degree in engineering or in architecture and often held professional status as a "Professional Engineer" or "Registered Architect". Whenever possible, contract administration training was offered the
individual through the Naval School, Civil Engineer Corps Officers (CECOS). CECOS offers specialized training at both its physical site in Port Hueneme, California, and its offerings at differing locations sited by a sponsoring command. The offered training courses are shown below.

1. **Construction Contract Administration and Management** (CANTRAC No. A-4A-0032); two weeks in length; content: intended as an entry level of study for active and inactive, regular and reserve Civil Engineer Corps officers and DoD civilian employees (GS-5 and above) assigned to OICC offices and/or to those offices having administration authority only, called "Resident" OICC or ROICCs.

2. **Construction Contract Modifications** (CANTRAC No. A-4A-0023); one week in length; content: intended for construction contract procurement personnel who are above the entry level in terms of experience, training, and authority...it is primarily for key OICC/ROICC office personnel, contract specialists, project engineers and managers, service contract managers, and others concerned with change in construction contracts.

3. **Design Contract Management**: three days in length; content: intended for regular and reserve Civil Engineer Corps officers and DoD civilian employees (GS-5 and above) who are involved in architect-engineer slating, selection, and negotiation committees...personnel designated as engineers in charge of design contracts and contract specialists directly involved in architect-engineer services procurement.

4. **Facilities Support Contracting** (CANTRAC No. A-4A-0045); one week in length; content: intended as an entry level of study for active and inactive, regular and reserve Civil Engineer Corps officers and
DoD civilian employees (GS-5 and above) who are involved with facilities support contracts.

NAVFAC routinely sends their junior officers to one or more of the CECOS courses prior to reporting for duty at their new, permanent duty stations. Civilian employees also attend, but their priority is second to that of the CEC officer.

NAVFAC established their Executive Institute in 1977 to fill a void of management training above the entry level. The courses are directed to senior civilian managers and mid-grade (Lieutenant Commanders, or O-4) and senior officers. The courses are intended to provide a knowledge of contemporary management theory and an understanding of the political, economic, and social environment in which the NAVFAC manager must exercise leadership and decision-making skills.

It is important to note that during this period (just prior to 1985) there existed no required training or experience tours for the Civil Engineer Corps officer and the NAVFAC civilian employee who was not in the career field of contract specialist. "Availability" dictated training course attendance: availability of the individual, availability of course quotas, and availability of funding. And should one of the preceding "availabilities" be absent, the individual did not attend prior to reporting for duty. This is not to say the system failed the individual, rather it is a recognition of the limited resources which sometimes occur in training.

I. THE ENVIRONMENT IN OTHER NAVFAC SYSCOMS

The development of acquisition experience at the Systems Commands within the Navy commences as within-organization familiarization prior to assignment to contracting officer
responsibilities. Introductory tours of duty are generally assigned the individual for a three, six, or twelve month period. This allows the individual the opportunity to become acquainted with the people and the structure of the organization.

While a knowledge of the FAR is required to function as a contracting officer, knowledge of trends in products and in the production processes of the concerned industries is likewise felt to be important. By becoming involved with the entire organization, the prospective contracting officer becomes recognized as a working partner in the technical aspects of contract planning and in the areas of quality and quantity and timing of a procurement. Being more familiar with the body of experts when ultimately placed in a contracting position, the individual presumably has learned to reduce response time in more efficiently engaging that body of expertise as the occasions arise.

The Systems Commands (Naval Sea, Naval Air, Naval Electronic and Naval Supply) are functionally organized with the contracting function centered in their Code 02, or Contracts Division/Department. Contracting officers coming into these groups are detailed from the Supply Corps of the Navy and are screened for prior experience and performance. Their education and training is generally thorough and post-graduate work or qualification under the NACO program is considered significant in appointment to one of these positions.

\footnote{When the Navy Secretary disestablished NAVMAT in May of 1965, the Naval Electronic Systems Command was renamed the Naval Space and Warfare Systems Command.}
F. OTHER DOD AND FEDERAL AGENCIES

In addition to the Air Force which was mentioned as having adopted the NCMA certification program, two other DoD agencies and two non-DoD agencies were reviewed with respect to their practices on assigning contracting officers. These were the U.S. Army Corps of Engineers, the Defense Logistics Agency (DLA), the National Aeronautics and Space Administration (NASA), and the General Services Agency (GSA), respectively.

Universally, DoD civilian contracting officers in the GS-11XX series are given their authority in accordance with jointly-developed OPM and DoD guidance, which is tied to certain mandatory training courses, education, and/or satisfactory performance. The member could be given contract authority by an agency based upon the career level recommendations11 contained in the guidance starting at the GS-05 level paygrade, or "entry" level.12 Career progression and increased recommended authority continues into the "intermediate" level and ultimately into the "senior" level, GS-/GM-13 level and above. No administrative complexities nor dollar-levels of authority have been established in these grading levels: these are the responsibilities of the heads of contracting activities. A more comprehensive treatment of the GS-1102 series has been presented in Appendix C. Outside the GS-11XX series, no firm and mandatory courses apply. Still, the GS-11XX series offers a comprehensive guide to the kinds of training courses required or made optional.

11The recommendations for holding contract authority do not give any added weight to actual pay-level grading and placement criteria used by OPM.

12"Entry" level is considered to be at the GS-05 through GS-08 levels.
In the U.S. Army, contract procurement policies and procedures are the responsibility of the Deputy for Materiel Acquisition, Office of the Assistant Secretary of the Army (Research, Development, and Acquisition). The general policy of this office is to allow the individual and specialized contracting authorities within the Army to establish their own qualifications in selecting and appointing contracting officers. In the Army's Corps of Engineers, which holds mission responsibilities in facilities construction very similar to those of NAVFAC, military contracting officers are required to have completed a 3-week commanders course in management and contracting skills given in Huntsville, Alabama. That appears to be the only real difference in the two organizations. The Corps of Engineers, like NAVFAC, has followed an assignment policy which delegates contract authority based upon the area's need and the position the individual filled; and authority is usually delegated to the senior officer present.

The Defense Logistics Agency (DLA) provides centralized logistics support to all the DoD services. The agency's activities are coordinated with the Joint Chiefs of Staff and it functions in three major areas of responsibility: contracting and supply support, contract administration, and logistics services. Its contracting officers are civilian employees in the GS-1102 series and therefore follow OPM and DoD guidance.

The National Aeronautics and Space Administration (NASA) and the General Services Administration (GSA) both operate a formalized contracting officer warranting program under NASA Procurement Notice 81-32 and GSA Acquisition Regulations System (subpart 501.600-70), respectively. Both programs are similar in that they select and appoint contracting officers only in those instances in which a valid organizational need can be demonstrated. The major factors to be considered in
assessing such a need include volume of actions, complexity of work, and organizational structure.

Once the need has been identified, the office supervisor will nominate a contracting officer candidate. It then becomes incumbent upon the candidate to prove his/her qualifications. The qualifications models of both agencies are grouped together in Table III below to demonstrate involvement by their contracting officer communities. The group model reflects similar career levels and training requirements found in the DoD GS-1102 series of Appendix C.

Table I, Appendices B and C, the NACO Program, and Table III can be used to form an analogy of existing programs and procedures from which to develop a model of NAVFAC contracting officer qualification standards.
### TABLE III

**NASA & GSA Contracting Officer Qualifications**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>QUALIFICATIONS</th>
</tr>
</thead>
</table>
| **BASIC** (within small purchase range) | 1. EXPERIENCE: 1 year of current experience in government or commercial procurement, with progressive work assignments, including 6 months in small purchase.  
2. EDUCATION: High school diploma or equal, with written supervisory statement of knowledge and ability.  
3. TRAINING:  
   (a). Small purchases and Federal supply schedules;  
   (b). Basic acquisition; and  
   (c). Contract administration. |
| **INTERMEDIATE** (up to: $500,000 NASA; or $100,000 GSA) | 1. EXPERIENCE: 2 years of current experience with progressive assignments leading to broader technical ability and/or staff experience.  
2. EDUCATION: A bachelor's degree preferred with written supervisory statement of knowledge and ability, 24 semester hours in procurement-related field.  
3. TRAINING:  
   (a). Contract law;  
   (b). Procurement by negotiation;  
   (c). Sealed bidding;  
   (d). Cost and price analysis;  
   (e). Termination settlements;  
   (f). Services contracting; and  
   (g). Specialty courses when applicable (i.e., utilities, construction, etc.). |
| **SENIOR** (unlimited authority) | 1. EXPERIENCE: 3-4 years of current experience with progressive work assignments and broad technical ability and/or staff experience.  
2. EDUCATION: Same as INTERMEDIATE.  
3. TRAINING:  
   (a). Executive Seminar in acquisition;  
   (b). Advanced procurement management; and  
   (c). Advanced contract management. |
III. QUALIFICATIONS OR REQUIREMENTS OF THE INDIVIDUAL

A. ORGANIZATION OBJECTIVES

The contracting officer is only one of a number of the individuals involved with the contract function at a contracts office; he/she relies upon the experience, training, and education of other members in the office in order to complete a contract requirement. In general management terms, the successful operation of any group, activity, or organization depends upon the process of planning, organizing, leading, and controlling the efforts of the members [Ref. 8: pg. 8]. One of the simplest management techniques to challenge each member is to establish a series of stated goals and objectives for the organization.

Therefore, as the initial step taken to analyze applicable contracting officer qualification standards for this study, the contracting functional and organizational objectives were researched to determine those which might be considered common in a contracting environment. The objectives which were found to be generally applicable to a procuring or contracting operation include the following:

1. To support organization operations;
2. To buy competitively and wisely (this objective includes two distinct considerations: keeping abreast of the forces of supply and demand in an item market and searching for better values that yield the best combination of price, quality, and schedule);
3. To keep inventory investment losses (due to deterioration, obsolescence, and theft) at a practical minimum, whether they be associated with the buyer (contracting officer) or the seller (contractor);
4. To develop reliable, alternative sources of supply or service;
5. To develop good, continuing buyer-seller relationships;
6. To achieve maximum integration with the organizations or activities supported by the procurement function;
7. To train and develop highly competent personnel who are motivated to make the procurement function succeed;
8. To develop policies and procedures which permit accomplishment of the preceding seven objectives at the lowest, reasonable operating cost. [Ref. 9: pg. 15]

Having stated the contracting organization objectives, the qualifications or requirements of an individual to organize, lead, and control such a function must now be pursued. It is important to keep in mind that the many difficulties which may arise in post-award contract performance may be symptomatic of larger contractural or procurement problems in the pre-award phases. Poorly stated contractual agreements have been found in several recent outside audits to be directly associated with the inadequate qualifications of the contracting officer and/or the contracting staffs. Awarded contracts in NAVFAC have been found to contain significant errors associated with designs, need-determinations, specifications, and pre-award evaluations and reviews. [Ref. 1: pp. 7-12]

B. EXPERIENCE REQUIREMENTS

1. **Required by Law and/or Regulation or Directive**

Experience is defined as the knowledge, skill, or practice derived from direct observation or participation in events [Ref. 10: pg. 403]. It is considered in this
study to be very significant: it is the application of the knowledge and skills learned through either self-training or some other training process. Repetitive application of techniques in an actual working environment stimulate the learning process by cementing the knowledge gained in a training experience. Also, results of these actions taken or of the decisions made are realized in the near term and can be reviewed to self-evaluate one's performance.

Managers contemplating...decisions must be willing to make them without guidance of decision rules, with confidence in their own judgment, which will have been seasoned by repeated analyses of similar questions [Ref. 11: pg. 456].

As stated earlier, Federal law dealing with purchasing and contracting is contained in the the FAR. A review of the specific requirements of the FAR is necessary to outline the "experience" factors for all contracting officer responsibilities as they relate to law and to the regulations. The pertinent areas of knowledge related to the "experience" factors are listed below. They have been taken from the listing which appears in Appendix A (the numbering reference shown in parentheses relates to the numbering scheme employed in the appendix).

a) Avoid any conflict of interest. (1,2,3,4,5,6,7,8)
b) Maintain the contract files. (11)
c) Publicize competitive contract actions. (13)
d) Oversee the solicitation procedures. (16)
e) Ensure contracts are placed with proper sources of supplies and services. (17)
f) Make determinations of contractor responsibility. (18)
g) Analyze planned acquisitions and resolve any organizational conflicts of interest. (19)
h) Ensure delivery or performance schedules are realistic. (20)
i) Ensure the best method of contracting is selected. (22)

j) Oversee the opening of offers, make determinations for responsiveness, and make the contract award. (24)

k) Sign the Determinations and Findings (D&Fs). (25)

l) Manage the specific contracting requirements associated with his/her procurement field. (30,31)

A more thorough study of these FAR responsibilities related to experience indicates the possibility of analyzing them by degrees of complexity. These complexities are in turn keyed in the FAR to a dollar basis. The first significant break occurs at the $25,000 mark: all procurement actions below this figure are referred as "small purchases." Under this mark, additional breaks can be affected, provided other laws regulating specific item procurements or urgency are not in effect, and are shown below.

a) Up to $1000: single-(or one- or sole-)source of supply is authorized without seeking any other additional supplier other than for purposes of supplier rotation.

b) Up to $2000/$2500: two or more sources of supply are to be solicited unless price is fixed by competition or is regulated; sources are matched to evaluate fair and reasonableness of prices received; upper bound determined by nature of the contracted work (see the next breakpoint on the Labor Law which applies):

   i) $2000 if work is of a construction-nature; or
   ii) $2500 if work is service-related.

c) Up to $10,000: a greater competition base is emphasized; Labor Law wage determinations may be required:

   i) Davis-Bacon Act if work is of a construction-nature; or
   ii) Walsh-Healy or Service Contract Acts if work is service-related.
d) Up to $25,000: more formal advertising requirements; even greater competition is emphasized; synopsis of solicitation required in the CBD\textsuperscript{13} contract format and specifications become more definitive; contractor representations and certifications required.

e) Last note: generally, all of the above procurements will be "set-aside" for small business participation only.

In an attempt to simplify the above categories, complexity breaks at the $2000/$2500 point and the $10,000 point represent a more real transition into the more complex issues of Labor Law enforcements, market analysis, and contract formality. The contracting office must assess the degree of competition which exists in an item market prior to the release of now a more formal solicitation.

For the category greater than $25,000, the contracting community departs from the small purchase arena and its "checklist" methods of contracting and enters a field requiring uses of available knowledge and resources not necessarily held in a single individual. Still only one person is held accountable for the transaction: the contracting officer. This greater dollar category requires decisions stressing judgment, independent evaluation, and objective and alternative reasoning. The broad decision responsibility of the contracting officer might be said to reflect the following evaluations:

a) identification of opportunity and risk;

b) determination of the organization's material, technical, financial, and managerial resources;

\textsuperscript{13}The CBD, or Commerce Business Daily, is the journal prepared by the Department of Commerce which summarizes all Government contract actions greater than, or anticipated to be greater than, $10,000.
c) personal values and aspirations of senior management; and

d) acknowledgement of noneconomic responsibilities to society. [Ref. 11: pp. 99, 455]

Within this more complex category of over $25,000 procurements, certain preliminary approvals and actions are required prior to a solicitation or an award. Some of the more significant actions for NAVFAC contracting are listed below in Table IV [Ref. 7: sections 4, 5]. With respect to relative significance, to degree of complexity, and to administrative time involvement, the Table IV requirements reveal that the break occurring at the $500,000 mark can be assumed to be of the greatest shift in complexity; the others being only minor in degree of difficulty. Accordingly, the breakpoints representing complexity shifts associated with experience are taken as the $2,000/$2,500, the $10,000, the $25,000, the $500,000, and the unlimited points.

2. Ideal and/or Practical Requirements

In addition to the above considerations of contract complexity, probably the most significant characteristic keyed to the experience of an individual who holds authority to commit the Government contractually is that of an ethical obligation. This obligation is considered to extend to employers (the Federal government), to vendors (the contractors), and to colleagues in the profession [Ref. 9: pg. 483]. The education process instills such an obligation, but only a working environment conducive to ethical conduct encourages its growth and development.

If there is such a thing as a profession as a concept distinct from a vocation, it must consist in the ideals which its members maintain, the dignity of character they bring to the performance of their duties, and the austerity of the self-imposed ethical standards. To constitute a true profession, there must be ethical
<table>
<thead>
<tr>
<th>Requirements on Contracts Greater than $25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Contracts at or over $25,000:</td>
</tr>
<tr>
<td>** Bidders will be required to submit bid bonds on construction work.**</td>
</tr>
<tr>
<td>** The prime contractor will be required to submit performance and payment bonds on construction.**</td>
</tr>
<tr>
<td>* Contracts at or over $100,000:</td>
</tr>
<tr>
<td>** Bid and performance bonds may be required on other types of services.**</td>
</tr>
<tr>
<td>** Payment bonds may also be required, subject to FAR permissive requirements.**</td>
</tr>
<tr>
<td>** Prime contractor is to be instructed to submit statement of controlled materials.**</td>
</tr>
<tr>
<td>** A business clearance is required.**</td>
</tr>
<tr>
<td>* Contracts at or over $300,000:</td>
</tr>
<tr>
<td>** Congressional clearance is required for architect-engineer design services.**</td>
</tr>
<tr>
<td>* Contracts at or over $500,000:</td>
</tr>
<tr>
<td>** Prime contractor is to be instructed to submit a detailed breakdown of controlled materials requirements.**</td>
</tr>
<tr>
<td>** Prime and subcontractors required to submit certified cost or pricing data for non-competitive procurements; attests to accuracy, completeness, and currency of data; a provision for price reduction on discovered defective data is also to be incorporated.**</td>
</tr>
<tr>
<td>(NOTE: The requirement for cost or pricing data is contained in the Truth in Negotiations Act (P.L. 87-653) which has been amended to require contractor certification at $500,000; however, recent annual authorization acts have re-established the dollar requirement at $100,000. It is anticipated that this requirement will soon return to the $500,000 point.)**</td>
</tr>
<tr>
<td>* Contracts at or over $1,000,000:</td>
</tr>
<tr>
<td>** A business clearance by NAVFAC is required for single bids received or for non-competitive procurements.**</td>
</tr>
<tr>
<td>** Individual review, procurement set-aside for small business-only participation (Generally, under this amount, the action shall be considered as though a set-aside request had been initiated) **</td>
</tr>
<tr>
<td>** A determination of non-discriminatory hiring and employment practices is to be made.**</td>
</tr>
<tr>
<td>** A required percentage of work to be performed by subcontractors is established for construction.**</td>
</tr>
<tr>
<td>* Contracts at or over $3,000,000:</td>
</tr>
<tr>
<td>** Must be coordinated with the Office of Navy Chief of Information.**</td>
</tr>
</tbody>
</table>
tradition so potent as to bring into conformity members whose personal standards of conduct are at a lower level, and to have an elevating and ennobling effect on those members. A profession cannot be created by resolution or become such overnight. It requires many years for its development, and they must be years of self-denial, years when success by base means is scorned, years when no results bring honor except to those free from the taint of unworthy methods. [Ref. 9: pg. 486]

When requirements for an ethical obligation exist, continuous satisfactory to outstanding performance in terms of professional progression must be maintained by an individual. Entry into the field though can be established at some lower level of responsibility or complexity. This allows an avenue for entrance into the community prior to individual commitment to a career. However, for the individual to now continue through the career levels of a contracting officer, prior satisfactory performance at the previous level becomes important. It will be this performance measure which will become the minimum standard to judge the contracting officer professional ethic and allow advancement.

The career levels recommended to be established, by dollar value and with a requirement to meet satisfactory performance measures between levels, are stated in Table V prior to continuing.

C. TRAINING AND EDUCATION REQUIREMENTS

1. General or Core Knowledge

Again, this analysis turns to the FAR for the general requirements of "training and education" as those
TABLE V
Proposed Contracting Officer Experience Levels

(1) LEVEL V (NTE $2,000 construction or $2,500 services)
(2) LEVEL IV (NTE $10,000)
(3) LEVEL III (NTE $25,000)
(4) LEVEL II (NTE $500,000)
(5) LEVEL I (UNLIMITED)

which may be required in law and in regulations. The pertinent areas of knowledge expected of the federal contracting officer related to the "training and education" factors are listed below. These have been taken from the listing which appears in Appendix A (the numbering reference shown in parentheses relates to the numbering scheme employed in the appendix). The list of factors include many of the same areas addressed in the previous section on experience factors. This is because of the broad application in the nature of the areas to both experience and training and education. The redundancy here is for thoroughness of coverage and as a reflection of greater area significance.

a) Avoid any conflict of interest. (1,2,3,4,5,6,7,8)
b) Ensure that the signer(s) for the contractor has(have) the authority to bind the contractor. (9)
c) Follow agency procedures for determining the security clearances of firms. (10)
d) Ensure that all contractual actions required have been completed. (12)
e) Oversee the solicitation procedures. (16)
f) Ensure contracts are placed with proper sources of supplies and services. (17)
g) Make determinations of contractor responsibility. (18)
h) Analyze planned acquisitions and resolve any organizational conflicts of interest. (19)
i) Ensure delivery or performance schedules are realistic. (20)
j) Ensure that the provisions for the materials' ordering under the Defense Production Act are included. (21)
k) Ensure the best method of contracting is selected. (22)
l) Sign the Determinations and Findings (D&Fs). (25)
m) Be responsible for the implementation of the set-aside program for Small Business and Small Disadvantaged Business Concerns. (26)
n) Oversee the program for Labor Surplus Area concerns. (27)
o) Oversee the programs related to application of labor laws and their enforcement. (28)
p) Ensure contractor compliance for environment, conservation and occupational safety. (29)
q) Manage the specific contracting requirements associated with his/her procurement field. (30, 31)

The intent of the following analysis of the FAR experience model is to consolidate the similar requirements from above into broader topical areas or categories which can normally be expected to be found in the training and educational environments. Training is defined as the act of forming by instruction, discipline, or drill; of teaching so as to make fit, qualified, or proficient [Ref. 10: pg. 1238]. When one speaks of "training", generally the attempt is to familiarize an individual with the basic laws, rules, regulations, and policies associated with the environment. A distinction is made at this point with the concept of
"education". Education is defined as the action or process of developing mentally or morally through instruction; of gaining knowledge and development resulting from, typically, a more formal process than in training [Ref. 10: pg. 361]. The key words familiarize and developing are emphasized to reflect the differences in the use of these terms: the latter being more personal to the individual and reflective of his/her career direction and the former being task- or vocation-related.

From the listing of the FAR knowledge requirements above, a simplification is suggested which will identify some broader categories in training and education. These categories are selected to reflect the more generalized areas associated with either developing one's own career path (educational in nature) or requiring only some form of familiarization (training). At best the task of simplification is highly subjective; however, the Table VI breakdown has been determined as one method to broadly categorize these FAR requirements.

The analysis to this point has helped to define levels of experience and categories in training and education for the general knowledge field in contracting. However, the training category of "specialization" remains to be defined. It is necessary to pursue this category in detail for the NAVFAC contracting authorities.

2. NAVFAC Contracting Authority

The specialization category from Table VI is concerned with the additional training requirements unique to NAVFAC. The training needed to specifically address NAVFAC's contracting authority must originate in its general responsibilities and expressed contractual authority. In the Navy community, NAVFAC is responsible for and holds authority in the performance of design, planning,
### TABLE VI
Training & Education Requirements (Basic)

**TRAINING:**
- Legal implications
  - (#'s: 1-5, 25)
- Organizational systems
  - (#'s: 1-8, 10, 19)
- Contracting procedures & admin.
  - (#'s: 12, 16, 20, 22, 28-31)
- Specialization
  - (#'s: 27-31)
- Contractual relationships
  - (#'s: 1-9)

**EDUCATION:**
- Business management
  - (#'s: 17, 18, 20, 26, 27)
- Economics
  - (#'s: 17, 21, 26, 27)
- Ethics
  - (#'s: 1-9)

NCTE: the numbering reference shown in parentheses is to the contracting officer general knowledge requirements listed in Appendix A.

---

development, procurement, construction, alteration, repair, and maintenance at all shore activities for public works and public utilities and in the procurement of construction, transportation, and weight-handling equipment. NAVFAC also exercises technical control related to the above and establishes the operating standards and procedures utilized. Specific contract authority includes the award and the administration of the following contracted services:

a) For construction, repair, or alteration (including civil works subcontracts);
b) For specialized materials and equipment not available through regular supply channels;
c) For demolition and removal of buildings and structures;
d) For the repair, alteration, and/or overhaul of Government-owned equipment, including motor vehicle,
construction, weight-handling, materials-handling, and railroad equipment (includes all other types of transportation equipment and allied appurtenances);

e) For the procurement of commercial ground transportation services;

f) For facilities support and maintenance services;

g) For architect-engineer and engineering services;

h) For utility services;

i) For timber sales and other forestry management services. [Ref. 7: part 1.402]

3. Ideal and/or Practical Requirements

From the above review of NAVFAC contracting authority, more broadly defined topical areas are suggested which consolidate the authority issues into course involvements. The following training areas are proposed which best represent the specialty needs of NAVFAC contracting.

a) Design Services Contracting.

b) Construction Contracting.

c) Facilities Support (or Maintenance) Services Contracting (inclusive of equipment and forestry).

d) Contract Modifications (construction and services).

e) Public Utilities Contracting.

The general requirements for training and education can now be expanded. Course topics known to address the broad categories of the Table VI requirements can be added to the specialty course recommendations to facilitate the resolution of standards applicable to the NAVFAC contracting officer. This expansion by course additions is made in Table VII below.

In reviewing these basic requirements and NAVFAC's specific requirements for training and education, there is found in the issue of ethics a need to progress along a
| TABLE VII  |
| Training & Education Course Requirements (Basic) |

**TRAINING:**

* Legal implications -
  ** Contract law.  
  ** Management of acquisition contracts or other management courses.  
* Organizational systems -
  ** Organizational systems (basic).  
  ** Management of acquisition contracts or other management courses.  
  ** NAVAC organizational systems.  
* Contracting procedures & administration -
  ** Small purchase.  
  ** Management of acquisition contracts or other management courses.  
  ** Cost estimation.  
  ** Cost and price analysis.  
  ** Contract negotiation.  
  ** Two-Step, multiyear procurement.  
* Specialization -
  ** Design services contracting.  
  ** Construction contracting.  
  ** Facilities support (or maintenance) services contracting (incl.: equipment & forestry).  
  ** Contract modifications (const. & serv.).  
  ** Public utilities contracting.  
* Contractual relationships -
  ** Small purchase.  
  ** Management of acquisition contracts or other management courses.  
  ** Contract negotiation.  
  ** Acquisition and contracting senior level training.  

**EDUCATION:**

* Business management -
  ** Financial accounting.  
  ** Cost accounting (incl.: Cost Accounting Standards, CAS).  
* Economics -
  ** Macroeconomics.  
  ** Microeconomics.  
* Ethics (associated w/ experience levels) -
  ** High school graduate or equivalent.  
  ** Associates degree; or two years of college-level study; or two years of continuous, satisfactory performance.  
  ** College-level specialized training concluding in a four-year degree in business administration, law, accounting, engineering, or other related fields.
formal education process. The reader should recall that ethics\(^1\) have a basis in the education process: an established rigor which is capable of filtering out the disinterested, the unmotivated, or the non-professional. In maintaining the analogy with the FAR knowledge baseline model depicted in Table I the issue of ethics allows a breakdown of training and education into levels of career progression similar to that which was performed for the experience factors. A depiction of course topics can be made to reflect the periods of entry into the contracting field, of intermediate growth, and of mastery or senior-level capabilities achievement. These period requirements are reflected in Table VIII below. The reader will note the use of multiple intermediate levels (I and II). In configuring the requirements at the intermediate level, such a large field of training requirements occurs, that it would become unmanageable to remain as a single intermediate level. The reader should further note the similarity between Tables V and VIII. This similarity will be developed in the analysis that follows.

4. Availability of Current Courses Applicable to NAVFAC

Certain aspects of training for the contracting function are common to all Federal services and to all DoD agencies while other training is peculiar to the service or agency. This is due to the specialized nature of the procurements tasked to the different agencies and why the differing agencies exist in the first place. However utilized, any educational and training programs must be orderly, continuous, and progressive: it must not only

---

\(^1\)The discussion on experience levels in the first half of this chapter argued that it was the education process which first instilled an ethical obligation. However, it was experience in a working environment conducive to ethical conduct which encouraged the individual's ethical growth and development.
<table>
<thead>
<tr>
<th>ENTRY LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Education: High school graduate or equivalent.</td>
</tr>
<tr>
<td>b. Training: Small purchase; &amp; management of contracts; or construction contracting; or facilities support contracting; - or - approved substitutes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERMEDIATE LEVEL I</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Education: Associates degree; or two years of college-level study; or two years of continuous, satisfactory performance.</td>
</tr>
<tr>
<td>b. Training: Cost and price analysis; &amp; contract negotiation; &amp; contract modifications; &amp; cost estimation; - or - approved substitutes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERMEDIATE LEVEL II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Education: College-level specialized training concluding in a four-year degree in business administration, law, accounting, engineering, or other related fields.</td>
</tr>
<tr>
<td>b. Training: Design contracts; &amp; contract law; &amp; macroeconomics; &amp; organizational systems; &amp; financial and cost accounting (w/ Cost Accounting Standards, CAS) - or - approved substitutes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Education: INTERMEDIATE LEVEL II</td>
</tr>
<tr>
<td>b. Training: NAVFAC organizational systems; and two-step, multiyear procurement; &amp; acquisition and contracting senior level training; &amp; microeconomics; - or - approved substitutes.</td>
</tr>
</tbody>
</table>
introduce the entry-level student to the function, but must also reach the service commanders, managers, technicians, and operators— at all levels of expertise.

Acquisition, contracting, purchasing, business administration, law, accounting, and engineering courses are available to the individual from civilian institutions, colleges, and universities. These courses vary from the basics for entry into a contracting field to those which enhance an individual's qualifications for advancement as he/she progresses in the field. For the NAVFAC contracting officer warrant, any training and education stipulated should stimulate several characteristics in his/her behavior.

a) The individual should show a high degree of initiative. The total framework in which the contracting officer operates is largely unstructured due to the interactions required between customers, contractors, governmental agencies, office staff, and peer groups.

b) The individual needs to be tactful and cooperative, yet objective. As an agent of the Government, the contracting officer represents the conduct of procurement to the outside communities: a process centered upon being "fair and reasonable".

c) The individual requires patience and an aptitude for detailed investigation. He/she will be required to make sound and reasoned decisions, supported by documentation.

d) Some form of mechanical aptitude will be a definite asset. The individual will be called upon to make financial decisions regarding technical issues.

Expanding a little on the above, a successful contracting officer must really develop two types of knowledge: business and technical. The business knowledge consists of a broad understanding of a myriad of general,
interrelated principles. For contracting, as a tool of pursuing the Government's socio-economic responsibilities, there is a need to understand national income determinations, consumption functions, and fiscal and monetary policy impacts. There must likewise be understanding of microeconomic theories related to allocation of resources, composition of output determinations, consumer and producer choice theory, partial and general equilibrium analysis, and welfare economics. The individual should have knowledge of basic accounting concepts and standards, of job order and process costing, and of budgeting. He/she also needs an understanding of individual and group behavior in a dynamic organizational context involving perception, communication, motivation, leadership, decision making, planning and controlling, and structure.

On the other hand, the technical requirements consist largely of knowledge of a body of highly specialized, detailed, factual information about a specific field, science, study, or group of materials. Technical knowledge relates to a practical understanding of the contract requirement and of the fabrication, erection, or production processes involved. This latter knowledge, because of its limited scope, can more easily be acquired from selected courses, directed readings, and/or practical experience as the job involvements become known. It is generally held that it is easier for a buyer to obtain the required technical knowledge on the job than it is to obtain the required business knowledge [Ref. 9: pg. 543].

Knowledge of the business environment extends to both the general and specific contracting practices performed by NAVFAC. Appendix D lists some of the representative organizations explored in this study that teach in areas related to the business acumen needed to function as a NAVFAC contracting officer. The study-recommended schools
having specific courses keyed to the standards of Table VII are shown in Table IX below, which further attempts to combine the proposals on experience levels and course requirements shown in Tables V and VIII.

D. PCS APPROACH

Up to this point of the analysis, standards have been proposed for experience and for the combination of training and educational requirements. When the two of these proposals are incorporated, and because they originated from FAR and DoD/NAVFAC directives, the requirements are offered as "personal qualification standards", or PQS, to be imposed for future selection of NAVFAC's contracting officers. The Sterling Institute, under contract with the Federal Acquisition Institute, reported that the use of qualification standards has value.

Qualification standards are based on laws and regulations that exist to ensure that all persons who have the ability to perform shall not be precluded from consideration for any social, economic, or political reason [Ref. 12: pg. 13].

Having established standards for the qualifications of the NAVFAC contracting officer, and assuming those or similar standards are adopted, it then becomes necessary to communicate those standards to the concerned individuals. The communication medium to be used and the device which offers substantiation of an action should possess characteristics of:

1. Long-term life for continual application;
2. Providing for the individualized attention of prospective contracting officers;
3. Providing a means of documentation for qualification entries; and
<table>
<thead>
<tr>
<th>Training Course</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. LEVEL V (NTE $2,000 const. or $2,500 services)</td>
<td>Small purchase (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Construction contracts; or Naval School, Civil Engineer Corps Officers</td>
</tr>
<tr>
<td></td>
<td>Facilities support contracts (CECOS)</td>
</tr>
<tr>
<td>II. LEVEL IV (NTE $10,000)</td>
<td>Cost and price analysis (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Contract negotiation (consult DMET catalog)</td>
</tr>
<tr>
<td>III. LEVEL III (NTE $25,000)</td>
<td>Management of Defense (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Acquisition Contracts; or CECOS</td>
</tr>
<tr>
<td></td>
<td>both LEVEL V courses for construction &amp; facilities</td>
</tr>
<tr>
<td></td>
<td>support contracts</td>
</tr>
<tr>
<td></td>
<td>Construction contract modifications (CECOS)</td>
</tr>
<tr>
<td></td>
<td>Cost estimation (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Private institution, college, or university</td>
</tr>
<tr>
<td>IV. LEVEL II (NTE $500,000)</td>
<td>Design contracts (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>CECOS</td>
</tr>
<tr>
<td></td>
<td>Contract Law (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Private institution</td>
</tr>
<tr>
<td></td>
<td>Macroeconomics course (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Private institution</td>
</tr>
<tr>
<td></td>
<td>Organizational systems (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Financial &amp; cost accounting (consult DMET catalog)</td>
</tr>
<tr>
<td>V. LEVEL I (UNLIMITED)</td>
<td>Advanced contract administration (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>NAVFAC Executive Institute NAVFAC</td>
</tr>
<tr>
<td></td>
<td>Two-step, multiyear procurement (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>Acquisition &amp; contracting (consult DMET catalog)</td>
</tr>
<tr>
<td></td>
<td>executive seminar</td>
</tr>
<tr>
<td></td>
<td>Microeconomics course Private institution.</td>
</tr>
</tbody>
</table>
4. Establishing a system for verification by qualified individuals of entries made by the individuals.

The audience that the standards need to reach are not the entire NAVFAC civilian workforce nor the Civil Engineer Corps community. Only those individuals who need or desire to apply the standards are the addressees who need to be on distribution. As such, the mediums considered include directives, Navy letters, and NAVFAC publications.

Directives, such as an instruction, are prescribed for matters pertaining to the establishment of policy or the requirement for periodic reports and offer many of the desired characteristics stated above. But the thrust of a directive is to the command or activity level of attention; and the importance of the proposed standards is tied to an individual. The standards advocated also do not require a periodic report nor are they a reflection of a policy change since they are derivatives of current regulation.

The Navy standard letter, related to personnel matters, could be used to correspond officially to prospective contracting officers. It would stress the qualities of getting the attention of only those individuals NAVFAC would desire and of expressing the continual nature of the standards. But the administrative tasking and associated costs of developing and maintaining a distribution listing of individuals, with the need to individually address every piece of correspondence, may be too great.

A publication, such as a manual or handbook, which is frequently used on the job (as opposed to a reference source), again offers many of the characteristics expressed above. What the publication approach lacks is the individual attention which something like the letter commands. But NAVFAC utilizes a publication directed entirely to the contracting functions and individuals make ready use of it on a continual basis. The publication is the Naval
Facilities Engineering Command Contracting Manual, (NAVFAC P-68), and is proposed as the medium for communicating the qualification-standards advocated in this study.

The next step is to develop a format which readily lends itself to the documentation and verification of qualification attainment. Within the format, it must also recognize the qualifications that the individual brings to the job. High school graduation (or equivalency), college attendance, special training, postgraduate work, and specialized past work/vocation involvements need initial acknowledgement. This will preclude repetitive training which does not enhance the person's performance. Finally, it must be easily understood.

To be easily understood, the verification requirement should be facilitated at the lowest level possible. Since the contract function is continuing within NAVFAC (only this standard is new to the environment), individuals are even now exercising warranted contract authority in various parts of the world. These then are the officials who should be charged with the responsibility to verify the individual's entries. A format which would meet the documentation and verification requirements of the standards has been depicted in Appendices E and F.

E. MAINTENANCE TRAINING

One-time qualification is not sufficient in an environment which is constantly changing. By its very nature, the Federal government can be conservatively said to be dynamic: at its head are three, semi-independent bodies, each holding responsibility to either create, execute, or interpret law. These laws address remedies and coordination needed for the improvement of the social and economic conditions of the country. It is this Federal law which forms the basis of
the Federal Acquisition Regulations and, in turn, regulate the conduct of the acquisition contracting functions.

It is because of these constant changes in law and regulation that maintenance training becomes important; but not necessarily for those who currently find themselves working in a contracts office. These individuals are daily exposed to the flow of regulation and directive changes as a course of business. They may also be subscribing to, or be exposed to, a subscription of periodicals, briefing papers, or newsletters which aid them in staying current. Maintenance training needs to address those individuals within DoD agencies who find themselves operating within a "revolving door" of position placements. Military and civilian employees move from one position to another due to orders, promotions, transfers, and changes in career path. This is particularly true for the military managers who are required to periodically rotate in order to broaden their skills and value to the Navy.

As an individual re-enters the contracting function, he/she will naturally be missing that segment of change which evolved during their period of absence. Only those who might individually pursue contracting as a profession will remain well-informed. The need is obvious and the methods of achieving maintenance training are diverse. Table X is provided as a listing of possible alternatives which might be employed by NAVFAC to ease this deficiency. Maintenance training is considered beyond the scope of this study and no further discussion is offered.

F. CERTIFICATION/LICENSETING.

During the period 1970 through 1972, the Commission on Government Procurement examined the Federal acquisition process. The Commission's final report (primarily, Study
TABLE I

NAVFAC Maintenance Training of Contracting Officers
(Study Recommendations)

* Formalized training program -
** By EPL.
** At a central location for the NAVFAC community only, such as CECOS/NPCTC.
** At a central location for the Navy contracting community, such as the two week refresher course planned by the Supply Corps at NPS Monterey, CA.
* Incorporate into existing CECOS refresher training -
** "IT Refresher" course.
** "LCDR Refresher" course.
* Maintain a history file of newsletters or briefs; required reading upon re-entering.
* Task each contracting office to update returning and new personnel.

Group No. 5 on organization and personnel) contained a recommendation that the Government look into certification as a means of improving the quality of its workforce.

In attempts to accomplish this recommendation, the Federal Acquisition Institute (FAI) conducted an analysis of certification programs being conducted by various professional associations in 1977 and 1978. The intent was to determine what overall value they might have to the Government's workforce. This study concluded that certification programs enhance the professional nature of the acquisition system and would be of definite value to the Government.

Continuing in these certification studies, FAI awarded a study contract to the Sterling Institute to identify means by which the Government could sponsor certification programs and to examine the implications of such sponsorship. The Sterling Institute reviewed current certification programs,
addressed basic issues of Government sponsorship, and forwarded their recommendations in January of 1979.

The study's analysis of certification programs currently conducted by professional associations in the field of acquisition revealed a common overall program objective. While each association's certification program had developed with regard to requirements and standards, all were focused on the objective of elevating participants from the level of functional specialists to that of recognized professionals. With professionalism as the ultimate objective, these programs are based on various aspects of what constitutes a definition of professionalism. These aspects include:

* A defined, sophisticated body of knowledge.
* A code of ethics.
* A measurable standard on which to base a judgment that the individual is capable of performing at a certain level of competence.
* An amount of degree-conferring programs in the universities that is adequate to ensure that a sufficient number of professionally educated persons will be available to meet national workforce needs within the functional field.

Professional associations do not address or control individual career development or organizational effectiveness. Government programs are designed not to directly instill professionalism or advance the state of the art but to concentrate on improving individual and organizational effectiveness. The synthesis of these two approaches can increase confidence in the quality of the workforce and improve its overall image. Employee career paths and attainment of professional status can be mutually reinforced, and the ethics of public accountability and professionalism can merge to serve the national interest. [Ref. 12: pp. 5-8]

On the basic issue, the study found that it is both appropriate and legal for the Government to sponsor certification programs. However, it is not immediately feasible for the Government to require certification as a standard for employment. The basic rule here in personnel selection is that no standard requirement can be established if an individual can perform the task without meeting the standard. A suggested approach is to "recommend" that all Federal agencies consider the use of certification as a quality ranking
factor in future selections.

The study concluded that certification would prove a positive motivator and that the only barrier was "management inertia". To overcome the inertia, the group recommended developing a generic certification program for each function in the acquisition field and require Government agencies to implement it within scheduled timeframes; then develop certification requirements that must be met before contracting officer authority is delegated; and finally to require that contracting officers be certified through agency-administered certification programs.

Since 1979, the issue of certification in the Government has not been pursued to the depth recommended in the study. One reason for this has been the lack of a single body within the Executive branch having the strength of organizational control over the contracting responsibility to centrally influence a universal acceptance, other than the Presidency. However, greater direction toward a professional approach to contracting has been issued by the President under Executive Order 12352 of 17 March 1982. The Presidential directive requires the establishment of a cadre of business professionals to safeguard the interests of the United States in its contractual relationships.

Employee selection is based upon the criteria and processes of, in priority, QUALIFICATION STANDARDS (basic requirements), SELECTIVE FACTORS (necessary attributes), and QUALITY RANKING FACTORS (desirable qualities). Certification is not justifiable on the first two criteria.
IV. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The results of the reviews conducted by GAO and NAVMAT, as well as NAVFAC's own internal study, reflect the problems of an evolving professional contracting community. The community is currently represented by associations of individuals who seek to elevate the status of the career contracting and acquisition personnel from a functional specialist level to a more professional level. The community points to unique knowledge requirements which an individual must possess; this, in turn, attempts to require recognition of staffing and funding resources on the part of the organizations' management groups, just as another profession might require. Yet, in many Government agencies comparable to NAVFAC, the contracting community is seen only as the functional "means" through which a task is accomplished. The community has been organizationally structured to work within another community of recognized professionals who are product-oriented. Such a relationship naturally places the contract function in second place for organizational resources.

But failures in performance have recently brought this community into the foreground. Waste and abuse of Government funding through contract actions has become a national concern. Improprieties have been sought out and offenders severely disciplined. Continued corrective actions have been demanded by the news media, the public, the Congress, and the President. Time will tell if this notoriety might well turn out to be an actual benefit to the community of professional contracting people. The current environment, both
within DoD and on the political front, would appear prime for the establishment of some form of universal Federal standards for the qualification of contracting officials, provided there is a body within the Executive branch strong enough to press the issue. The Congress is also a strong possibility to force an issue for standards or certification through legislation.

The author has concluded that definition of NAVFAC contracting officer qualification standards is essential to the effective management and good order of the contracting function. The author further concludes, as an ancillary to the standards requirement, that the training and education issues in the function must be resource supported at the highest management levels. Such attention is essential if the community is to be allowed to grow into the professional-like group that it must be to recapture the public trust and respect. This issue also involves the requirement to establish some form of active maintenance training for the individuals who exit and then re-enter the contracting field or function at some later date. The maintenance training would fill the void of the knowledge lost through absence from the dynamic environment in which contract and acquisition regulations and standards evolve.

The author, however, finds no compelling need to establish a certification program within the Federal contracting function. First, certifications in the field are not recognized as a qualification for personnel selection. Second, a profession is an evolutionary process culminating in near-universal recognition of the unique character of the career field and not an issue which can be forced into existence. Third, Government mandate would only create an administrative program which may actually hinder the true evolutionary process of a developing field. The author contends that the matter of certification is better left to the
self-actualizing process demanded in the independent, career or field associations of a developing profession. If it is indeed a viable profession, it will receive the synergistic support of a growing association membership to establish certification, or some other proof of acquired knowledge, as a condition of employment.

B. RECOMMENDATIONS

The author recommends that NAVFAC establish standards by which prospective contracting officers might measure themselves and as a device to place qualified individuals, regardless of seniority, into positions of contracting responsibility. Appendices E and F offer a system of Personal Qualification Standards (PQS) which meets these two qualities in this recommendation.

The author further recommends that a program of active maintenance training be developed to aid those persons returning to a contracting function after a period of absence. The operation of the DoD contracting organization is very dynamic in its structure and in its personnel positioning and movement approaches. The strong involvement and influence of the military organizations upon its functions assures us that the fluid use of personnel is not very likely to change. Accordingly, the system must be accommodated as it exists and a program is needed to allow some form of refresher training for all re-entering civilian and military personnel. The suggested forums of conducting such refresher training can be found in Table X.

In the two above recommendations, consideration must also be given the resource support of the travel and training needs. These support responsibilities are too closely tied to an effective implementation of any PQS-type approach to qualification and maintenance training. It
must be realized that the broad travel and training needs are an expensive proposition and only top level commitment to the requirements of such an undertaking will produce the desired results: experienced and well-trained contracting personnel. With such an objective in mind, should standards later be developed by others or should certification become a reality in this field, the established and supported standards will position NAVFAC for easy entry.
APPENDIX A

GENERAL KNOWLEDGE OF A U. S. GOVERNMENT CONTRACTING OFFICER

Federal law dealing with purchasing and contracting is contained in the Federal Acquisition Regulation (FAR). The following are pertinent areas of knowledge expected of the federal contracting officer and associated responsibilities.

1. The general rule is to avoid strictly any conflict of interest or even the appearance of a conflict of interest in the Government-contractor relationships [Ref. 5: part 3.101-1].

2. If a contract is made between the U.S. Government and any member or delegate to Congress, or resident commissioner, it may constitute a violation of 18 U.S.C. 431 and 432, resulting in both the officer or employee of the Government who awarded the contract and the member, delegate or resident commissioner being subjected to criminal penalties; the contract being voided; and the contractor having to return any consideration paid by the Government under the contract [Ref. 5: part 3.102-1].

3. Agency personnel shall report suspected violations of the Gratuities clause to the contracting officer or other designated official [Ref. 5: part 3.202].

4. Contracting personnel are an important potential source of investigative leads for antitrust enforcement and should therefore be sensitive to indications of unlawful behavior by offerors and contractors. Agencies are required by 41 U.S.C. 252(d) and 10 U.S.C. 2305(d) to report to the Attorney General bids or offers received after competition that evidence a violation of the antitrust laws [Ref. 5: part 3.3].
5. The contracting officer shall evaluate the SF 119, Statement of Contingent or Other Fees, and all related information to determine whether a contingent fee arrangement exists between the prospective contractor and a person or company other than a full-time, bona fide employee working solely for the prospective contractor and, when such a contingent fee arrangement does exist, whether it meets the statutory exception permitting contingent fee arrangements with bona fide employees or agencies [Ref. 5: part 3.408-1].

6. The contracting officer must take appropriate action to ensure that "buying-in" losses are not recovered by the contractor through the pricing of (1) change orders or (2) follow-on contracts subject to cost analysis [Ref. 5: part 3.501-2].

7. The Anti-Kickback Act, 41 U.S.C. 51-54, was passed to deter subcontractors from making payments to influence the award of subcontracts. Agencies shall report suspected violations of the Act in accordance with agency procedures [Ref. 5: part 3.502].

8. A contracting officer shall not knowingly award a contract to a Government employee or to a business concern or other organization owned or substantially owned or controlled by one or more Government employees [Ref. 5: part 3.601].

9. Only contracting officers shall sign contracts on behalf of the United States. The contracting officer shall ensure that the signer(s) for the contractor has(have) the authority to bind the contractor, which may be constituted as individuals, partnerships, corporations, joint ventures or agents of the preceding types of firms [Ref. 5: part 4.1].

71
10. If access to classified information of an agency may be required, the contracting officer shall follow agency-procedures for determining the security clearances of firms to be solicited [Ref. 5: part 4.403].

11. Contracting officers shall maintain the contract files, which shall document the basis for the acquisition and the award, contract administration and payment [Ref. 5: part 4.8].

12. The contracting officer shall ensure that all contractual actions required have been completed and shall prepare a statement to that effect. This statement is authority to close the contract file and shall be made a part of the official contract file [Ref. 5: part 4.804-2].

13. Contracting officers shall publicize contract actions offering competitive opportunities for contractors and subcontractors in accordance with the Small Business Act, 15 U.S.C. 637 [Ref. 5: part 5].

14. Contracting officers may make available maximum information to the public, except information [Ref. 5: part 5.4].
   a) On plans that would provide undue or discriminatory advantage to private or personal interests;
   b) Received in confidence;
   c) Otherwise requiring protection under the Freedom of Information Act, 5 U.S.C. 552 (as amended), or Privacy Act, 5 U.S.C. 552(a); or
   d) Pertaining to internal agency communications

15. For acquisitions other than small, repetitive buys, agencies shall perform coordinated planning, integrating the efforts of all personnel responsible for significant aspects of the acquisition [Ref. 5: part 7.1].
16. The contracting officer shall oversee the solicitation procedures for cost comparisons of the statements of work for contractor versus Government performance in accordance with the Office of Management and Budget Circular No. A-76 [Ref. 5: part 7.2].

17. The contracting officer shall ensure contracts are placed with proper sources of supplies and services: agency requirements must first be checked with required sources of supply. These include [Ref. 5: part 8]:

a) Agency inventories;
b) Excess personnel property under the control of a federal agency;
c) Use of other Government supply sources
   i) Jewel bearings;
   ii) Public utility services;
   iii) Printing and related supplies;
   iv) Automatic data processing and telecommunications acquisitions;
   v) Leased motor vehicles;
   vi) Strategic and critical materials from excess General Services Administration (GSA) inventories; and
   vii) Helium.
e) Procurement lists from the Committee for Purchase from the Blind and Other Severely Handicapped, Javits-Wagner-O'Day Act, 41 U.S.C. 46-48c;
f) Wholesale supply sources, such as the GSA, the Defense Logistics Agency, the Veterans Administration and military inventory control points;
9) Mandatory Federal Supply Schedules;

h) Optional use Federal Supply Schedules; and, finally,

i) commercial sources (inclusive of educational and nonprofit institutions).

18. The contracting officer shall make a determination of contractor responsibility prior to award of a contract, inclusive of using a preaward survey [Ref. 5: part 9.1].

19. Contracting officers shall analyze planned acquisitions in order to identify and to resolve any organizational conflicts of interest, inclusive of obtaining the advice of counsel and the assistance of technical specialists in evaluating potential conflicts and in developing any necessary solicitation provisions and contract clauses. [Ref. 5: part 9.5].

20. Contracting officers shall ensure that delivery or performance schedules are realistic and meet the requirements of the acquisition [Ref. 5: part 12.101].

21. Contracting officers shall ensure that, for ratable contracts, the provisions for the materials' ordering under the Defense Production Act, 50 U.S.C. App.2061 (as amended), are included. These provisions include the proper use of the priority system provided in the Defense Materials System and the Defense Priorities System [Ref. 5: part 12.3].

22. Contracting officers shall ensure the proper purchase or contract type is prepared, the proper procurement format is followed and the best method of contracting is selected prior to release of the solicitation [Ref. 5: parts 13, 14, 15, 16 and 17].
23. The contract office shall receive all bids or proposals associated with a solicitation, inclusive of issuing modifications or withdrawals [Ref. 5: parts 14.3, 15].

24. The contracting officer shall oversee the opening of offers, shall make such determinations for responsiveness, and shall make the contract award [Ref. 5: parts 14.4, 15].

25. The contracting officer shall sign the Determinations and Findings (D&Fs) which justify the use of the legal authorities to not compete a potential contract [Ref. 5: part 15.2].

26. The contracting officer shall be responsible for the implementation of the set-aside program for Small Business and Small Disadvantaged Business Concerns in accordance with the Small Business Act, 15 U.S.C. 631 et seq., the applicable sections of the Armed Services Procurement Act, 10 U.S.C. 2301 et seq., and Executive Order 12138, May 18, 1979 [Ref. 5: part 19].

27. The contracting officer shall oversee the program for Labor Surplus Area concerns, Small Business Act, 15 U.S.C. 644(d), (e) and (f) [Ref. 5: part 20].

28. The contracting officer shall oversee the programs related to application of labor laws and their enforcement [Ref. 5: part 22].

29. The contracting officer shall ensure contractor compliance for environment, conservation and occupational safety [Ref. 5: part 23].

30. The contracting officer shall, in addition to the above specific responsibilities, oversee the contractual actions dealing with the following special categories, as may be required:
   a) Major systems acquisition [Ref. 5: part 34],
b) Research and development contracting [Ref. 5: part 35],
c) Construction and architect-engineer contracts [Ref. 5: part 36],
d) Service contracting [Ref. 5: part 37],
e) Federal Supply Schedule contracting [Ref. 5: part 38], or
f) Management, acquisition, and use of information resources [Ref. 5: part 39].

31. After contract award, the contracting officer shall oversee the management of the contracting function, inclusive of:

a) Contract administration [Ref. 5: part 42],
b) Contract modifications [Ref. 5: part 43],
c) Subcontracting policies and procedures [Ref. 5: part 44],
d) Government property [Ref. 5: part 45],
e) Quality assurance [Ref. 5: part 46],
f) Transportation [Ref. 5: part 47],
g) Value engineering [Ref. 5: part 48],
h) Termination of contracts [Ref. 5: part 49],
i) Extraordinary contractual actions [Ref. 5: part 50], and
j) Use of Government sources by contractors [Ref. 5: part 51].
The Certified Professional Contract Manager (CPCM) examination of the National Contract Management Association (NCMA) is administered in May and November of each year. An application fee and an examination fee are required to be paid at the time of the application and prior to examination (if the applicant is considered eligible), respectively. At the time of this writing, the total certification fee was $90 ($45 application and $45 examination). The exam is in essay format and is given during two three-hour sessions in a single day: a morning session (General Exam, GE) covering general procurement and contracting followed by an afternoon session (Areas of Concentration, AOC).

Training/Education. Below is a listing of topic and sub-topic areas which represent subject areas selected for the CPCM exam. A broad-based knowledge in these areas with specific reference to formalized education and/or specified training courses in the application is needed to meet the criteria of NCMA CPCM educational requirements.

EXAMINATION TOPIC/SUB-TOPIC AREAS

General Exam (GE)
- Procurement Management
  - Procurement
  - Government Contracting

Areas of Concentration (AOC)
1. Legal Aspects of Procurement
   - Statutory & Regulatory Foundation of Procurement Law
   - Contract Formation & Enforcement Principles
   - Contracting Methods & Techniques
   - Contract Interpretation
   - Changes & Differing Site Conditions
   - Equitable Adjustments & Cost Recovery Principles
   - Government Property

   - Industrial Contracting
   - Purchase Management
   - Purchasing
   - Negotiated & Advertised Procurement
   - Inspection, Acceptance, & Warranties
   - Uniform Commercial Code
   - Subcontract Principles
   - Delays
   - Terminations
   - Disputes, Claims, & Appeals
* Technical Data, Patents, & Royalties
* Extraordinary Relief

II. Finance/Economics/Accounting
* Financial management of Contracts
* Contract Pricing
* Contract Financing
* Cost principles
* Cost Accounting Standards
* Applied Economics
* Budgeting

III. Production Management
* Inventory Control
* Production Control Management
* Management Information Systems
* Data Processing

IV. Procurement and Contracting
* Procurement Management
* Purchasing Management
* Contract Management
* Acquisition Management
* Cost Accounting Standards
* Contract Administration
* Contract Pricing
* Contract Negotiations
* Materials Management
* Procurement Data Management
* Socio-Economic Considerations

* Ethics/Conflict of Interest/Standards of Conduct

V. Logistics Management
* Engineering Management
* Systems Management
* Program Management
* Project Management

VI. Commercial Purchasing
* New area introduced in the May 1985 examination

VII. State and Local Government Purchasing
* New area introduced in the May 1985 examination

**Experience.** The second criteria of the NCMA CPCM requires experience of a minimum of two (2) years. Applicable experience includes the performing and/or consu-mate participation (such as teaching) of the functions normally included in positions typified by the following job titles, either in the public or the private sectors.
JOB TITLES

* Business Administrator (Contracts)
* Business Manager (Contracts)
* Buyer
* Contract Administrator
* Contract Auditor
* Contract Negotiator
* Contract Specialist
* Contract Writer
* Contracts Manager
* Contracting Officer
* Cost Analyst
* Director of Contracts
* Director of Material
* Director of Procurement
* Price Analyst
* Purchasing Officer

From a functional viewpoint, applicable experience relates to the management and/or the performance of tasks involved in the contracting process: the preparation of the purchase/procurement requirements; the solicitation of requests for proposals or invitations for bids, the handling of protests, the proposal/bid evaluations, the negotiations, the reviews, the approvals, the determinations, the awards, the contract administration, the changes/modifications, the handling of claims, and the close outs of contracting actions.

Code of Ethics. A "Code of Professional Responsibility" is a part of the entire NCMA certification process. Each applicant is expected to subscribe to the NCMA Code (whether an NCMA member or not) and, as a CPCM, to uphold the Code. The Code is reproduced below.

CODE OF ETHICS

PREAMBLE

Each member of the National Contract Management Association accepts the obligation to uphold the purpose of the organization as set forth in the NCMA constitution, to strive for the increase of knowledge in job performance and the field of contract management, and to abide by the letter and spirit of the ethical standards of the Association.

As prescribed in Article X of the By-Laws to the constitution of NCMA, this Code of Ethics establishes for the member a foundation of professional conduct. However, ethical conduct may require more than merely abiding by the letter of the Code. It is therefore incumbent upon each member of the Association to make a commitment to honorable behavior in all aspects of work and professional activity.
STANDARDS

Each member of NCM shall:

1. Strive to attain the highest professional standard of job performance, to exercise diligence in carrying out the duties of his or her employer, and to serve that employer to the best of one's ability.

2. Keep informed of acquisition developments, through academic course work and attendance at symposia, in order to increase knowledge, skill and thoroughness of work preparation.

3. Respect the confidence and trust reposed in the member by one's employer.

4. Conduct oneself in such a manner as to bring credit upon the Association, as well as to maintain trust and confidence in the integrity of the acquisition process.

5. Avoid engagement in any transaction that might conflict with the proper discharge of one's employment duties by reason of financial interest, family relationship, or any other circumstance causing a breach of confidence in the acquisition process.

6. Not knowingly influence others to commit any act that would constitute a violation of this code.
APPENDIX C

CONTRACT SPECIALIST, CONTRACT ADMINISTRATION (GS-1102)
TRAINING

The training courses for this civilian employee series are divided into three career levels: entry, GS-05 through GS-08; intermediate, GS-09 through GS-12; and senior, GS-/GM-13 and above. The mandatory courses shown shall be completed before promotion to the next higher level or within 12 months after promotion.17

In addition to these mandatory courses, each DoD Component shall develop and provide its employees a list of courses that are considered "mandatory when required by mission". Courses considered pertinent to an individual's career development shall be listed on his/her Individual Development Plan (IDP).

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>MANDATORY COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY</td>
<td></td>
</tr>
<tr>
<td>1.a.</td>
<td><strong>Contract Administration</strong>, PPM 152 (JT);</td>
</tr>
<tr>
<td></td>
<td>- or -</td>
</tr>
<tr>
<td>2.a.</td>
<td><strong>Principles of Contract Pricing</strong>, QMT 170 (JT);</td>
</tr>
<tr>
<td></td>
<td>- or -</td>
</tr>
</tbody>
</table>

17The course requirements have been established in DoD Manual 1430.10-M-1 and NAVFAC Letter, Subject: NAVFAC PROCUREMENT TRAINING PROGRAM, 19 November 1984.
INTERMEDIATE
1.a. Advanced Contract Administration, PFM 304 (JT);
   - or -
2. Government Contract Law, PPM 302 (JT).
(3. Introductory Quantitative Analysis, QM 345 (JT); required only for Price and Cost Analysis or Procurement and Production Specialists.)

SENIOR
1.a. Management of Managers, 7A-738 (JT);
   - or -
   1.b. NAVFAC Executive Institute Levels I-IV.
2. Defense Acquisition and Contracting Executive Seminar, ER (JT).
APPENDIX D

TRAINING SITES FOR NAVFAC CONTRACTING OFFICERS

The following schools or organizations offer acquisition and contract training courses, conferences and/or devices related to the field of contract management which the contracting officer may utilize to expand his/her level of expertise.

I. U.S. Navy

A. Naval School
   Civil Engineer Corps Officers (CECOS)
   Port Hueneme, CA  93043

B. Naval Facilities Contract Training Center (NFCTC)
   Naval Construction Battalion Center, BLDG 44
   Port Hueneme, CA  93043

C. Naval Facilities Engineering Command
   Executive Institute (NEI)
   200 Stovall Street
   Alexandria, VA  22332

D. Naval Postgraduate School (NPS)
   Administrative Sciences Department
   Acquisition and Contracting Curriculum
   Monterey, CA  93943

II. Other Department of Defense

A. Air Force Institute of Technology (AFIT)
   School of Systems and Logistics
   Wright-Patterson AFB, OH

B. U.S. Army Logistics Management Center (ALMC)
   School of Acquisition Management
   Fort Lee, VA

C. Defense Systems Management College (DSMC)
   Fort Belvoir, VA  22060-5426

D. Industrial College of the Armed Forces (ICAF)
   and National Defense University (NDU)
   Fort McNair
   Washington, D.C.

III. Other Federal

A. Federal Acquisition Institute (FAI)
   Office of Federal Procurement Policy
   Washington, D.C.  20503

B. General Services Administration (GSA)
   Acquisition Training Facility (HDAA)
   Washington, D.C.  20406
C. Office of Personnel Management (OPM)
Management Sciences Training Center
1900 E. Street, NW
Washington, D.C. 20415

IV. Private

A. American Bar Association
Section of Public Contract Law
750 N. Lake Shore Drive
Chicago, IL 60611

B. The American Graduate University
and Procurement Associates, Inc.
733 North Dodsworth Avenue
Covina, CA 91724

C. BNA Conferences
The Bureau of National Affairs, Inc.
2550 M Street, NW
Suite 699
Washington, D.C. 20037

D. Center for Public Management
12713 Steeple Chase Way
Potomac, MD 20854

E. Federal Publications Inc.
Dept 216
1120 20th Street, NW
Washington, D.C. 20036

F. The George Washington University
School of Government and Business Administration
Office of Research and Continuing Professional Education
2000 L Street, NW
Suite 303
Washington, D.C. 20052

G. Law & Business
855 Valley Road
Clifton, NJ 07013

H. Middlesex Research Center
3509 M Street, NW
Washington, D.C. 20007

I. National Contract Management Association
6728 Old McLean Village Drive
McLean, VA 22101

J. The Potomac Forum Ltd.
P.O. Box 1639
Alexandria, VA 22313

K. Touche Ross
Seminar Division
1900 M Street, NW
Washington, D.C. 20036

L. U.S. Professional Development Institute
1620 Ellicott Road
Silver Springs, MD 20903

84
APPENDIX E
CONTRACTING OFFICER WARRANTING PROCEDURES

The standards included in this appendix are suggested for insertion into the Naval Facilities Engineering Command's publication titled, Contracting Manual, NAVFAC P-68, section 1-402.2.\(^1\)

***************

1-402.2 Contracting Officer Warranting Procedures

NAVFAC contracting officers shall be appointed only when there is a valid organizational need. Factors recommended to be considered in assessing the need include: the volume of contract actions, the complexity of work, and the organizational supports and resources readily available.

Additionally, it is important to appoint the individual having the most comprehensive, contracting education, training, and experience qualifications on site. This may not be the most senior CEC officer or the most senior civilian employee at a particular contracting location, as position will not be the first consideration or criteria employed in selecting and appointing contracting officers.

To aid all aspiring contracting officers, Appendix H, Personal Qualifications Standards (PQS), has been adopted as a method of documenting the basic qualification requirements set forth in 1-402.2(a) below. The Engineering Field Divisions shall maintain an automated file documenting the

---

\(^1\)The standards are offered as a recommended revision to the appointment procedures forwarded by Commander, Naval Facilities Engineering Command letter dated 6 February 1985.
progress of its assigned personnel, as well as for all CEC officers in its geographical area. It is incumbent upon the individual to provide copies of his/her PQS achievements to his/her Engineering Field Division as milestones are achieved.

(a) The criteria set forth below are the basic qualification requirements for the selection and the appointment of contracting officers for NAVFAC contract authority: (NOTE: the criteria are based upon successful attainment of the previous, lower levels.)

(1) LEVEL V (NTE $2,000 construction or $2,500 services)
   a. Education .... High school graduate or equivalent.
   b. Experience ..... None.
   c. Training ........ Defense Small Purchase course; and Construction Contracts course; or Facilities Support Contracts course; - or - approved substitutes.

(2) LEVEL IV (NTE $10,000)
   a. Education .... Associates degree; or two years of college-level study; or two years of continuous LEVEL V, satisfactory performance.
   b. Experience ..... None (see "Education").
   c. Training ........ Defense Cost and Price Analysis course; and Defense Contract Negotiation Workshop; - or - approved substitutes.
(3) LEVEL III (NTE $25,000)
   a. Education ...... LEVEL IV.
   b. Experience ...... One year of continuous LEVEL IV, satisfactory performance.
   c. Training ...... Management of Defense Acquisition Contracts; or both of the courses in LEVEL V for Construction and Facilities Support Contracts; and Construction Contract Modifications course; and Cost Estimation course; - or - approved substitutes.

(4) LEVEL II (NTE $500,000)
   a. Education ...... College-level specialized training concluding in a four-year degree in business administration, law, accounting, engineering, or other related fields.
   b. Experience ...... Two years of continuous LEVEL III, satisfactory performance, with at least one year contracting in the construction or facilities support specialty.
   c. Training ...... Design Contracts course; and Contract Law course; and Macroeconomics course; and Organizational Systems course; and Cost Accounting (inclusive of Cost Accounting Standards, CAS) course; - or - approved substitutes.
(5) LEVEL I (UNLIMITED)

a. Education ...... LEVEL II

b. Experience ...... Five years of satisfactory contracting performance, with at least two years contracting in the construction or facilities support specialty.

c. Training ...... Advanced Contract Administration; and NAVFAC Executive Institute, levels I-IV; and Two-Step, Multiyear Procurement; and Defense Acquisition and Contracting Executive Seminar; and Microeconomics course;

- or -

approved substitutes.
APPENDIX F
PERSONAL QUALIFICATION STANDARDS (PQS)

The personal qualification standards included in this appendix are suggested for insertion into the Naval Facilities Engineering Command's Contracting Manual, NAVFAC P-68, as a new Appendix H.1⁹

**************

PERSONAL QUALIFICATION STANDARDS (PQS)
FOR WARRANTS AS A
CONTRACTING OFFICER
IN THE
NAVAL FACILITIES ENGINEERING COMMAND

Name: ____________________________________________
Rank/Grade & Series: __________________________________

**************

1⁹This PQS appendix is offered as a recommended revision to the appointment procedures forwarded by Commander, Naval Facilities Engineering Command letter dated 6 February 1985.
Initial Qualifications Held

********** EDUCATION **********

Name of High School/Equivalency: ____________________________
City & State: ____________________________
Graduation Date: ____________________________

Names of Colleges/Universities: (1) ____________________________
City & State: ____________________________
Graduation Date: ____________________________
Degree(s): ____________________________

(2) ____________________________
City & State: ____________________________
Graduation Date: ____________________________
Degree(s): ____________________________

(3) ____________________________
City & State: ____________________________
Graduation Date: ____________________________
Degree(s): ____________________________

********** EXPERIENCE **********

Warrants Previously Held: (attach copies SF 1402/appointment)
Attachment (1), LEVEL ____________________________
Attachment (2), LEVEL ____________________________
Attachment (3), LEVEL ____________________________
Attachment (4), LEVEL ____________________________
Attachment (5), LEVEL ____________________________

********** TRAINING **********

(NOTE: all relevant training is to be annotated in the subsequent PQS pages)
This is an individualized verification sheet which is to be used under the Naval Facilities Engineering Command (NAVFAC) contracting officer warranting procedures. The contracting officer community in the Government holds unique authority and responsibility: as an agent of the Government, they are conferred the authority to obligate the Government to a funding requirement and, therefore, they must exercise reasonable care, skill, and judgment both in the use of their own personal knowledge and in obtaining outside expertise in order to render objective contracting decisions.

This PQS is used as a method of documenting the basic qualification requirements set forth in NAVFAC P-68, Contracting Manual, section 1-402.2(a). It is incumbent upon the individual to provide copies of his/her PQS achievements to his/her geographical Engineering Field Division as milestones are achieved. Verification of completed requirements is to be demonstrated by the individual to any NAVFAC contracting officer who currently holds a contracting officer's warrant at or above the LEVEL for which qualification is sought.

*************** WARRANT LEVELS ***************

(1) LEVEL V (NTE $2,000 construction or $2,500 services).

a. Education .... High school graduate or equivalent.
   Verification signature: ____________________________
   Typed/Printed name: ______________________________
   Warrant ID No.: ___________ Date: _______________

b. Experience .... None.
c. Training ....... Defense Small Purchase course.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________

and ............... Construction Contracts course.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________
or ................. Facilities Support Contracts course.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________

- or -
approved substitutes.

Course: ............................................................
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________

(2) LEVEL IV (MTD $10,000).

a. Education ....... Associates degree.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________
or ................. Two years of college-level study.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________
or ................. Two years of continuous LEVEL V,
satisfactory performance.
Verification signature: ........................................
Typed/Printed name: ........................................
Warrant ID No.: _________ Date: __________

b. Experience ....... None (see "Education").
c. Training ....... Defensive Cost and Price Analysis course.
Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________
and ............... Defense Contract Negotiation Workshop.
Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________
- or -
approved substitutes.
Course: __________________________________________________________________________________
Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________

(3) LEVEL III (WTH $25,000).

a. Education ....... LEVEL IV.

b. Experience ..... One year of continuous LEVEL IV, satisfactory performance.
Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________

Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________
or ............... Both of the courses in LEVEL V for Construction and Facilities Support Contracts.
Verification signature: ____________________________
Typed/Printed name: ______________________________
Warrant ID No.: _________ Date: ____________

93
and............. Construction Contract Modifications course.

Verification signature: __________________________

Typed/Printed name: __________________________

Warrant ID No.: _________ Date: ____________

and ............. Cost Estimation course.

Verification signature: __________________________

Typed/Printed name: __________________________

Warrant ID No.: _________ Date: ____________

- or -

approved substitutes.

Course: __________________________

Verification signature: __________________________

Typed/Printed name: __________________________

Warrant ID No.: _________ Date: ____________

(4) LEVEL II (NTE $500,000).

a. Education .... College-level specialized training concluding in a four-year degree in business administration, law, accounting, engineering, or other related fields.

Verification signature: __________________________

Typed/Printed name: __________________________

Warrant ID No.: _________ Date: ____________

b. Experience ..... Two years of continuous LEVEL III, satisfactory performance, with at least one year contracting in the construction or facilities support specialty.

Verification signature: __________________________

Typed/Printed name: __________________________

Warrant ID No.: _________ Date: ____________

94
c. Training Design Contracts course.
   Verification signature: _______________________________
   Typed/Printed name: _______________________________
   Warrant ID No.: _______ Date: _______________

and Contract Law course.
   Verification signature: _______________________________
   Typed/Printed name: _______________________________
   Warrant ID No.: _______ Date: _______________

and Macroeconomics course.
   Verification signature: _______________________________
   Typed/Printed name: _______________________________
   Warrant ID No.: _______ Date: _______________

and Organizational Systems course.
   Verification signature: _______________________________
   Typed/Printed name: _______________________________
   Warrant ID No.: _______ Date: _______________

and Cost Accounting (inclusive of Cost Accounting Standards, CAS) course.
   Verification signature: _______________________________
   Typed/Printed name: _______________________________
   Warrant ID No.: _______ Date: _______________

- or -

approved substitutes.

Course: _______________________________
Verification signature: _______________________________
Typed/Printed name: _______________________________
Warrant ID No.: _______ Date: _______________

(5) LEVEL I (UNLIMITED).

a. Education LEVEL II

b. Experience Five years of satisfactory contracting performance, with at least two years contracting in the construction/facilities support specialty.
   Verification signature: _______________________________
A PROPOSAL FOR QUALIFICATION STANDARDS AS A CONTRACTING OFFICER IN THE NAVAL FACILITIES ENGINEERING COMMAND (U)
NAVAL POSTGRADUATE SCHOOL MONTEREY CA  G A DALKE JUN 85
F/G 15/5  NL
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
c. Training ......... Advanced Contract Administration course.
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
and ............ NAVFAC Executive Institute, levels I-IV.
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
and ............. Two-Step, Multiyear Procurement course.
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
and ............. Defense Acquisition and Contracting Executive Seminar.
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
and ............. Microeconomics course;
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
- or - approved substitutes.
Course: ____________________________
Verification signature: ____________________________
Typed/Printed name: ____________________________
Warrant ID No.: _________ Date: ____________
APPENDIX G
BASIC RESEARCH QUESTIONS

INTERVIEW QUESTIONNAIRE UTILIZED - THESIS RESEARCH
(Guideline for Interview)

1. What experience, training and education should a Contacting Officer for NAVFAC possess prior to appointment and warrant?
2. What are the "experience" requirements?
3. What is required by law and by regulations/directives?
4. What is required by other Chief of Naval Material (NAVMAT) systems commands?
5. What is the requirement by other Department of Defense agencies (specifically, the Army Corps of Engineers) and other Federal agencies (NASA, GSA)?
6. What would be ideal and/or practical for NAVFAC's "experience" requirements?
7. What are the "training and education" requirements?
8. What is required by current regulations with respect to general or core knowledge?
9. What additionally would be required to contract under NAVFAC authority? (What is NAVFAC's contracting authority and what are NAVFAC's currently-expressed training and education guidelines?)
10. Where are training/education courses applicable to NAVFAC contracting authority presently available?
11. What would be ideal and/or practical "training and education" for a NAVFAC Contracting Officer?
12. How are qualifications/requirements reviewed, approved and documented for the individual?
13. Is a formalized, individual qualification standards approach feasible (such as Personal Qualification Standards, or PQS)?
14. Or is there an alternative approach?
15. Should the qualification standards lead to a certification program or licensing requirement prior to allowing an individual to hold a warrant or authority to contract?
16. Is a continuing verification requirement necessary for re-qualification as an individual exits and re-enters a Contracting Officer position? Or is some form of re-testing necessary?
LIST OF REFERENCES


BIBLIOGRAPHY


Chief of Naval Operations (OPNAV), Instruction 12400.1, DoD Civilian Career Program for Contracting and Acquisition Personnel, 1 April 1983.


Department of Defense (DoD), DoD FAR Supplement, April 1984 Edition.

Department of Defense (DoD) Instruction 1430.10-M-1, DoD Civilian Career Program for Contracting and Acquisition Personnel, 7 December 1982.


General Services Administration (GSA) Acquisition Regulations System, Subpart 501.6, Contracting Authority and Responsibilities, April 1984.


National Contract Management Association, Education & Training Matrix, developed under the guidance of Dr. Harry Page to represent the body of knowledge required to be a professional in contract management, November 1982.

National Contract Management Association, Certified Professional Contract Manager, Application Package, for the May 1985 examination.


Naval Material Command Instruction 1543.2C, Subject: Navy Acquisition Contracting Officer Career Development Program, 17 February 1981.


Naval School, Civil Engineer Corps Officers (CECOS), CECOS FY-85 Course Offerings, 1 June 1984.


Secretary of the Navy Instruction 5216.5C, Subject: Department of the Navy Correspondence Manual, 24 August 1983.


<table>
<thead>
<tr>
<th>No.</th>
<th>Copies</th>
<th>Initial Distribution List</th>
</tr>
</thead>
</table>
| 1.  | 2      | Defense Technical Information Center  
Cameron Station  
Alexandria, Virginia  22304-6145 |
| 2.  | 2      | Library, Code 0142  
Naval Postgraduate School  
Monterey, California  93943-5100 |
| 3.  | 1      | Commanding Officer  
Naval Mobile Construction Battalion 74  
P.O. Box 999  
FPO Miami, Florida  34099  
(Attn: Lcdr Gregory A. Dalke) |
| 4.  | 2      | Commanding Officer  
Naval Facilities Engineering Command  
Code 09M1 (Cdr A. T. Pringle)  
200 Stovall Street  
Alexandria, Virginia  22332 |
| 5.  | 2      | Command  
Naval Facilities Engineering Command  
Code 02 (Mr. Bot Boyer)  
200 Stovall Street  
Alexandria, Virginia  22332 |
| 6.  | 3      | Commanding Officer  
Naval School  
Civil Engineer Corps Officers  
Fort Huéneo, CA  93043 |
| 7.  | 2      | Moreell Library  
Naval Construction Battalion Center  
Fort Huéneo, CA  93043 |
| 8.  | 1      | W. R. Talutis, Code 54Tu  
Naval Postgraduate School  
Monterey, California  93943-5100 |
| 9.  | 1      | E. G. Dreher, Code 54Dr  
Naval Postgraduate School  
Monterey, California  93943-5100 |